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DAQEM
DEPARTMENT OF AIR QUALITY & ENVIRONMENTAL MANAGEMENT

RESET FORM BEFORE STARTING

APPLICATION
DUST CONTROL PERMIT FOR CONSTRUCTION ACTIVITIES

Blank spaces must be completed for the application to be processed. If not applicable, enter N/A.

1. Applicant/Permittee:

☑ Property Owner ☐ Developer ☐ Prime Contractor ☐ Other _____

Name: Tronox LLC

Address: 560 West Lake Mead Parkway

City: Henderson State: NV Zip: 89015

Telephone: 7025927727 Ext: _____ Fax: 7026512310

E-mail Address: susan.crowley@tronox.com or smcrowley@cox.net

2. Project:

Name: Soil Remediation Project

Address: 560 West Lake Mead Parkway City: Henderson

Nearest major cross-streets: Lake Mead Pkwy and Water Street

Township(s): _____ Range(s): _____ Section(s): _____

Assessor's Parcel number(s) (Attach map): _____

Project Description: Remove impacted soil from the site

Project Acreage: 56.5 acres (rounded to the nearest 0.1 acre, all land that will be disturbed must be included in project acreage)

Submit non-refundable minimum fee for 1 acre with application (applied to total permit fee collected upon permit approval). Permit fees are based on project acreage, rounded up to the next whole acre.

You must select one of the following three choices.

☑ This project does not require any offsite street or utility development.

☐ This project requires offsite street/utility development that is not included in this application, and will be added at a later date by modification or additional permit.

☐ This application includes offsite street/utility development. (Area must be marked on the accompanying parcel map. Check all that apply)

Utility Lateral ☐ less than 100 ft. ☐ greater than 100 ft. ☐ Half Street ☐ Full Street

☐ Curb / Entrance ☐ Entity Name and Number of Approved Offsite Plan / Permit / Easement: _____ ☐ Plan Pending ☐ Other

3. Property Owner (if not applicant):

Name: Tronox LLC

If applicant is NOT the Property Owner, applicant must complete the Owner's Designee form DCP 05, see Attachment 1: Dust Control Permit Forms. The signature on the Owner's designee form must be the same person that signs this application.

4. **Point of Contact for dust control matters and to whom a NOTICE OF VIOLATION should be sent if necessary:**

Name: Susan Crowley Company: Tronox LLC

Address: 560 West Lake Mead Parkway

City: Henderson State: NV Zip: 89015

Telephone: 7025927727 Ext: _____ Fax: 7026512310

Cellular/Pager: 7025927727 After Hours Phone: 7025927727

5. **On-site Superintendent/Supervisor/Foreman contact:**

Name: Susan Crowley Company: Crowley Environmental LLC

On-site phone: 7025927727 Cellular/Pager: 7025927727

DAQEM Dust Class Certification/Card #: DC0308147 Expiration date: 3/25/11

Have all other on-site supervisory personnel attended the DAQEM Dust Class? ☑ Yes ☐ No

If no, all on-site supervisory personnel must attend a DAQEM Dust Class within 30 days.

6. **Storm Water Advisory:** Be advised that all land disturbances that exceed one (1) acre or which are adjacent to a waterway must submit a "Notice of Intent" to the Nevada Division of Environmental Protection (NDEP) that certifies a Storm Water Pollution Prevention Plan has been developed and is maintained for the site. For information contact NDEP at (775) 687-9429. Applications and instructions are available at www.ndep.nv.gov/bwpc/storm01.htm

7. **By signing this permit application I certify that:**

A. I am authorized, on behalf of the individual or company listed in Section 1, as Applicant/Permittee, to apply for their Dust Control Permit and to commit to all of the terms and conditions of the requested permit.

B. Construction activities will be limited to lands that the applicant/permittee either owns or is authorized to use for construction activities. The permit issued subsequent to this application is not a substitute for obtaining the property owners permission to use his land. Issuance of a Dust Control Permit is intended only for the purpose of controlling emissions of air pollutants and assuring compliance with Air Quality Regulations. The applicant/permittee agrees to hold harmless, indemnify, and defend Clark County, its employees and assigns from any claims that may arise due to any unauthorized use of land for construction activities.

C. The permittee accepts responsibility for assuring that all contractors, subcontractors, and all other persons on the construction site covered by this permit, comply with the terms and conditions of the permit, the dust mitigation plan and all applicable Air Quality Regulations.

D. The applicant/permittee understands that it is a condition of the permit that the permittee agrees to allow the inspection of the site for compliance with the terms and conditions of the permit and Air Quality Regulations at any time during the permittee's hours of operation by a DAQEM officer without prior notice or at any time pursuant to the investigation of a complaint or upon direct observation of emission and/or failure to maintain Best Management Practices.

E. I understand that any material misrepresentation made in this application may invalidate the permit and that Clark County may pursue enforcement action against me. In addition, I understand any willful misrepresentation may result in criminal penalties. I declare under penalty of perjury that the foregoing is true and correct.

Executed on:

March 10, 2010 _____

DATE SIGNATURE

Fredrick R. Stater Plant Manager

PRINTED NAME TITLE AND COMPANY NAME

Application completed by, if not completed by signatory (Please Print):

Susan Crowley 7025927727 Ext._____

Name Phone Number

PAYMENT INFORMATION TO BE COMPLETED BY THE APPLICANT

PAYING BY **(Please Print)**

☐ CASH

☐ CHECK CHECK # _____

NAME AND ADDRESS AS IT APPEARS ON CHECK:

_____

_____

_____

Telephone #: _____

☐ CREDIT CARD LAST FOUR DIGITS OF CREDIT CARD NUMBER: _____

EXACT NAME AS IT APPEARS ON CREDIT CARD:

_____

FOR DAQEM USE ONLY

ISSUE DATE ISSUED BY POS #

DATE PAID RECEIVED BY

DAQEM REVIEW: _____ DATE:_____

BLASTING APPROVAL (if applicable): _____ DATE: _____

DEMOLITION APPROVAL (if applicable): _____ DATE:_____

COMPLIANCE AREA ASSIGNMENT: _____ Hydrographic Area: _____

☐ Airport ☐ Blasting ☐ Commercial ☐ Demo-Structure ☐ Demo–Other ☐ Staging/Stockpiling

☐ Highway ☐ Schools ☐ Residential ☐ Public Works ☐ Flood Detention ☐ Utilities ☐ Misc.

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DUST MITIGATION PLAN FOR ALL PROJECTS

Project Name: Soil Remediation Project

Permittee Name: Tronox LLC

Identify the Project Soil "Particulate Emission Potential" (check all that apply):

Using silt and optimum moisture content to determine the particulate emission potential (PEP) is the preferred method.

☑ PEP determined using generalized PEP determination maps included in the Dust Control Handbook. View Valley Map View County Map

☐ PEP determined using silt vs. optimum moisture table in Figure 2 of the Dust Control Handbook.

Percentage of silt through a #200 sieve: ___% Optimum moisture content: ___%

PEP for this project is determined to be:

☐ High ☐ Moderate High ☑ Moderate Low ☐ Low

Water source: ☑ Hydrant with Jones Valve ☑ Fire hose ☑ Water trucks/pulls ☐ Well ☑ Stand tanks ☐ Ponds ☐ Other:_____

PROJECT ACTIVITIES CHECKLIST

Instructions:

Place a check mark in the box to the right of each Project Activity that will occur on your project. If additional soil disturbing activities that are not on the checklist are to be included in the project, list them on a separate page and provide a description. For a more complete description of the listed activities, see the Control Measures Selection Pages (Form DCP03) that follow or refer to the Best Management Practices for dust control in the Dust Control Handbook.

BMP 10 Disturbed Soil and BMP 20 Trackout Prevention and Cleanup must be marked for every Dust Mitigation Plan.

