State of California
AIR RESOURCES BOARD
Executive Order G-09-100
Equipment Precertification of
American Refining Group
PennzSuppress® D

WHEREAS, the Air Resources Board (ARB) has established a statewide Equipment and Process Precertification (Precertification) Program to assist air pollution control and air quality management districts in meeting the requirements of the Air Pollution Permit Streamlining Act (California Health and Safety Code section 42320-42323);

WHEREAS, the ARB has been given the authority under California Health and Safety Code section 39620 to develop and implement the Precertification Program which consists of a preliminary engineering evaluation of equipment or processes and provides recommended operating conditions;

WHEREAS, this Precertification does not constitute an air pollution permit or eliminate the responsibility of the end user to comply with all federal, state, and local laws, rules, and regulations;

WHEREAS, American Refining Group has requested renewal for its Precertification of PennzSuppress® D, a dust suppressant for unpaved roads;

WHEREAS, American Refining Group identified the following Precertification standard regarding the emissions performance of PennzSuppress® D: when topically applied as a dust suppressant in accordance with the manufacturer's instructions, including a target concentration of 0.15 gallons of concentrate per square yard of treated surface, PennzSuppress® D reduced PM_{10} emissions by approximately 85 percent after 7,000 vehicle (predominantly light-duty) passes on an engineered unpaved road consisting of a well-graded aggregate;

WHEREAS, this Precertification is valid only when PennzSuppress® D is manufactured, transported, sold, stored, applied, and disposed of in accordance with the recommended practices contained in Exhibit A;

WHEREAS, this Precertification applies only to the use of PennzSuppress® D for air pollution/air quality control purposes, and should be represented in a manner consistent with this Executive Order;

WHEREAS, this Precertification is valid only when a copy of the recommended practices contained in Exhibit A is provided to each distributor, applicator, and user of PennzSuppress® D prior to its application on an unpaved road;

WHEREAS, I find that the Applicant, American Refining Group, has met the requirements specified in Title 17 California Code of Regulations section 91400 which incorporates the ARB's Criteria for Equipment Precertification (Adopted June 14, 1996) and has satisfactorily demonstrated through independent testing that the dust suppressant described in the application meets the identified Precertification standards;

WHEREAS, this performance Precertification is subject to all conditions and requirements of the ARB's Criteria for Equipment Precertification, including the provisions relating to suspension and revocation;

WHEREAS, marketing of this device using an identification other than that shown in this Executive Order shall be prohibited unless prior approval is obtained from the ARB. Any oral or written references to this Executive Order or its content by American Refining Group, its principals, agents, employees, distributors, dealers, or other representatives must include the disclaimer that this Executive Order is not an endorsement or approval of PennzSuppress® D. No claim shall be made, such as "Approved by the Air Resources Board," with respect to any advertising or other oral or written communication. It is only a finding that PennzSuppress® D meets the identified Precertification standard, as specified in the evaluation report for application number 09059701;

WHEREAS, this performance Precertification shall expire three years from the date of this Executive Order, unless renewed;

NOW THEREFORE, IT IS HEREBY ORDERED, that the performance Precertification, Executive Order G-09-100.

Executed in Sacramento, California, this 7th day of December 2009.

James N. Goldstene
Executive Officer
by

Robert D. Fletcher, Chief
Stationary Source Division

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Executive Order G-09-100
EXHIBIT A

RECOMMENDED PRACTICES FOR REDUCING THE GENERATION OF AIRBORNE PARTICULATE EMISSIONS FROM UNPAVED ROADS

Purpose: To reduce the generation of airborne particulate matter by treating unpaved roads with PennzSuppress® D.

Evaluate the unpaved road closely to determine the condition of the road and to determine the appropriate application of PennzSuppress® D. Specific consideration should be given to:

- Road imperfections such as potholes, wash-boarding, aggregate loss, rutting, etc.;
- Type of material from which the road has been constructed, including the aggregate and particle size distribution (i.e. clay content, largest aggregate size, etc.);
- Slope and drainage of the road;
- Number of vehicle passes per day;
- Type of vehicles using the road; and
- Local climate, including annual rainfall amounts, relative atmospheric humidity, temperature extremes, and seasonal climatological fluctuations.

Repair the road as necessary by:

- Correcting road imperfections such as potholes, wash-boarding, rutting, and a lack of road base aggregate material; and
- Correcting improper drainage by constructing a crown/slope on the road, cutting ditches along the length of the road and/or constructing drainage beneath the road surface.

Apply a dilution of PennzSuppress® D evenly on the road surface. The dilution will range from 4:1 to 9:1 parts water to PennzSuppress® D concentrate. The recommended application rate is 0.25 to 0.50 gallons per square yard (1.125 to 2.25 liters per square meter). The dilution and application rate may be adjusted, depending on:

- The compaction of the road surface; and
- The moisture content of the road material

Apply a second product treatment to effectively bind any loose road surface material, seven to 10 days after the initial application. This second application should be applied at a rate not to exceed 0.25 gallons per square yard (1.125 liters per square meter) to ensure the product dilution fully penetrates the road surface. As with the initial application, the dilution will depend on the road conditions at the time of the application. Regardless of the dilutions or application rates used, the quantity of PennzSuppress® D

concentrate used to treat each square yard of surface should total no less than 0.15 gallons (0.68 liters per square meter).

Plan follow-up treatment of the road according to the deterioration of the road surface over time. The effectiveness of PennzSuppress® D to suppress dust over time will be affected by those items detailed in the first paragraph of this document. It should be noted, however, that over time, with repeated PennzSuppress® D treatments, the amount of product required to achieve similar dust suppression efficiencies will likely decrease to a point.

Precautions:

1. PennzSuppress® D should not be introduced into storm drains or drainage ditches. Temporary berms should be used to prevent product from entering storm drains.
2. PennzSuppress® D should not be applied during or immediately prior to a rain event.
3. PennzSuppress® D should not be applied directly to a stream bank.
4. PennzSuppress® D should not be applied within 100 feet of a sinkhole or any direct conduit to ground water.
5. PennzSuppress® D should not be applied in a manner that may cause the reporting of an unauthorized discharge to be made to an environmental authority.