

53.31 SUPPLY AND APPLY DUST ABATEMENT

53.31.1 GENERAL

The Work consists of supplying and applying materials as dust control for gravel roads.

53.31.2 MATERIALS

The Contractor shall supply the dust abatement material from the Alberta Transportation Recognized Products list however, the Engineer shall determine which dust abatement material will be used at specific locations.

The following dust abatement materials are commonly used in Alberta:

Calcium Chloride (flake)
lignosulphonate
Liquid calcium chloride (brine)
materials meeting Emulsified Dust Suppressant (EDS) Specifications.

53.31.3 PROCEDURES

The dust suppressant material shall be applied to the roadway surface to a minimum width of 7 m or greater width as determined by the Engineer. The completed treatment shall provide a smooth and relatively dust free surface.

The Contractor shall perform the work in accordance with the material supplier's recommended application rates, and methods of roadway preparation and placing of material unless otherwise directed by the Engineer.

53.31.4 TIME TO COMPLETE

The Contractor shall complete the Work within 30 calendar days of the issuance of the Work Order.

53.31.5 MEASUREMENT AND PAYMENT

53.31.5.1 Calcium Chloride

Measurement will be in litres of liquid calcium chloride solution (brine) applied to the roadway based on the application rate and area of roadway treated. If the area treated is not enough to use a full load of material, any surcharge for a partial load will be paid as Extra Work. For payment purposes, the litres of solution (brine) will be converted to a tonne equivalent of 77% calcium chloride flake based upon the

solution percentage of the solution supplied as tested by the Engineer or shown in the manufacturer's analysis. The conversion factors which will be used are:

Solution Percentage	litres per 77% Equivalent Flake tonne
25%	2389
30%	1944
35%	1632

For example, if the Contractor applies 30 000 R of 25% calcium chloride solution, payment will be made for:

$$30\ 000 \div 2389 = 12.56\ t$$

Further 30 000R of 30% solution would equal a 15.43 t payment

30 000R of 35% solution would equal an 18.35 t payment

Payment will be made at the unit price bid per tonne of calcium chloride at 77% calcium chloride flake equivalent for "Dust Abatement, Calcium Chloride - Supply and Apply". This payment will be full compensation for supplying and applying water, supplying and applying calcium chloride into the roadway surface, and all labour, materials, equipment, tools and incidentals necessary to complete the Work.

53.31.5.2 Other Materials

Measurement will be in tonnes of material as per product requirement delivered to the work site based on the supplier's weigh bills. If the area treated is not enough to use a full load of material, any surcharge for a partial load will be paid as Extra Work.

Payment will be made at the unit price bid per tonne of lignosulphonate for "Dust Abatement, Lignosulphonate - Supply and Apply" or of EDS material for "Dust Abatement, EDS Material - Supply and Apply". This payment will be full compensation for supplying and applying water, supplying and applying lignosulphonate or supplying and applying EDS material into the roadway surface, and all labour, materials, equipment, tools and incidentals necessary to complete the Work.

53.31.5.3 Surface Preparation

Measurement and payment for preparing the roadway surface, if required, will be made in accordance with Specification 53.27, Maintenance and Preparation of Gravel Surface Roads and Snow Removal and Ice Control on Gravel and Paved Surfaces.

53.31.5.4 Gravel Surfacing

Measurement and payment for regravelling the roadway surface, if required, will be made in accordance with Specification 53.29, "Spot Gravelling" or Specification 53.30, "Gravel Surfacing".

53.31.6 WARRANTY

The warranty period for this Work shall coincide with the appropriate supplier's warranty period, or for a minimum period of 60 days.