CONTROL MEASURES SELECTION PAGES

Instructions:

For each project activity that you have selected on the Project Activities Checklist you must include the corresponding Control Measures Selection Page. Read and understand each item listed as a "Requirement" on these included pages. Where control measure options are listed, place a check in the box in front of the control measure you will use to meet that requirement. You must select at least one control measure where a choice is listed. In addition you must select the control measure that corresponds to your PEP as listed above, if applicable.

NOTE: PROJECTS 10 ACRES AND LARGER MUST COMPLETE A SUPPLEMENT TO THE DUST MITIGARTION PLAN (APPENDIX B-1 AND B-2).

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PROJECT ACTIVITIES CHECKLIST

Project Name: Soil Remediation Project

Permittee Name: Tronox LLC

PLACE A CHECK MARK NEXT TO EVERY ACTIVITY THAT WILL BE CONDUCTED ON THIS SITE, FOR EACH CHECKED ACTIVITY COMPLETE THE CORRESPONDING CONTROL MEASURES SELECTION PAGE AND INCLUDE WITH APPLICATION.

BMP	Project Activity	Check All That Apply
01	Backfilling Filling area previously excavated or trenched.	☐
02	Blasting - Abrasive Sandblasting and/or abrasive blasting.	☐
03	Blasting Soil & Rock Explosive blasting of soil and rock.	☐
04	Clearing & Grubbing Clearing and grubbing for site preparation and vacant land cleanup.	✓
05	Clearing Forms, Foundations and Slabs Clearing and cleaning of forms, foundations and slabs prior to pouring concrete.	✓
06	Crushing Crushing of construction and demolition debris, rock and soil.	☐
07	Cut and/or Fill Cut and/or fill soils for site grade preparation.	✓
08	Demolition - Implosion Implosive demolition of a structure, using explosives.	☐
09	Demolition - Mechanical/Manual Mechanical and manual demolition of walls, stucco, concrete, freestanding structures, buildings, load-bearing walls and/or removal of transit pipe	✓
10	Disturbed Soil **THIS ACTIVITY MUST BE SELECTED FOR ALL PROJECTS** Disturbed soil throughout project including between structures.	✓
11	Disturbed Land - Long Term Stabilization Large tracts of disturbed land that will not have continuing activity for more than 30 days.	✓
12	Dust Suppressants - Selection and Use Selection and use of chemical and organic dust suppressing agents and other dust palliatives.	☐
13	Importing/Exporting Materials Importing or exporting of soil, aggregate, decorative rock, debris, Type II and other bulk material.	✓
14	Landscaping Installation of sod, decorative rock, desert or other landscape material.	☐
15	Paving/Subgrade Preparation Subgrade preparation for paving streets, parking lots, etc.	☐
16	Sawing/Cutting Material Sawing or cutting materials such as concrete, asphalt, block or pipe.	☐
17	Screening Screening of rock, soil or construction debris.	☐
18	Staging Areas Staging areas, equipment storage, vehicle parking lots, and material storage areas.	✓
19	Stockpiles Stockpiling of materials, such as Type II, other soils, rock or debris, for future use or export.	☐
20	Trackout Prevention and Cleanup **THIS ACTIVITY MUST BE SELECTED FOR ALL PROJECTS** Prevention and cleanup of mud, silt and soil tracked out onto paved roads.	✓
21	Traffic - Unpaved Routes and Parking Construction related traffic on unpaved interior and/or access roads and unpaved employee/worker parking areas.	✓
22	Trenching Trenching with track or wheel mounted excavator, shovel, backhoe or trencher.	✓
23	Truck Loading Loading trucks with materials including construction and demolition debris, rock and soil.	✓

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CONSTRUCTION ACTIVITIES DUST CONTROL PERMIT SUPPLEMENTAL PERMITS/APPROVALS CHECKLIST

The following construction activities require permits or approval in addition to a Dust Control Permit. Permits or approvals must be obtained prior to conducting the activity. This form must be submitted with every Dust Mitigation Plan. *Check all activities that apply to the construction project.*

Activities requiring a Various Locations Permit (VLP):
(Comply with VLP regulations prior to installation of this equipment on the project site.)

Operation of a: List Name of VLP Company and/or VLP#

- ☐ powered crusher at temporary locations. _____
- ☐ powered screen at temporary locations. _____
- ☐ concrete batch plant at temporary locations. _____
- ☐ asphalt batch plant at temporary locations. _____

Activities requiring Supplemental Permit:
(Submit applicable supplemental forms. Asbestos survey is required for any size demo/remodel. NESHAP notification is required for ANY size demolition or for remodel if RACM is found.)

- ☐ Blasting to fracture rock, hardpan, or caliche.
- ☐ Blasting to implode a structure.
- ☐ Demolition of a structure greater than 1,000 square feet.
  - ☐ Structural remodeling
  - ☐ Structure relocation

Activities requiring Authority to Construct (ATC) Certificate and Operating Permit:
(An ATC must be obtained prior to installation of this equipment/facility.)

- ☐ Construction of or installation of any Emission Unit
  - ☐ Gasoline Dispensing Facility
  - ☐ Plating Shop
  - ☐ Cooling Tower
  - ☐ Incinerator
  - ☐ Dry Cleaning Equipment
  - ☐ Boiler
  - ☐ Emergency Standby Generator or Other Internal Combustion Engine
  - ☐ Woodworking Process Equipment
  - ☐ Power Generation Facility or Equipment
  - ☐ Crushing or Screening Stationary Source
  - ☐ Concrete or Asphalt Plant Stationary Source
  - ☐ Commercial Surface Coating Equipment including Paint Spray Booth
  - ☐ Other Source of PM_{10}, CO, VOC, NO_X, SO_2, Lead, Hazardous Air Pollutant, or Toxic Chemical Substance

- ☑ Activities Listed Above Do Not Apply to this Construction Project:

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Soil Remediation Project

BACKFILLING

BMP 01

YOU MUST SELECT AT LEAST ONE CONTROL MEASURE FOR EACH REQUIREMENT. PLACE A CHECK IN THE BOX IN FRONT OF YOUR SELECTION.

Requirement: Stabilize backfill material when not actively handling.

- ☑ 01-1 Water backfill material to maintain moisture or to form crust when not actively handling.
- ☐ 01-2 Apply and maintain a dust palliative to backfill material to form crust when not actively handling.
- ☐ 01-3 Cover or enclose backfill material when not actively handling.

Requirement: Stabilize backfill material during handling.

- ☑ 01-4 Empty loader bucket slowly and minimize drop height from loader bucket.
- ☐ 01-5 Dedicate water truck or large hose to backfilling equipment and apply water as needed.

Note: Select at least one of the above; in addition the appropriate control measure for your soil type must be selected from the following.

- ☐ 01-6 **L:** Mix moist soil with dry soil until the optimum moisture is reached.
- ☑ 01-7 **ML:** Apply and mix water into the backfill material until optimum moisture is reached.
- ☐ 01-8 **MH:** Apply and mix water and tackifier solution into the backfill material until optimum moisture is reached.
- ☐ 01-9 **H:** Apply and mix water and surfactant solution into the backfill material until optimum moisture is reached.

Requirement: Stabilize soil at completion of backfilling activity.

- ☑ 01-10 Apply water and maintain disturbed soils in a stable condition until permanent stabilization is complete.
- ☐ 01-11 Apply and maintain a dust palliative on disturbed soils to form a crust following backfilling activity.

Requirement: Stabilize material while using pipe padder equipment.

- ☑ 01-12 Mix moist soil with dry soil until the optimum moisture is reached.
- ☐ 01-13 Dedicate water truck or large hose to equipment and apply water as needed.

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Soil Remediation Project

BLASTING – Abrasive

BMP 02

YOU MUST SELECT AT LEAST ONE CONTROL MEASURE FOR EACH REQUIREMENT. PLACE A CHECK IN THE BOX IN FRONT OF YOUR SELECTION.

Requirement: Stabilize surface soils where support equipment and vehicles will operate.

