SECTION 01 50 61

DUST CONTROL
11/2002

PART 1 GENERAL

1.1 SUMMARY

The work covered by this section consists of furnishing all labor, materials and equipment and performing all work required for the control and prevention of fugitive dust during and as the result of construction operations under this contract except for those measures set forth in other Technical Provisions of these specifications. For the purpose of this specification, fugitive dust entails the generation of solid particles by the forces of wind or machinery acting upon exposed materials. Provisions of this specification shall prevent fugitive dust from adversely affecting human health or welfare; unfavorably altering ecological balances of importance to human life; affecting other species of importance to man; or degrading the utility of the environment for aesthetic and recreational purposes.

1.2 REFERENCES

The publications listed below form a part of this section to the extent referenced. The publications are referenced in the text by basic designation only.

CORPS OF ENGINEERS (COE)

COE EM 385-1-1	(Latest Version) Safety and Health Requirements Manual

1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Dust Control; G.
Products and Procedures; G

Prior to commencement of the work, the Contractor shall submit in writing a proposal to the Contracting Officer for implementing the provisions of this section for fugitive dust control. The Contractor shall address by submittal the plans to prevent and control fugitive dust through specific mitigative and preventative measures, including any products to be used. The effectiveness of the dust control program shall be periodically checked and reviewed. Revisions to the dust control plan shall be submitted to the Contracting Officer as changes are necessary during the duration of this contract.

SD-02 Shop Drawings

Recordkeeping;.

Maintain and furnish records in accordance with PART 1 paragraph RECORDKEEPING.

1.4 IMPLEMENTATION MEETING

Prior to commencement of the work the Contractor shall meet with representatives of the Contracting Officer to develop mutual understandings relative to compliance with these provisions and administration of the dust control program.

1.5 APPLICABLE REGULATIONS

In order to prevent and to provide control of pollution arising from the construction activities of the Contractor and his subcontractors in the performance of this contract, all applicable Federal, State, and local laws and regulations concerning environmental pollution control and abatement, and all applicable provisions of the COE EM 385-1-1 as well as the specific requirements stated in this section and elsewhere in the contract specifications. Compliance with the provisions of this section by subcontractors will be the responsibility of the Contractor.

1.6 NOTIFICATION OF NON-COMPLIANCE

The Contracting Officer will notify the Contractor in writing of any observed non-compliance with the foregoing provisions. The Contractor shall, after receipt of such notice, immediately take corrective action. Such notice, when delivered to the Contractor or his authorized representative at the site of the work, shall be deemed sufficient for the purpose. If the Contractor fails or refuses to promptly take corrective action, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to any such stop orders shall be made the subject of a claim for extension of time or for excess costs or damages by the Contractor unless it was later determined that the Contractor was in compliance.

1.7 RECORDKEEPING

The Contractor shall, at a minimum, maintain records indicating dust control measures taken. Information provided shall be sufficient to answer any questions regarding control methods utilized, products used, application rates, inspections performed. Additional information to be recorded, but not limited to reporting, includes treated area, operator, date and time of treatment, meteorological conditions and inspection and monitoring reports. Records shall be submitted every 30 days to the Contracting Officer.

PART 2 PRODUCTS

2.1 PRODUCTS AND PROCEDURES

Products and procedures used in controlling particulates and dust shall be in accordance with the Contractor's Environmental Protection Plan and the dust control plan required by this Section. If the Contractor proposes to use chemical treatments or other manufactured products such as SOIL SEMENT, prior approval by the Post Directorate of Environment is required and shall be obtained by submitting a written request to the Contracting Officer's Representative.

PART 3 EXECUTION

3.1 INTERIOR DUST CONTROL - INFECTION CONTROL

3.1.1 HVAC SYSTEM ISOLATION

3.1.1.1 During Construction Project

Remove or isolate existing HVAC system(s) in area where the work is being done to prevent contamination of the ventilation system(s)system. Return air pathways passing out the construction space will be blocked. Stubbed ventilation ducts will be sealed to include the encasement of any exterior duct insulation to prevent the entrainment of contaminants that may later become airborne.

