

## PROHIBITED EMISSIONS

### 040.031 STREET SANDING OPERATIONS (Adopted 2/27/02)

#### SECTION A – GENERAL

1. **PURPOSE:** To reduce the amount of sanding material placed on the roads during storm events. The effect of this rule shall be to reduce the amount of PM<sub>10</sub> entrained into the ambient air as a result of the roads drying out and vehicles traveling over the sand.
2. **APPLICABILITY:** The provisions of this regulation shall apply to persons and governmental agencies that apply materials to provide increased traction or de-icing of public paved roads, driveways or parking lots located within Washoe County and south of Township 22N.

#### SECTION B – DEFINITIONS: For the purpose of this regulation, the following definitions shall apply.

1. **Anti-icing.** Anti-icing strategies involve applying salt or other chemicals to pavements before snow and ice bond to the road. The salt/chemicals are usually applied in solution form and lower the freezing point of water so roads stay wet, or slushy, longer before turning to ice.
2. **Base Sanding Amount.** The average amount of street sanding material applied per lane mile driven by maintenance trucks during snow and ice removal operations. The base sanding amount was estimated in pounds per lane mile based on the usage data of each agency during the 1998-1999 winter season.
3. **De-icing.** De-icing involves applying salt or other chemicals combined with sand to increase traction on roads after the snow and ice have created a bond with the road.
4. **Durability Index.** The materials resistance to breaking down as defined by American Association of State Highway and Transportation Officials (AASHTO) T-210 or Caltrans Test 229.
5. **Hardness Index.** The percent loss of weight as determined using "Standard Test Method for Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine", as defined by the American Association of State Highway and Transportation Officials (ASSHTO) T-96.
6. **Materials.** Natural geologic material, including sand, but excluding sodium chloride rock salt and other de-icing chemicals, used to provide increased traction or de-icing on roadways.
7. **Percent Fines.** The percent material passing a specified sieve size as determined by the American Society for Testing Materials' (ASTM) "Standard Method for Sieve Analysis of Fine and Course aggregates", designation C136-84a.

8. Sanding Event. The operation of equipment for the application of street sanding materials to a public road network each time an application of materials is necessary for traction control and de-icing.

#### SECTION C – STANDARDS

1. DE-ICING SAND SPECIFICATIONS: no person or governmental agency shall supply for use or place any materials upon any public paved road, driveway, or parking lot, which does not meet the following requirements:
  - a. Durability Index must be greater than 75.
  - b. The Hardness Index must be less than 33%.
  - c. The content of material smaller than 100 mesh sieve must not exceed 4.0 percent fines by weight.
  - d. The content of material smaller than 200 mesh sieve must not exceed 2.5 percent fines by weight.

#### SECTION D – ADMINISTRATIVE REQUIREMENTS

1. DE-ICING MATERIAL APPLICATION: Any governmental agency or any person who contracts with such governmental agency for the purpose of applying street sanding materials for traction control in the District shall submit a plan to reduce the amount of sanding material applied as compared to the base sanding amount.
  - a. The plan must be approved by the Control Officer, and must consist of an implementation schedule describing the methods to be used to reduce the amount of sanding material applied compared to the base sanding amount by:
    - (1) At least twenty (20) percent during the winter season of 2002-2003;
    - (2) At least thirty-five (35) percent during the winter season of 2003-2004;
    - (3) At least fifty (50) percent by the winter season of 2004-2005.
  - b. The plan must be submitted to the Control Officer by April 1, 2002.

#### SECTION E – COMPLIANCE AND RECORDS

1. Any governmental agency or any person who contracts with such governmental agency for de-icing/sanding activities within the District shall complete a report and submit it to the Control Officer no later than June 30 of each year, with the following information:
  - a. The total number of lane miles that sanding materials are applied for traction control in the agencies' jurisdiction per sanding event.
  - b. The total amount of sanding material, salt, and other de-icing or anti-icing agents used during the past winter season.

- c. Verification that a laboratory independent of the supplier tested the material used, and proof that the material met the requirements specified in **Section 040.031.C.**
- d. The number and dates of sanding events.
- e. Any additional lane miles where sanding materials were applied as a result of requests by law enforcement agencies.