☐ 02-1 Pre-water and maintain surface soils in a stabilized condition where support equipment and vehicles will operate.

☐ 02-2 Apply and maintain a dust palliative on surface soils where support equipment and vehicles will operate.

Requirement: Limit visible emissions to no more than an average of 40% opacity for any period aggregating 3 minutes in any 60-minute period pursuant to Air Quality Regulations.

☐ 02-3 Hydro-blasting, using water as the propellant, must be conducted in a manner to maintain visible emissions within opacity standards.

☐ 02-4 Dry, unconfined blasting with abrasive material must use only those abrasives that are approved and certified by the California Air Resources Board (CARB) for such use (see Attachment 3: CARB-Approved Abrasives Information).

Requirement: Stabilize particulate matter in surrounding area following blasting.

☐ 02-5 Clean particulate material from surrounding area and water disturbed soils following blasting.

☐ 02-6 Apply and maintain a dust palliative to surrounding area following blasting.

Recommendation: Abrasive blasting should be conducted within an enclosed structure whenever possible to preclude the release of visible emissions to the atmosphere.

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Soil Remediation Project

BLASTING – Soil and Rock

BMP 03

YOU MUST SELECT AT LEAST ONE CONTROL MEASURE FOR EACH REQUIREMENT. PLACE A CHECK IN THE BOX IN FRONT OF YOUR SELECTION.

Requirement: A Blasting Supplemental form must be filled out, submitted and approved by the DAQEM prior to any blasting (see Appendix A: Dust Control Permit Supplemental Forms)

Requirement: No blasting within 1,500 feet of a residential area, occupied building or major roadway, when wind direction is toward these structures.

Requirement: Blasting shall be between the hours of 8:00 a.m. and 4:30 p.m., excluding Saturdays, Sundays and holidays unless prior permission is obtained from the Control Officer.

Requirement: No blasting allowed when the National Weather Service forecasts wind gusts above 25 miles per hour (mph).

- ☑ 03-1 Prior to setting explosive charges in holes, document current and predicted weather conditions as provided by the National Weather Service. If the current forecast is for wind gusts of 25 mph or greater or they are forecasted to be 25 mph or greater within the next 24 hours, do not charge any blast holes. When setting explosive charges, monitor weather reports for wind gusts of 25 mph or greater on the National Weather Service Radio and/or Internet sites. If wind gusts above 25 mph are stated, discontinue charging additional blast holes. Limit the blast to holes charged at time the wind report is made.

Requirement: Stabilize surface soils where drills, support equipment and vehicles will operate.

- ☐ 03-2 Pre-water and maintain surface soils in a stabilized condition where drills, support equipment and vehicles will operate.
- ☐ 03-3 Apply and maintain a dust palliative on surface soils where drills, support equipment and vehicles will operate.

(Continued on next page.)

Requirement: Stabilize soil during blast preparation activities.

☐ 03-4 Limit the blast footprint area to no larger than what can be practically stabilized immediately following the blast.

☐ 03-5 Maintain surface rock and vegetation where possible to reduce exposure of disturbed soil to wind.

Note: Select at least one of the above; in addition the appropriate control measure for your soil type must be selected from the following.

☐ 03-6 **L & ML:** Presoak surface soils to depth of the caliche or bedrock with water using water trucks, water pulls, sprinklers or wobblers.

☐ 03-7 **MH:** Presoak surface soils to depth of the caliche or bedrock with water and tackifier mixture using water trucks, water pulls, sprinklers or wobblers.

☐ 03-8 **H:** Presoak surface soils to depth of the caliche or bedrock with water and surfactant mixture using water trucks, water pulls, sprinklers or wobblers.

Requirement: Stabilize soil after blasting.

☐ 03-9 Water disturbed soils to form crust immediately following blast and safety clearance.

☐ 03-10 Apply and maintain a dust palliative to form crust immediately following blast and safety clearance.

See also: BMP 11: DISTURBED LAND – Long-Term Stabilization, if no continuing activity will occur within 30 days.

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Soil Remediation Project

CLEARING AND GRUBBING — BMP 04

YOU MUST SELECT AT LEAST ONE CONTROL MEASURE FOR EACH REQUIREMENT. PLACE A CHECK IN THE BOX IN FRONT OF YOUR SELECTION.

Requirement: Stabilize surface soils where support equipment and vehicles will operate.

- ☑ 04-1 Pre-water and maintain surface soils in a stabilized condition where support equipment and vehicles will operate.
- ☐ 04-2 Apply and maintain a dust palliative on surface soils where support equipment and vehicles will operate.

Requirement: Stabilize soil during clearing and grubbing activities.

- ☑ 04-3 **L & ML:** Apply water during clearing and grubbing activities.
- ☐ 04-4 **MH:** Apply water and tackifier mixture during clearing and grubbing activities.
- ☐ 04-5 **H:** Apply water and surfactant mixture during clearing and grubbing activities.

Requirement: Stabilize disturbed soil immediately after clearing and grubbing activities.

- ☑ 04-6 Water disturbed soils to form crust immediately following clearing and grubbing activities.
- ☐ 04-7 Apply and maintain a dust palliative on disturbed soils to form crust immediately following clearing and grubbing activities.

Recommendations: Maintain live perennial vegetation and desert pavement where possible.

See also: BMP 11: DISTURBED LAND – Long-Term Stabilization, if no continuing activity will occur within 30 days.

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Soil Remediation Project

CLEARING FORMS, FOUNDATIONS AND SLABS

BMP 05

YOU MUST SELECT AT LEAST ONE CONTROL MEASURE FOR EACH REQUIREMENT. PLACE A CHECK IN THE BOX IN FRONT OF YOUR SELECTION.

Requirement: Limit visible emissions to no more than an average of 20% opacity for any period aggregating 3 minutes in any 60-minute period pursuant to Air Quality Regulations.

- [x] 05-1 Use single stage pours, unless prohibited by engineering design or building code, to minimize clearing.

Note: At least one of the following must be selected.

- [x] 05-2 Use water spray to clear forms, foundations and slabs.
- [ ] 05-3 Use sweeping and water spray to clear forms, foundations and slabs.
- [ ] 05-4 Use industrial vacuum to clear forms, foundations and slabs prior to the use of high pressure air to blow soil and debris.
- [ ] 05-5 Use industrial vacuum to clear forms, foundations and slabs.

Recommendations: Verify Building Code Restrictions for use of water on slabs.

Avoid use of high pressure air to blow soil and debris from forms, foundations and slabs.

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Soil Remediation Project

CRUSHING BMP 06

YOU MUST SELECT AT LEAST ONE CONTROL MEASURE FOR EACH REQUIREMENT. PLACE A CHECK IN THE BOX IN FRONT OF YOUR SELECTION.

Requirement: Obtain the appropriate Operating Permit for powered crushers prior to engaging in crushing activity. Comply with permit conditions.

Requirement: Stabilize surface soils where support equipment and vehicles will operate.

- ☐ 06-1 Pre-water and maintain surface soils in a stabilized condition where support equipment and vehicles will operate.
- ☐ 06-2 Apply and maintain a dust palliative to surface soils where support equipment and vehicles will operate.

Requirement: Stabilize material before crushing.

- ☐ 06-3 Pre-water material prior to loading into crusher.
- ☐ 06-4 Test material to determine moisture content and silt loading, crush only material that is at optimum moisture content.

Requirement: Stabilize material during crushing.

- ☐ 06-5 Apply water to stabilize material so as to remain in compliance with opacity standards and permit conditions, during crushing.
- ☐ 06-6 Monitor emissions opacity. Make adjustments to remain in compliance with opacity standards and permit conditions.

Requirement: Stabilize material after crushing.

- ☐ 06-7 Water crushed material to form crust immediately following crushing.
- ☐ 06-8 Apply and maintain a dust palliative to crushed material.

See also: BMP 19. STOCKPILING

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Soil Remediation Project

CUT AND FILL — BMP 07

YOU MUST SELECT AT LEAST ONE CONTROL MEASURE FOR EACH REQUIREMENT. PLACE A CHECK IN THE BOX IN FRONT OF YOUR SELECTION.

