



Dust Suppressants

Dust can cause a range of problems, so dust suppressants are often used on roads. While these substances can serve their purpose and make dust less of a nuisance, they can also damage the environment if not used properly, so care must always be taken.

The Law

Dust suppressants can harm people's health and/or the environment if used improperly. Under the Yukon's *Environment Act*, the Department of Environment has the authority to:

- ↻ order the user of a product to clean up any site where there is evidence that use of the product may cause an adverse effect;
- ↻ initiate legal action when the use of a product causes, or has the potential to cause, a significant adverse effect on the environment.

Similar legislative powers also reside with Environment Canada, DIAND (Department of Indian Affairs & Northern Development), and Fisheries and Oceans Canada.

Why Use Dust Suppressants?

Dust suppressants are used for a number of reasons:

- **Safety:** loss of visibility on untreated roads may lead to accidents;
- **Health:** breathing dust particles may cause health problems;
- **Vegetation:** coatings of dust on plants can increase heat absorption and decrease transpiration rates, causing changes in the vegetation;
- **Aquatic resources:** large amounts of dust falling into water may harm aquatic plants and fish that are not adapted to high sedimentation levels;
- **Road maintenance:** treated roads can lower maintenance costs by reducing erosion (gravel loss) and blading time; and
- **Aesthetics:** dusty roads can be unpleasant for nearby residents.

Choose and Use Wisely

Be sure to pick the right dust suppressant for the job. A number of factors can influence the effectiveness of different products, including:

- type of road surface material;
- climate (wind, temperature, humidity and precipitation); and
- vehicular/animal traffic (density and type).

If used properly, dust suppressants can serve their purpose without endangering public health or the environment. Application procedures, which are noted on the product label,

should always be strictly followed.

Dust suppressants must not be allowed to enter bodies of water supporting aquatic species. People must ensure that they use these products appropriately. Suppliers of dust suppressants are also responsible for the safety of their products.

If you are not certain whether a product is suitable for a certain use, ask the supplier whether the product is safe for the environment when applied as directed.

Do I Need a Permit?

The Department of Environment is not mandated to issue environmental permits for the application of commercial dust suppressants or any other products intended for use as dust control.

However, under the Special Waste Regulations, a permit is required for the use and handling of special (hazardous) wastes.

If you are interested in using special waste as a dust suppressant, you must apply for a permit. It is unlikely that any form of special waste would qualify for such a use. Waste oils or waste Bunker C may **not** be used to control dust because of concerns over the long-term environmental effects of these substances.

Additional Information

The Department of Environment has information on the following types of dust suppressants:

- Brines (calcium chloride, oil field brine);
- Pulping liquors (Road Binder, Tembind);
- Petroleum-based products (Dust Bond, DCS-225); and
- Virgin & rerefined oils (coke-wash oil, line-wash oil, rerefined oil).

For more information on dust suppression products and permit requirements, please contact:

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Department of Environment (V-8)
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