DATE:    April 2, 1991
TO:       Air Pollution Control Board
SUBJECT:  Adoption of Amendments to Rule 67.7 (Cutback and Emulsified Asphalts)

SUMMARY:

Rule 67.7 (Cutback and Emulsified Asphalts) regulates emissions of volatile organic compounds (ozone precursors) from the application of cutback and emulsified asphalt materials for paving, constructing, or maintaining streets and highways. The changes correct deficiencies identified by the Environmental Protection Agency. Failure to correct deficiencies may result in withholding of certain federal grant monies from the District, imposing a major source construction ban in San Diego County and/or withholding of federal highway and sewage treatment funds. In addition, the applicability of the rule has been expanded. The changes are not expected to result in any additional emission reductions. They will impact approximately 10 facilities.

Issue

Should the Board adopt amendments to Rule 67.7 (Cutback and Emulsified Asphalts) to correct deficiencies identified by the Environmental Protection Agency?

Recommendation

AIR POLLUTION CONTROL OFFICER

1. Set May 7, 1991 at 2:00 p.m., as the date and time for public hearing to consider the resolution amending Rule 67.7 of the Rules and Regulations of the San Diego County Air Pollution Control District.

2. Direct the Clerk of the Board to notice the Hearing pursuant to Section 40725 of the State Health and Safety Code.

3. Following the hearing: (a) adopt the resolution amending Rule 67.7 and, (b) make appropriate findings of necessity, authority, clarity and consistency, as required by Section 40727 of the State Health and Safety Code.

ON MOTION of Member Bailey, seconded by Member Golding, the Air Pollution Control Board of the San Diego County Air Pollution Control District takes action as recommended on recommendations 1 and 2, setting hearing on 5/21/91, 2:00 p.m., by following vote:

AYES:  Bailey, Golding, Williams, MacDonald

ABSENT:  Bilbray

THOMAS J. PASTUSZKA
Clerk of the Air Pollution Control Board

By

Deputy
SUBJECT: Adoption of Amendments to Rule 67.7 (Cutback and Emulsified Asphalts)

Advisory Statement

The Air Pollution Control Advisory Committee recommended adopting the proposed changes at its March 13, 1991 meeting.

Fiscal Impact

Adopting the proposed changes will have no fiscal impact on the District.

Alternatives

Not adopt the proposed changes to Rule 67.7. Failure to correct the deficiencies may result in the Environmental Protection Agency withholding certain federal grant monies from the District, and imposition of a major source construction ban in San Diego County and/or withholding of federal highway and sewage treatment funds.

BACKGROUND:

Rule 67.7 (Cutback and Emulsified Asphalts) regulates volatile organic compound emission from the application of cutback and emulsified asphalts. The proposed changes correct deficiencies with the rule identified by the Environmental Protection Agency. They revise the "Volatile Organic Compound" definition consistent with other District rules and Environmental Protection Agency requirements. They also exempt additional compounds that are not ozone precursors. Language has been added to require containers for asphalt shipped out of San Diego County be labeled as such in order to be exempt from the requirements of the rule. Recordkeeping requirements and test methods have also been added.

In addition, the applicability of the rule was expanded to applying cutback and emulsified asphalts on parking lots and driveways. A definition has been added for "Asphalt" and the definition for "Cutback Asphalt" has been revised. An exemption has been added for asphalt materials used in conjunction with housing for not more than four families.

The District estimates the additional cost to implement the new recordkeeping requirements will be negligible.

A public workshop on the proposed changes was held on February 28, 1991. The workshop report is attached.

Concurrence:  

Respectfully submitted,

NORMAN W. HICKEY
Chief Administrative Officer

R. J. SOMMERVILLE
Air Pollution Control Officer
AIR POLLUTION CONTROL BOARD
AGENDA ITEM
INFORMATION SHEET

SUBJECT: Adoption of Amendments to Rule 67.7 (Cutback and Emulsified Asphalts)

SUPV DIST.: All

COUNTY COUNSEL APPROVAL: Form and Legality [X] Yes [ ] N/A
[ ] Standard Form [ ] Ordinance [X] Resolution

AUDITOR APPROVAL: [X] N/A [ ] Yes 4 VOTES: [ ] Yes [X] No

FINANCIAL MANAGEMENT REVIEW: [ ] Yes [X] No

CONTRACT REVIEW PANEL: [ ] Approved [X] N/A

CONTRACT NUMBER(S): N/A

PREVIOUS RELEVANT BOARD ACTION: 8/29/79 (#1)

BOARD POLICIES APPLICABLE: N/A

CITIZEN COMMITTEE STATEMENT: The Air Pollution Control District Advisory Committee recommended approval of the proposed changes at its March 13, 1991 meeting.

CONCURRENCES: N/A

ORIGINATING DEPARTMENT: Air Pollution Control District

CONTACT PERSON: Richard J. Smith 750/694-3303

R. J. SOMMERRVILLE
DEPARTMENT AUTHORIZED REPRESENTATIVE

April 2, 1991
MEETING DATE
RESOLUTION AMENDING RULE 67.7
OF REGULATION IV
OF THE RULES AND REGULATIONS OF THE
SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

On motion of Member __ Bailey _____, seconded by Member __ Williams _____ the following resolution is adopted:

WHEREAS, the San Diego County Air Pollution Control Board, pursuant to Section 40702 of the Health and Safety Code, adopted Rules and Regulations of the Air Pollution Control District of San Diego County; and

WHEREAS, said Board now desires to amend said Rules and Regulations; and

WHEREAS, notice has been given and a public hearing has been had relating to the amendment of said Rules and Regulations pursuant to Section 40725 of the Health and Safety Code.