Maintain negative air pressure within enclosed work site with respect to adjacent occupied spaces by utilizing HEPA equipped air filtration units. If the work site is not enclosed, coordinate with the Medical Facilities Manager to ensure the adjacent occupied spaces are at a higher pressure than the work site.

3.1.1.2 Upon Completion of Work

Install temporary startup and testing ventilation filters specified for normal system operation before the initial start and testing of HVAC systems(s). Clean ducts using a HEPA filtered vacuum and wipe down the interior of all ducts with a wet disinfectant approved by the Infection Control Department. If the startup and commission of HVAC system(s) are done before the final cleaning of work area, flush the HVAC system(s) for 24 hours by operating the system at the maximum allowable static pressure once the work area has received the final cleaning. Before turn over of the project to Medical Facilities Management replace temporary startup filters with new filters.

Stubbed duct connections will *not* be reconnected to an active HVAC system until after the final clean up of the construction area - no exceptions. The HVAC system will be deactivated during duct reconnections and the inside of the duct at the reconnection shall be vacuumed and wiped with an approved disinfectant.

3.1.2 WORK AREA ISOLATION

3.1.2.1 During Construction Work

Seal work area by installing barriers (drywall, plywood, or plastic) between occupied/active health care spaces and work area. If plastic barriers are used they must be of the appropriate fire rating for the adjoining health care operation.

If entrances to the work area are required thru active health care spaces, then double sealing doorways will be used for plastic door barriers. If frame doors are used within the barriers, the doors shall be self closing. Walk off mats shall be used at all entrances.

Transport work materials and construction waste in tightly covered containers when moving thru active areas. Container or cart coverings will be tapes on all sides, or a closed solid lid will be used. Contractor shall clean interior pathways to and from the work area each day.

3.1.2.2 Upon Completion of Work

The Contractor shall clean in accordance with Section 01 78 02.00 10 CLOSEOUT SUBMITTALS, paragraph "FINAL CLEANING." The Contractor is responsible for coordination the the MEDDAC Environmental Services Department for health care standard cleaning of the space. Do not remove barriers from work area until the completed project is inspected by the Safety Department and Infection Control Department.

Remove Barrier materials carefully to minimize spreading dirt and debris that has accumulated during construction.

3.1 EXTERIOR DUST CONTROL

Control techniques for fugitive dust sources shall involve watering, chemical treatment, light bituminous treatment, reduction of surface wind speed with wind breaks or source enclosures, or similar methods. The methods utilized shall be cost effective and appropriate for the size and scope of the fugitive dust source. Methods and controls shall not have an adverse effects on plant and animal life, or contaminate the treated material.

Methods shall be repeated at such intervals as to keep all parts of the disturbed area treated at all times, and the Contractor shall have sufficient competent equipment on the job to accomplish control techniques. Products shall provide a method to reduce dust-related environmental concerns and aid in complying with applicable regulations. Products shall not in any form produce any adverse environmental effects through their use and shall provide an effective, clean, safe control of airborne dust and protection against soil erosion.

3.1.1 Preventative Techniques

The reduction of source extent, the incorporation of process modifications, or adjusted work practices, which reduce the amount of dust-generation, are preventative techniques for the control of fugitive dust emissions. These techniques could include, for example, the elimination of mud and dirt carry-out onto paved roads at construction sites.

3.1.2 Mitigative Techniques

Mitigative measures entail the periodic removal of dust-producing material. Examples of mitigative control measures include clean-up of spillage on paved or unpaved travel surfaces and clean-up of material spillage at transfer points.