Requirement: Stabilize surface soils where support equipment and vehicles will operate.

- ☑ 07-1 Pre-water and maintain surface soils in a stabilized condition where support equipment and vehicles will operate.
- ☐ 07-2 Apply and maintain a dust palliative to surface soils where support equipment and vehicles will operate.

Requirement: Pre-water soils.

- ☐ 07-3 Dig a test hole to depth of cut or equipment penetration to determine if soils are moist at depth. Continue to pre-water if not moist to depth of cut.
- ☐ 07-4 **L & ML:** Pre-water with sprinklers or wobblers to allow time for penetration.
- ☑ 07-5 **L & ML:** Pre-water with water trucks or water pulls to allow time for penetration.
- ☐ 07-6 **MH:** Pre-water with a water and tackifier mixture using sprinklers or wobblers to allow time for penetration.
- ☐ 07-7 **MH:** Pre-water with a water and tackifier mixture using water trucks or water pulls to allow time for penetration.
- ☐ 07-8 **H:** Pre-water with a water and surfactant mixture using sprinklers or wobblers to allow time for penetration.
- ☐ 07-9 **H:** Pre-water with a water and surfactant mixture using water trucks or water pulls to allow time for penetration.

Requirement: Stabilize soil during cut activities.

- ☑ 07-10 Apply water, using water truck or water pull, to depth of cut prior to subsequent cuts.
- ☐ 07-11 No cut activities fill only.

Requirement: Stabilize soil after cut and fill activities.

- ☑ 07-12 Water disturbed soils to form crust following fill and compaction.
- ☐ 07-13 Apply and maintain a dust palliative on disturbed soils to form crust following fill and compaction.

See also: BMP 11: DISTURBED LAND – Long-Term Stabilization if no continuing activity will occur within 30 days.

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Soil Remediation Project

DEMOLITION – Implosion BMP 08

YOU MUST SELECT AT LEAST ONE CONTROL MEASURE FOR EACH REQUIREMENT. PLACE A CHECK IN THE BOX IN FRONT OF YOUR SELECTION.

Requirement: A Demolition Supplemental form (see Appendix A) and a Supplement To The Dust Mitigation Plan (see Appendix B) must be filled out, submitted and approved by the Control Officer prior to implosion.

Requirement: An asbestos survey must be conducted on any facility before demolition can commence.

Requirement: A complete Clark County NESHAP Notification form must be submitted to the DAQEM at least ten working days prior to demolition. The asbestos survey must be attached to this notification.

Requirement: All friable and non-friable asbestos containing material must be removed from the facility prior to implosion.

Requirement: Confine blasting to times when wind direction is away from closest residential areas, occupied buildings and major roadways.

Requirement: Implosion time must be pre-approved by the Control Officer.

Requirement: Monitor and document current weather conditions and weather predictions from National Weather Service.

☑ 08-1 Prior to setting explosive charges, obtain and document current and predicted weather conditions as provided by the National Weather Service. If wind advisory (over 20 miles per hour gusts or average wind speed of 10 miles per hour) is current or forecasted for blast period, do not set charges and do not blast. Maintain a calibrated anemometer and log ambient air velocity and direction within 1,000 feet of the implosion site, beginning at least 1 (one) hour prior to and 15 minutes after the implosion.

(Continued on next page)

Requirement: Stabilize surface area where support equipment and vehicles will be operated.

☐ 08-2 Restrict support equipment and vehicles to existing paved and/or stable areas.

Note: You must select one of the following if paved and/or stable areas do not already exist and you have not selected 08-2.

☐ 08-3 Pre-water and maintain surface soils in a stabilized condition where support equipment and vehicles will operate.

☐ 08-4 Apply and maintain a dust palliative on surface soils where support equipment and vehicles will be operated.

Requirement: Stabilize demolition debris immediately following blast and safety clearance.

☐ 08-5 Apply water to debris immediately following blast and safety clearance.

☐ 08-6 Apply and maintain a dust palliative to debris immediately following blast and safety clearance.

Requirement: Stabilize and clean surrounding area immediately following blast and safety clearance.

☐ 08-7 Water all disturbed soil surfaces to establish crust and prevent wind erosion of soil.

☐ 08-8 Thoroughly clean blast debris from paved and other surfaces following blast and safety clearance.

See also: BMP 23: TRUCK LOADING.

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Soil Remediation Project

DEMOLITION - Mechanical/Manual

BMP 09

YOU MUST SELECT AT LEAST ONE CONTROL MEASURE FOR EACH REQUIREMENT. PLACE A CHECK IN THE BOX IN FRONT OF YOUR SELECTION.

Requirement: For renovation or demolition of a structure, a Demolition Supplemental form (see Appendix A) must be filled out, submitted and approved by the Control Officer prior to commencing demolition.

Requirement: An asbestos survey must be conducted on any facility or structure that is subject to NESHAP requirements before demolition can commence.

Requirement: A complete Clark County NESHAP Notification form must be submitted to the DAQEM at least ten working days prior to demolition. The asbestos survey must be attached to this notification.

Requirement: Stabilize surface soils where support equipment and vehicles will operate.

- ☑ 09-1 Pre-water and maintain surface soils in a stabilized condition where support equipment and vehicles will operate.
- ☐ 09-2 Apply and maintain a dust palliative to surface soils where support equipment and vehicles will operate.
- ☐ 09-3 Area where support equipment and vehicles will operate is completely covered with paving or concrete.

Requirement: Stabilize demolition debris during handling.

- ☑ 09-4 Apply water to demolition debris during handling.

Requirement: Stabilize debris following demolition.

- ☑ 09-5 Apply water to stabilize demolition debris.
- ☐ 09-6 Apply a dust palliative to stabilize demolition debris.

Requirement: Stabilize surrounding area following demolition.

- ☑ 09-7 Apply water to stabilize surrounding area following demolition.
- ☐ 09-8 Apply and maintain a dust palliative to stabilize surrounding area following demolition.

See also: BMP 23: TRUCK LOADING.

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Soil Remediation Project

DISTURBED SOIL — BMP 10

YOU MUST SELECT AT LEAST ONE CONTROL MEASURE FOR EACH REQUIREMENT. PLACE A CHECK IN THE BOX IN FRONT OF YOUR SELECTION.

Requirement: For each non-linear project to be permitted for 5 acres or less; install perimeter wind barrier 3 feet or more in height made of material with a porosity of 50% or less.

Requirement: Limit vehicle traffic and disturbance of soils where possible.

- ☑ 10-1 Limit vehicle traffic and disturbance of soils with the use of fencing, barriers, barricades, and/or wind barriers.

Requirement: Stabilize and maintain stability of all disturbed soil throughout construction site.

Note: You must choose one or more of the following.

- ☑ 10-2 Apply water to stabilize disturbed soils. Soils must be kept in a sufficiently damp, crusted or covered condition.
- ☐ 10-3 Apply and maintain a dust palliative based on soil type and future plans.

Requirement: Soil conditions, including preventive and corrective measures, must be recorded every day the construction project is active.

- ☑ 10-4 Record soil conditions and dust control actions in daily project records.

Recommendations: If interior block walls are planned, install as early in the construction as possible.

See also: BMP 11: DISTURBED LAND – Long-Term Stabilization, if no continuing activity will occur within 30 days.

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Soil Remediation Project

DISTURBED LAND – Long-Term Stabilization

BMP 11

YOU MUST SELECT AT LEAST ONE CONTROL MEASURE FOR EACH REQUIREMENT. PLACE A CHECK IN THE BOX IN FRONT OF YOUR SELECTION.

Requirement: Stabilize soil to meet standards required by Air Quality Regulation Section 90.

