

SECTION 4 DUST CONTROL AND WATERING

4-1 GENERAL - This work shall consist of applying either water or dust palliative, or both, for the alleviation or prevention of dust nuisance.

Dust resulting from the Contractor's performance of the work, either inside or outside the project area, shall be controlled by the Contractor in accordance with the provisions in Section 6, "Legal Relations and Responsibilities," of the General Provisions of the City Standard Specifications.

It is understood that these provisions will not prevent the Contractor from applying water or dust palliative for the Contractor's convenience, if desired.

The Contractor's attention is also directed to Section 6-21.5, "Dust Control," of the General Provisions of the City Standard Specifications.

4-2 DUST PALLIATIVE

4-2.1 Description - This work shall consist of applying a dust palliative for the prevention of dust nuisance. The dust palliative shall be applied in the amount and at the locations as directed by the Engineer.

4-2.2 Materials - The binder shall be miscible in water or be some form of material that is directly applied to the surface without mixing with water. Binders shall be non-toxic, non-corrosive; and environmentally safe.

4-2.3 Application - Binders that are miscible in water shall be mixed with water at the rate of from 4 to 19 parts of water to one part of binder, the exact rate to be approved by the Engineer. Mixing shall be accomplished by placing the binder and water in the spreading equipment simultaneously or by some other mixing method that will produce equivalent results.

The resulting mixture shall be applied with a pressure type water distributor truck equipped with a pressurized spray system. Spray bars shall have a minimum length of 9 feet and shall be full circulating type. The spray bar shall be adjustable to permit positioning at various heights above the surface to be treated. The valves shall be operated by levers so that one or all valves may be quickly opened or closed in one operation. Dust palliative shall be applied at a rate of 0.2 gallon to 0.8 gallons per square yard.

Binders that are directly applied to the surface without mixing with water shall be applied with equipment approved by the Engineer. The binder shall be applied at a rate of 0.10 gallon to 0.25 gallons per square yard.

The Engineer will determine the exact rate and number of applications of binder.

4-3 WATERING

4-3.1 Description - This work shall consist of developing a water supply and furnishing all water required for the work, including water used in the performance of work paid for as extra work, and applying all water.

4-3.2 Application - Water shall be applied in the amounts, at the locations, and for the purposes designated in the General Provisions and in the various Technical Provisions and as ordered by the Engineer.

Water for compacting embankment material, subbase, base and surfacing material, and for laying dust shall be applied by means of pressure-type distributors or pipelines equipped with a spray system or hoses with nozzles that will insure a uniform application of water.

All equipment used for the application of water shall be equipped with a positive means of shut-off.

Unless otherwise permitted by the Engineer, or all the water is applied by means of approved pipelines, at least one mobile unit with a minimum capacity of 1,000 gallons shall be available for applying water on the project at all times.

4-3.3 Chemical Additives - If the Contractor may use chemical additives in water used for compaction. If such additives are used, furnishing and applying the additives shall be at the Contractor's expense.

The right is reserved by the Engineer to prohibit the use of a particular type of additive, to designate the locations where a particular type of additive may not be used, or to limit the amount of a particular type of additive to be used at certain locations, if the Engineer has reasonable grounds for believing that such use will be in any way detrimental to the work.

4-4 PENALTY FOR NON-COMPLIANCE - If in the opinion of the Engineer, dust from the Contractor's work or work area, including but not limited to storage and staging areas, is not being properly controlled, the Engineer may assess a monetary penalty against the Contractor. The amount of the assessment shall be \$250.00 for each violation. For the purpose of enforcement, any one of the following shall constitute a violation:

- 1) A complaint (verbal or written) from the public.
- 2) A written warning from the Engineer.
- 3) A site inspection by an Air Quality Control Board representative.

Upon written warning from the Engineer, each hour that transpires without dust being controlled to the satisfaction of the Engineer shall constitute a separate violation. Assessments will be deducted from any payments due to the Contractor.

4-5 FAILURE TO COMPLY - Should the Contractor, in the opinion of the Engineer, not comply with written warnings to provide adequate dust control, the Engineer may order a partial or complete stop of the Contractor's work until compliance is achieved. Such partial or complete stoppage shall not be just cause for the Contractor to request any additional compensation or extension of time to complete the project. Any costs incurred by the City due to enforcement of these provisions shall be at the Contractor's expense, and deducted from any payments due the Contractor. Any partial or complete stoppage of work shall not relieve the Contractor's responsibility to maintain the project and adjacent area in a safe, clean and convenient condition.

4-6 MEASUREMENT - There shall be no separate measurement for dust control, or dust palliative or watering.

4-7 PAYMENT - No separate payment will be made for any work performed or material used to control dust resulting from the Contractor's performance of the work, either inside or outside the right-of-way. Full compensation for dust control, including dust palliative and watering, will be considered as included in the prices paid for the various contract items of work involved, and no additional compensation shall be made therefor.