3.2 MATERIALS HANDLING

The Contractor shall take the following minimum precautions to limit fugitive dust emissions from material handling and transportation to achieve control of dust emissions to the extent practicable:

a. Stockpiles

The Contractor shall apply water or other approved suitable chemicals or materials, or cover material stockpiles and other surfaces which can create airborne dust.

b. Transportation

At a minimum, complete covering of materials hauled from the construction site in open-bed vehicles which can create airborne particulate matter is required. Additional application of water, suitable chemicals, or maintaining a minimum 12 inch free-board space shall be required if additional controls are considered necessary by the Contracting Officer.

c. Off-Site Tracking

Dust control shall be performed as the work proceeds to minimize vehicle off-site tracking of sediment and generation of dust. Every effort shall be made to keep vehicles from tracking soils from the construction site. Dust generation shall be controlled by sprinkling, chemical treatment, light bituminous treatment, or similar approved methods.

3.3 CONSTRUCTION AND DEMOLITION

The Contractor shall control dust resulting from demolition and construction activities. No person may cause, suffer, allow, or permit a structure, road, street, alley, or parking area to be constructed, altered, repaired, or demolished, or land to be cleared without taking minimum precautions to achieve control of dust emissions.

3.3.1 Demolition

The amount of dust resulting from demolition shall be controlled to prevent the spread of dust to occupied portions of the construction site and to avoid creation of a nuisance in the surrounding area. The use of water, oil or chemical treatment for control of dust in the demolition of structures, in construction operations, in work performed on a road, parking area, or in the clearing of land is required.

3.3.2 Sandblasting

Adequate methods such as wet-sandblasting and enclosure of work areas to prevent airborne particulate matter during sandblasting of structures or other similar operations shall be utilized.

3.4 ACCESS ROADS AND PARKING LOTS

No person may cause, suffer, allow, or permit any public, industrial, commercial, or private road, street, or alley to be used without taking precautions to achieve control of dust emissions.

In addition to preventative techniques, the removal of soil or other materials shall be periodically performed by mechanical sweepers or their equivalent. The Contractor shall also spot clean dirty roadways and parking lots. These activities shall be performed as deemed necessary. Sand applied for the specific purpose of snow or ice control shall be removed as soon as practicable.

3.4.1 Access Roads

The use of asphalt or uniform gravel cover is an acceptable method of dust control for roads leading to and from the area of construction activity. Water, suitable oil, or approved chemical applications to construction and demolition site access roads may be used if accepted by the Contracting Officer.

3.4.2 Parking Lots

No person may allow any vehicular parking surface having more than five parking spaces to be used unless dust is controlled by the appropriate application of asphalt, water, or suitable oil or chemicals.

Parking surfaces with more than five parking spaces shall be paved or uniformly covered with gravel. This provision shall not apply to temporary parking lots used for less than one month, after which access is prohibited unless a continuance is granted by the Contracting Officer. Such temporary lots shall be required to apply water or suitable oil or chemical. Lots with more than 100 parking spaces shall be paved or covered by an equivalent method approved by the Contracting Officer.

3.5 CONTROL STRUCTURES

Activities performed under this Contract shall conform with the specifications described herein along with other technical specifications, particularly Section 01 57 20.00 10 ENVIRONMENTAL PROTECTION .

If the Contractor proposes to construct temporary structures, he shall submit the proposal for approval at least ten (10) days prior to the scheduled start of such temporary work. Modification of the Contractor's plans shall be made only with the written approval of the Contracting Officer.

3.6 MAINTENANCE

During the life of this contract, the Contractor shall maintain all facilities constructed for pollution control under this Contract as long as the operations creating the particular pollutant are being carried out or until the material concerned has become stabilized to the extent that pollution is no longer being created.

During the construction period the Contractor shall conduct frequent training courses for his maintenance personnel. The curricula shall include methods of dust control, familiarity with pollution standards, and care of controls and measures to prevent and correct fugitive dust pollution.

The Contractor shall furnish daily services for the temporary control measures at the project site and perform any required maintenance as deemed necessary by and to the satisfaction of the Contracting Officer during the entire life of the Contract. Services shall be performed at such a time and in such a manner to least interfere with the operations.

The Contractor's designated Site Inspector shall inspect all pollution prevention measures at the Contracting Officer's request.

-- End of Section --