- ☑ 11-1 Apply and maintain a dust palliative on disturbed soils for long-term stabilization.
- ☐ 11-2 Stabilize disturbed soil with vegetation for long-term stabilization.
- ☐ 11-3 Pave or apply surface rock for long-term stabilization.
- ☐ 11-4 Use wind breaks in accordance with a site-specific plan approved by the Control Officer and Region IX Administrator of the EPA.
- ☐ 11-5 Apply water and maintain soils in a visible damp or crusted condition for temporary stabilization.

Requirement: Prevent access to limit soil disturbance.

- ☑ 11-6 Prevent access by fencing, ditches, vegetation, berms or other suitable barrier or means approved by the Control Officer.

Recommendations: Plant perimeter vegetation early. Use of native and drought-tolerant plants with greater than 50 % silhouette area is encouraged.

See also: BMP 12: DUST SUPPRESSANT, DUST PALLIATIVE AND SURFACTANT – Selection and Use.

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Soil Remediation Project

DUST PALLIATIVE – Selection and Use

BMP 12

YOU MUST SELECT AT LEAST ONE CONTROL MEASURE FOR EACH REQUIREMENT. PLACE A CHECK IN THE BOX IN FRONT OF YOUR SELECTION.

Requirement: Follow AQD "Interim Policy on Dust Palliatives Use In Clark County, Nevada".

Requirement: Record use of suppressants and dust palliatives and retain records.

Requirement: Follow applicable federal and state regulations.

Requirement: Select method of long-term stabilization taking into consideration future land use.

☐ 12-1 For traffic area applications use Table 1: Traffic Area Application Requirements, Appropriate Use of Liquid Dust Palliatives and Application Rates, from the Interim Policy on Dust Palliatives Use In Clark County, Nevada.

☐ 12-2 For non-traffic area applications use Table 2: Non-Traffic Area Application Requirements, Appropriate Use of Liquid Dust Palliatives and Application Rates, from the Interim Policy on Dust Palliatives Use In Clark County, Nevada.

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Soil Remediation Project

IMPORTING/EXPORTING SOIL, ROCK AND OTHER BULK MATERIAL

BMP 13

YOU MUST SELECT AT LEAST ONE CONTROL MEASURE FOR EACH REQUIREMENT. PLACE A CHECK IN THE BOX IN FRONT OF YOUR SELECTION.

Requirement: Limit visible dust opacity from vehicular operations.

- ☑ 13-1 Apply water and limit vehicle speeds to 15 mph on the work site.
- ☐ 13-2 Apply and maintain dust suppressant on haul routes.

Requirement: Check belly-dump truck seals regularly and remove any trapped rocks to prevent spillage.

Requirement: Maintain 3-6 inches of freeboard to minimize spillage.

Requirement: Stabilize materials during transport on site.

- ☐ 13-3 Use tarps or other suitable enclosures on haul trucks.
- ☑ 13-4 Stabilize materials with water.

Requirement: Clean wheels and undercarriage of haul trucks prior to leaving construction site.

Recommendations: Verify State and local laws, concerning the hauling of bulk materials on public roadways.

See also: BMP 20: TRACKOUT PREVENTION AND CLEANUP.

BMP 23: TRUCK LOADING.

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Soil Remediation Project

LANDSCAPING

BMP 14

YOU MUST SELECT AT LEAST ONE CONTROL MEASURE FOR EACH REQUIREMENT. PLACE A CHECK IN THE BOX IN FRONT OF YOUR SELECTION.

Requirement: Stabilize soils, materials and slopes during handling.

- ☐ 14-1 **L & ML:** Apply water prior to leveling or any other earth moving activity to keep the soil moist throughout the process.
- ☐ 14-2 **MH:** Apply a water and tackifier mixture prior to leveling or any other earth moving activity to keep the soil moist throughout the process.
- ☐ 14-3 **H:** Apply a water and surfactant mixture prior to leveling or any other earth moving activity to keep the soil moist throughout the process.

Requirement: Stabilize soils, materials and slopes at completion of activity.

- ☐ 14-4 Stabilize sloping surfaces using soil binders until vegetation or ground cover can effectively stabilize the slope.
- ☐ 14-5 Apply water and maintain sloping surfaces in a crusted condition.
- ☐ 14-6 Maintain effective cover over materials.

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Soil Remediation Project

PAVING/SUBGRADE PREPARATION

BMP 15

YOU MUST SELECT AT LEAST ONE CONTROL MEASURE FOR EACH REQUIREMENT. PLACE A CHECK IN THE BOX IN FRONT OF YOUR SELECTION.

Requirement: Stabilize soils prior to activities.

- ☑ 15-1 Pre-water subgrade surface until optimum moisture content is reached and maintained.

Requirement: Stabilize soils during activities.

- ☑ 15-2 Maintain at least 70% of optimum moisture content for Type II material while aggregate is being applied.

Requirement: Stabilize soils following activities.

- ☐ 15-3 Place tack coat on Type II aggregate base immediately after it is applied.
- ☐ 15-4 Apply water to Type II aggregate base immediately after it is applied.

Requirement: Stabilize adjacent disturbed soils following paving activities.

- ☐ 15-5 Stabilize adjacent disturbed soils following paving activities by crusting with water.
- ☐ 15-6 Stabilize adjacent disturbed soils following paving activities by applying a dust palliative.
- ☐ 15-7 Stabilize adjacent disturbed soils following paving activities with immediate landscaping activity or installation of vegetative or rock cover.
- ☐ 15-8 There are no soils adjacent to paving activities.

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Soil Remediation Project

SAWING/CUTTING MATERIALS

BMP 16

YOU MUST SELECT AT LEAST ONE CONTROL MEASURE FOR EACH REQUIREMENT. PLACE A CHECK IN THE BOX IN FRONT OF YOUR SELECTION.

Requirement: Limit visible emissions to no more than an average of 20% opacity, pursuant to Air Quality Regulations.

- ☐ 16-1 Use water to control dust when cutting materials.
- ☐ 16-2 Use a vacuum to collect dust when cutting materials.

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Soil Remediation Project

SCREENING

BMP 17

YOU MUST SELECT AT LEAST ONE CONTROL MEASURE FOR EACH REQUIREMENT. PLACE A CHECK IN THE BOX IN FRONT OF YOUR SELECTION.

Requirement: If using a powered screen, obtain the appropriate Operating Permit for powered screens prior to engaging in screening activity. Comply with permit conditions.

Requirement: Drop material through the screen slowly and minimize drop height.

Requirement: Stabilize surface soils where support equipment and vehicles will operate.

- ☐ 17-1 Pre-water and maintain surface soils in a stabilized condition where support equipment and vehicles will operate.
- ☐ 17-2 Apply and maintain a dust palliative on surface soils where support equipment and vehicles will operate.

Requirement: Pre-treat material prior to screening.

- ☐ 17-3 Apply sufficient water to obtain at least 70% optimum moisture in material prior to screening.
- ☐ 17-4 Apply a dust suppressant to material prior to screening.

Requirement: Stabilize material during screening.

- ☐ 17-5 Dedicate water truck or large hose to screening operation and apply water as needed to prevent dust.
- ☐ 17-6 Apply water to material as it is being dropped through the screen.
- ☐ 17-7 Install wind barrier upwind of screen as high as the screen drop point and made of material with a porosity of 50% or less.

Requirement: Stabilize material and surrounding area immediately after screening.

- ☐ 17-8 Apply water to stabilize screened material and surrounding area after screening.
- ☐ 17-9 Apply and maintain a dust palliative to stabilize screened material and surrounding area after screening.

See also: BMP 19: STOCKPILING

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Soil Remediation Project

STAGING AREAS — BMP 18

YOU MUST SELECT AT LEAST ONE CONTROL MEASURE FOR EACH REQUIREMENT. PLACE A CHECK IN THE BOX IN FRONT OF YOUR SELECTION.

Requirement: Limit visible dust opacity from vehicular operations.

- ☑ 18-1 Limit vehicle speeds to 15 mph in the staging area and on all unpaved access routes.
- ☐ 18-2 Apply and maintain dust suppressant on all vehicle traffic areas in the staging areas and unpaved access routes.

Requirement: Stabilize staging area soils during use.

- ☑ 18-3 Pre-water and maintain surface soils in a stabilized condition where support equipment and vehicles will operate.
- ☐ 18-4 Apply and maintain a dust palliative to surface soils where support equipment and vehicles will be operated.

Requirement: Stabilize staging area soils at project completion.

- ☑ 18-5 Apply a dust palliative.
- ☐ 18-6 Apply screened or washed Type II aggregate.
- ☐ 18-7 Use wind breaks in accordance with a site-specific plan approved by the Control Officer and Region IX Administrator of the EPA.
- ☐ 18-8 Pave with thin paving.
- ☐ 18-9 Completed project will cover staging area with buildings, paving, and/or landscaping.
- ☐ 18-10 Apply water to form adequate crust and prevent access.

Recommendations: Limit size of staging areas.

Limit ingress and egress points.

See also: BMP 20: TRACKOUT PREVENTION AND CLEANUP

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Soil Remediation Project

STOCKPILING — BMP 19

YOU MUST SELECT AT LEAST ONE CONTROL MEASURE FOR EACH REQUIREMENT. PLACE A CHECK IN THE BOX IN FRONT OF YOUR SELECTION.

Requirement: To the extent possible, maintain stockpile to avoid steep sides or faces.

Requirement: Stockpile location and height must be maintained pursuant to Air Quality Regulations. Stockpiles located within 100 yards of occupied buildings must not be constructed over 8 feet in height.

☐ 19-1 Stockpiles will not be constructed over 8 feet in height.

☐ 19-2 Stockpiles will be constructed over 8 feet high and must have a road bladed to the top to allow water truck access or must have a sprinkler irrigation system installed, used and maintained

Requirement: Stabilize surface soils where support equipment and vehicles will operate.

☐ 19-3 Pre-water and maintain surface soils in a stabilized condition where support equipment and vehicles will operate.

☐ 19-4 Apply and maintain a dust palliative on surface soils where support equipment and vehicles will operate.

Requirement: Stabilize stockpile materials during handling.

☐ 19-5 Maintain stockpile materials with at least 70% optimum moisture content.

☐ 19-6 Remove material from the downwind side of the stockpile, when safe to do so.

Note: Select at least one of the above; in addition the appropriate control measure for your soil type must be selected from the following.

☐ 19-7 **L & ML:** Apply water during stacking, loading and unloading operations.

☐ 19-8 **MH:** Apply a water and tackifier mixture during stacking, loading and unloading operations.

☐ 19-9 **H:** Apply a water and surfactant mixture during stacking, loading and unloading operations.

(Continued on next page)

Requirement: Stabilize stockpiles at completion of activity.

- ☐ 19-10 Water stockpiles to form a crust immediately at the completion of activity.
- ☐ 19-11 Apply and maintain a dust palliative to all outer surfaces of the stockpiles.
- ☐ 19-12 Provide and maintain wind barriers on 3 sides of the pile, whose length is no less than equal to the length of the pile, whose distance from the pile is no more than twice the height of the pile, whose height is equal to the pile height, and made of material with a porosity of 50% or less.
- ☐ 19-13 Apply a cover or screen to stockpiles.

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Soil Remediation Project

TRACKOUT PREVENTION AND CLEANUP

BMP 20

YOU MUST SELECT AT LEAST ONE CONTROL MEASURE FOR EACH REQUIREMENT. PLACE A CHECK IN THE BOX IN FRONT OF YOUR SELECTION.

Requirement: In soils that have a PEP classification of "High", pave construction activities roadways as early as possible.

Requirement: Use of soil to create a ramp for vehicle access over a curb is prohibited.

Requirement: Trackout conditions, including preventive and corrective measures, must be recorded daily for every day that the construction project access is used by vehicles.

- ☑ 20-1 Record soil conditions and dust control actions in daily project records.

Requirement: Prevent dust from trackout.

- ☐ 20-2 Immediately clean trackout from paved surfaces to maintain dust control. Trackout must not extend 50 feet or more.
- ☑ 20-3 Maintain dust control during working hours and clean trackout from paved surfaces at the end of the work shift/day. Trackout must not extend 50 feet or more and must be cleaned daily, at minimum.

Requirement: Install and maintain trackout control devices in effective condition at all access points where paved and unpaved access or travel routes intersect.

- ☑ 20-4 Install gravel pad(s) consisting of 1" to 3" rough diameter, clean, well-graded gravel or crushed rock. Minimum dimensions must be 30 feet wide by 3 inches deep, and, at minimum, 50' or the length of the longest haul truck, whichever is greater. Re-screen, wash or apply additional rock in gravel pad to maintain effectiveness.
- ☐ 20-5 Install wheel shakers. Clean wheel shakers on a regular basis to maintain effectiveness.
- ☐ 20-6 Install wheel washers. Maintain wheel washers on a regular basis to maintain effectiveness.
- ☐ 20-7 Install wheel shakers in the event that trackout cannot be controlled with gravel pads.
- ☐ 20-8 Install wheel washer in the event that trackout cannot be controlled with gravel pads and wheel shakers.
- ☐ 20-9 Motorized vehicles will only operate on paved surfaces.

(Continued on next page)

Requirement: All exiting traffic must be routed over selected trackout control device(s).

- [x] 20-10 Clearly establish and enforce traffic patterns to route traffic over selected trackout control device(s).
- [ ] 20-11 Limit site accessibility to routes with trackout control devices in place by installing effective barriers on unprotected routes.

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Soil Remediation Project

TRAFFIC – Unpaved Routes and Parking Areas

BMP 21

YOU MUST SELECT AT LEAST ONE CONTROL MEASURE FOR EACH REQUIREMENT. PLACE A CHECK IN THE BOX IN FRONT OF YOUR SELECTION.

Requirement: Limit visible dust opacity from vehicular operations.

- ☑ 21-1 Limit vehicle speeds to 15 mph on all unpaved routes and parking areas.
- ☐ 21-2 Apply and maintain dust palliative on all vehicle travel areas.

Requirement: Stabilize all haul routes.

- ☑ 21-3 Apply water to haul routes and maintain in a stabilized condition.
- ☐ 21-4 Apply a dust palliative to haul routes and maintain in a stabilized condition.
- ☐ 21-5 Apply gravel to haul routes and maintain in a stabilized condition.
- ☐ 21-6 Supplement dust palliative or aggregate applications with watering, if necessary.

Requirement: Stabilize all off-road and parking areas.

- ☑ 21-7 Apply water to off-road traffic and parking areas and maintain in a stabilized condition.
- ☐ 21-8 Apply gravel to off-road traffic and parking areas and maintain in a stabilized condition.
- ☐ 21-9 Apply recycled asphalt (or other suitable material) to off-road traffic and parking areas and maintain in a stabilized condition.
- ☐ 21-10 Apply and maintain a dust palliative (designed for vehicle traffic) to off-road traffic and parking areas and maintain in a stabilized condition.

Recommendations: Use of bumps or dips for speed control is encouraged.

Apply paving as soon as possible to all future roadway areas for PEP categories other than “High”.

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Soil Remediation Project

TRENCHING BMP 22

YOU MUST SELECT AT LEAST ONE CONTROL MEASURE FOR EACH REQUIREMENT. PLACE A CHECK IN THE BOX IN FRONT OF YOUR SELECTION.

Requirement: Stabilize surface soils where trenching equipment, support equipment and vehicles will operate.

- ☑ 22-1 Pre-water and maintain surface soils in a stabilized condition where trenching equipment, support equipment and vehicles will operate.
- ☐ 22-2 Apply and maintain a dust palliative to surface soils where trenching equipment, support equipment and vehicles will operate.

Requirement: Presoak soils prior to trenching activities.

- ☐ 22-3 Pre-water surface, pre-trench to 18” depth, soak soils via pre-trench prior to deep trenching.
- ☐ 22-4 **L & ML:** Presoak soil with water using sprinklers or wobblers.
- ☑ 22-5 **L & ML:** Presoak with water, using water truck and/or water pull.
- ☐ 22-6 **MH:** Presoak soil with a water and tackifier mixture using water pulls and/or water trucks.
- ☐ 22-7 **MH:** Presoak soil with a water and tackifier mixture using sprinklers or wobblers.
- ☐ 22-8 **H:** Presoak soil with a water and surfactant mixture using water pulls and/or water trucks.
- ☐ 22-9 **H:** Presoak soil with a water and surfactant mixture using sprinklers or wobblers.

Requirement: Stabilize soil during trenching activities.

- ☑ 22-10 **L & ML:** Complete trenching with a dedicated water truck or large hose maintaining water as needed to prevent dust.
- ☐ 22-11 **L & ML:** Use spray nozzles mounted on trenching machine.
- ☐ 22-12 **MH:** Complete trenching with a dedicated water truck or large hose maintaining a water and tackifier mixture as needed to prevent dust.
- ☐ 22-13 **H:** Complete trenching with a dedicated water truck or large hose maintaining a water and surfactant mixture as needed to prevent dust.

(Continued on next page)

Requirement: Stabilize soils at the completion of trenching activities.

- [x] 22-14 Use water to form crust on excavated soil windrow as it is formed.
- [ ] 22-15 Use dust palliative to form crust on excavated soil windrow as it is formed.

Recommendations: Wash mud and soil from equipment at completion of trench to prevent crusting and drying of soil on equipment.

See also: BMP 01: BACKFILLING, if applicable.

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Soil Remediation Project

TRUCK LOADING — BMP 23

YOU MUST SELECT AT LEAST ONE CONTROL MEASURE FOR EACH REQUIREMENT. PLACE A CHECK IN THE BOX IN FRONT OF YOUR SELECTION.

Requirement: Ensure all loads are covered prior to leaving the construction site and traveling on public roadways.

Requirement: Stabilize surface soils where loaders, support equipment and vehicles will operate.

- ☑ 23-1 Pre-water and maintain surface soils in a stabilized condition where loaders, support equipment and vehicles will operate.
- ☐ 23-2 Apply and maintain a dust palliative on surface soils where loaders, support equipment and vehicles will operate.

Requirement: Stabilize material during loading.

- ☑ 23-3 Empty loader bucket slowly and keep loader bucket close to the truck to minimize the drop height while dumping.

Note: You must selected 23-3 if PEP is greater than LOW, in addition one of the following must be selected.

- ☐ 23-4 **L & ML:** Mix material with water prior to loading.
- ☑ 23-5 **L & ML:** Spray material with water while loading.
- ☐ 23-6 **MH:** Mix material with a water and tackifier mixture prior to loading.
- ☐ 23-7 **MH:** Spray material with a water and tackifier mixture while loading.
- ☐ 23-8 **H:** Mix material with a water and surfactant mixture prior to loading.
- ☐ 23-9 **H:** Spray material with a water and surfactant mixture while loading.

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CLARK COUNTY
DEPARTMENT OF AIR QUALITY &
ENVIRONMENTAL MANAGEMENT
500 S. Grand Central Pkwy. P.O. Box 551776, Las Vegas Nevada 89155-1776
Office (702) 455-5942 · Fax (702) 383-9994

BLASTING SUPPLEMENTAL

Each blasting contractor working under a Dust Control Permit must complete a separate Blasting Supplemental Form and submit applicable fees prescribed in Section 18 of the Air Quality Regulations.

1. PERMIT INFORMATION:

Permit Number:_____

Applicant/Permittee: Tronox LLC

Project Name: Soil Remediation Project

Project Address/Location: 560 West Lake Mead Parkway

2. BLASTING CONTRACTOR INFORMATION:

Blasting Company:_____

Address:_____

Contact Person:_____

Phone #:_____ Cellular #:_____ Fax #:_____

3. BLASTING DETAILS:

Attach selected Control Measures for BMP 03: BLASTING - Soil and Rock.

Monitor and record weather conditions using a suitable source such as the website http://www.wrh.noaa.gov/Lasvegas/, Las Vegas Weather - Local Forecast.

Duration of Blasting:_____ Start Date:_____ Finish Date:_____

Hours during which blasting will occur: _____a.m. to _____p.m.
(Hours other than 8:00 a.m. through 4:00 p.m., Monday through Friday, excluding holidays, require Control Officers prior review and approval.)

Description of material to be blasted:_____

Total number of acres to be blasted:_____acres Depth:_____

Distance: To nearest residence:_____ To commercial facility:_____

Have nearby residents been informed? ☐ Yes ☐ No

4. SUBMITTED BY:

Name:_____ Title:_____

Company Name:_____

Signature:_____ Date:_____

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CLARK COUNTY
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500 S. Grand Central Pkwy. P.O. Box 551776, Las Vegas Nevada 89155-1776
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DEMOLITION SUPPLEMENTAL

NESHAP notifications must be submitted with renovation/demolition applications regardless of age and/or size of the building.

Permit Number: _____
(If known, otherwise to be completed by DAQEM)

1. PERMIT INFORMATION:

Applicant/Permittee: Tronox LLC

Project Name: Soil Remediation Project

Project Address/Location: 560 West Lake Mead Parkway Henderson

2. DEMOLITION CONTRACTOR:

Company Name: TBD Responsible Person: _____

Address: _____

Phone #: _____ Cellular #: _____ FAX #: _____

3. DEMOLITION INFORMATION:

Describe demolition to take place: TBD

Size of building: _____ ft^2 Date of building construction: _____

Total Number of buildings on site: _____ Number of buildings to be demolished: _____

4. **BEFORE A DUST CONTROL PERMIT CAN BE ISSUED ON SITES REQUIRING AN ASBESTOS SURVEY, THE FOLLOWING IS REQUIRED:**

A. If Regulated Asbestos Containing Material (RACM) is present, a NESHAP notification must be submitted to DAQEM and an Asbestos Waste Certificate must be issued before the asbestos can be removed and disposed.

B. Once the RACM has been abated, submit a final clearance letter from a certified asbestos consultant along with a copy of the license of the individual that cleared the site.

C. Has Asbestos Waste Certificate been received from DAQEM?

No: ☒ Yes: ☐, Certificate #: _____

5. SUBMITTED BY:

Name: _____ Title: _____

Company Name: _____

Signature: _____ Date: _____

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Protecting the air we share

Air Quality

OWNER'S DESIGNEE FORM
DUST CONTROL PERMIT for CONSTRUCTION ACTIVITIES

An Excavation / Encroachment / Offsite permit for government owned land may be submitted in lieu of this form.

1. **DESIGNEE INFORMATION:**

   Applicant/Permittee: Tronox LLC

   Project Name: Soil Remediation Project

2. **PROPERTY OWNER INFORMATION:**

   ☑ Property Owner ☐ Easement / Right of Way Holder

   Name: Tronox LLC

   Address: 560 West Lake Mead Parkway

   City: Henderson State: NV ZIP: 89015

   Phone: 7025927727 Ext: Fax: 7026512310

I certify that the property owner and/or easement/right-of-way holder has given me permission to act as the Designee and to act on his/her behalf in all matters regarding the issuance, modification, closure and all requirements of the DUST CONTROL PERMIT for Construction Activities. I understand that I am responsible for dust control on the property listed on this application until such time that the permit is closed in accordance with Air Quality Regulations. I have completed the Dust Control Class or will complete the Class, no later than thirty (30) days from today's date. Furthermore, I understand that I am responsible for ensuring the contractor(s), subcontractor(s), and all other persons associated with the Project comply with the "Conditions of Permit" and "Dust Mitigation Plan".

I declare under penalty of perjury that the foregoing is true and correct.

Executed on:

Date

Applicants/Permittee Signature

Fredrick R. Stater

Printed Name

Plant Manager

Title and Company

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FIGURE 4: VALLEY SOIL TYPES MAP
Las Vegas Valley

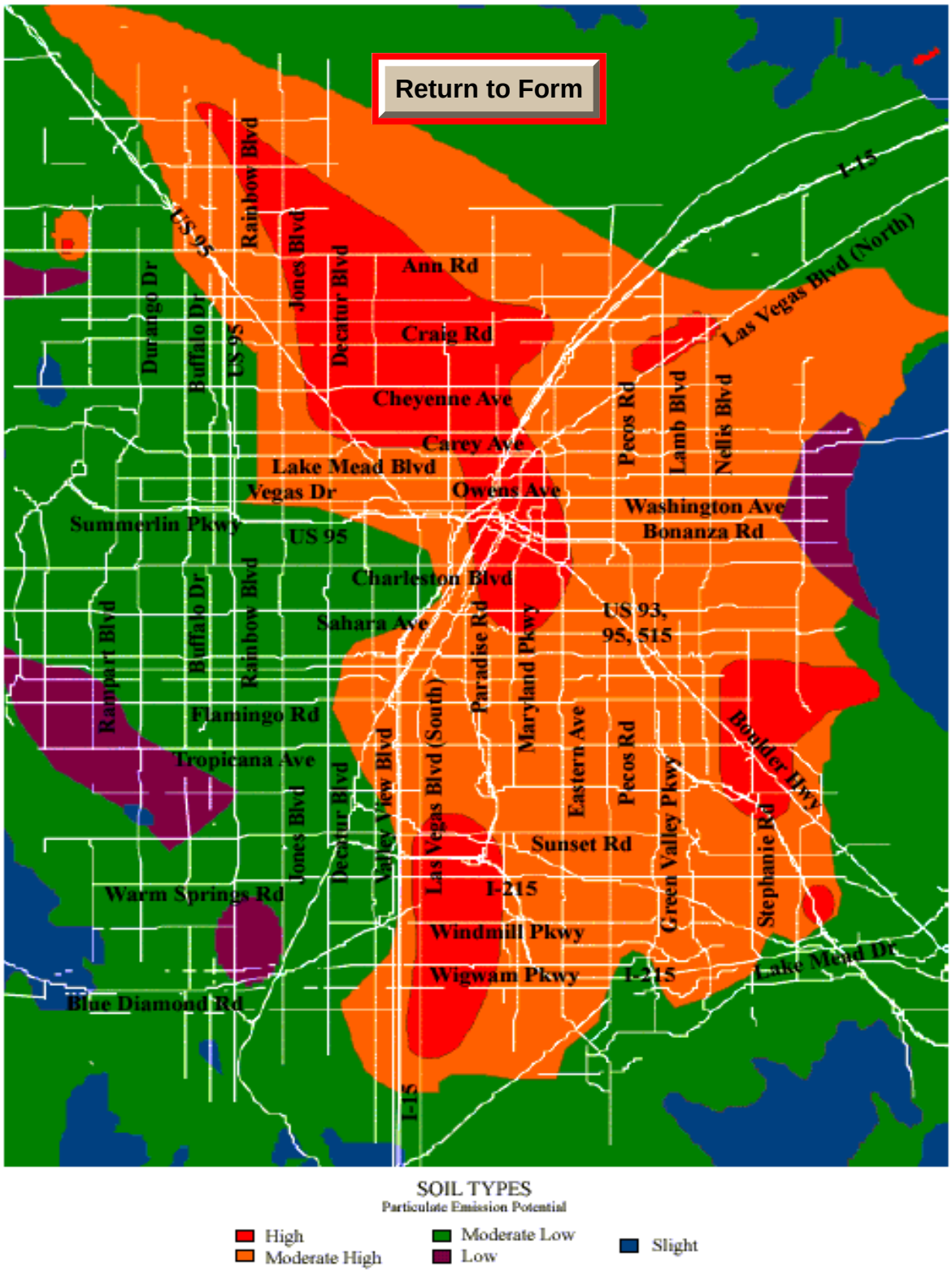
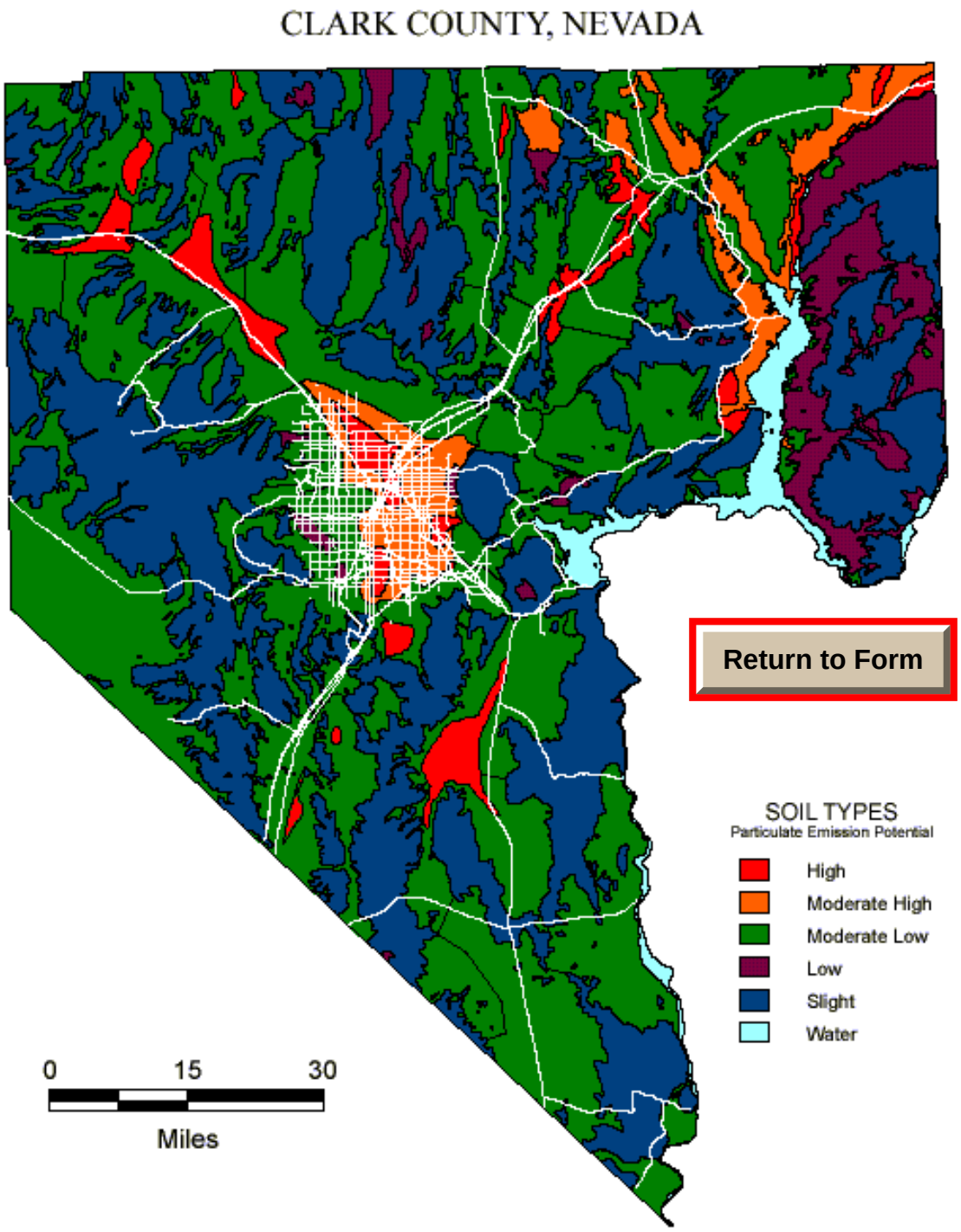
FIGURE 3: COUNTY SOIL TYPES MAP