NOW THEREFORE IT IS RESOLVED AND ORDERED by the San Diego County Air Pollution Control Board that the Rules and Regulations of the Air Pollution Control District of San Diego County be and hereby are amended as follows:

Proposed amendments to Rule 67.7 are to read as follows:

RULE 67.7. CUTBACK AND EMULSIFIED ASPHALTS

(a) APPLICABILITY

The provisions of this rule apply to the application and sale of cutback and emulsified asphalt materials for the paving, construction or maintenance of parking lots, driveways, streets and highways.

(b) EXEMPTION

(1) The provisions of this rule shall not apply to any asphalt material sold in San Diego County for shipment and use outside San Diego County.

It shall be the responsibility of any person claiming the above exemption to clearly label each container of materials subject to this exemption or provide shipping records to demonstrate that the asphalt material is not for use within San Diego County.
(2) The provisions of Section (e) shall not apply to any person who uses or applies asphalt materials utilized exclusively in connection with any structure which is designed and used exclusively as a dwelling for not more than four families.

(c) DEFINITIONS

(1) "Asphalt" means a brownish-black cementitious material (solid or semi-solid mixture) of which the main constituents are bitumens which occur naturally or obtained by distillation from coal or petroleum.

(2) "Cutback Asphalt" means paving grade asphalt liquified with petroleum distillate and as further defined by American Society for Testing and Materials (ASTM) specifications as follows:

Rapid cure type: ASTM D2028
Medium cure type: ASTM D2027
Slow cure type: ASTM D2026

(3) "Dust Palliative" means any light application of liquified asphalt (cutback or emulsified asphalt) for the express purpose of controlling loose dust.

(4) "Emulsified Asphalt" means any asphalt liquified with water containing an emulsifier. The two kinds of emulsions most pertinent are the anionic and cationic types.

(5) "Exempt Compound" is any of the following compounds: methylene chloride, 1,1,1-trichloroethane, trichlorofluoromethane (CFC-11), dichlorodifluoromethane (CFC-12), chlorodifluoromethane (CFC-22), trifluoromethane (FC-23), trichlorotrifluoroethane (CFC-113), dichlorotetrafluoroethane (CFC-114), chloropentafluoroethane (CFC-115), dichlorotrifluoroethane (HCFC-123), tetrafluoroethane (HFC-134a), dichlorodifluoroethane (HCFC-141b), and chlorodifluoroethane (HCFC-142b).

(6) "Penetrating Prime Coat" means any application of asphalt to an absorptive surface to penetrate and bind the aggregate surface and promote adhesion between it and the new superimposed construction. Prime coats do not include palliatives or tack coats.

(7) "Road Oils" shall be synonymous with slow cure asphalts.

(8) "Tack Coat" means any application of asphalt applied to an existing surface to provide a bond between new surfacing and existing surface and to eliminate slippage places where the new and existing surfaces meet.

(9) "Volatile Organic Compounds (VOC)" means any volatile compound of carbon, excluding methane, carbon monoxide, carbon dioxide, carbonic acid, ammonium carbonate, metallic carbides, metallic carbonates, and exempt compounds which may be emitted to the atmosphere during the application of asphalt materials subject to this rule.

(d) STANDARDS

(1) A person shall not sell, offer for sale, use or apply for paving, construction or maintenance of parking lots, driveways, streets or highways any cutback asphalt material or road oils which contain more than 0.5 percent by volume VOC which evaporate at 260° C (500° F) or less.

(2) A person shall not sell, offer for sale, use or apply for paving, construction or maintenance of parking lots, driveways, streets or highways any emulsified asphalt.
material which contains more than 3.0 percent by volume VOC which evaporate at 260° C (500° F) or less.

(e) RECORDKEEPING

Any person who sells, offers for sale, uses or applies for paving, construction or maintenance of parking lots, driveways, streets or highways any asphalt material subject to this rule shall maintain a current list of all asphalt materials in use and Material Safety Data Sheets (MSDS) or manufacturer specifications for each asphalt material containing sufficient information to readily determine compliance with Subsections (d)(1) or (d)(2) of this rule, as applicable. These records shall be kept on site for at least three years and made available to the District upon request.

(f) TEST METHODS

(1) Measurement of VOC content in cutback asphalts pursuant to Subsection (d)(1) of this rule shall be conducted and reported in accordance with ASTM Test Method D 402-76.

(2) Measurement of VOC content in cutback asphalts pursuant to Subsection (d)(2) of this rule shall be conducted and reported in accordance with ASTM Test Method D 244-89.

(3) Measurement of exempt compound content in cutback asphalts pursuant to Subsections (d)(1) and (d)(2) of this rule shall be conducted and reported in accordance with ASTM Test Method D 4457-85.

IT IS FURTHER RESOLVED AND ORDERED that the subject amendments to Rule 67.7, of Regulation IV, shall take effect upon adoption.

PASSED AND ADOPTED by the Air Pollution Control Board of the San Diego County Air Pollution Control District, State of California, this 21st day of May, 1991 by the following votes:

AYES: Members Bailey, Williams, MacDonald
NOES: Members None
ABSENT: Members Bilbray and Galding

STATE OF CALIFORNIA) ss.
COUNTY OF SAN DIEGO)

I, THOMAS J. PASTUSZKA, Clerk of the Air Pollution Control Board of the County of San Diego, State of California, hereby certify that I have compared the foregoing copy with the original resolution passed, and adopted by said Board at a regular meeting thereof, at the time and by the vote herein stated, which original resolution is now on file in my office; that the same contains a full, true and correct transcript therefrom and of the whole thereof.

Witness my hand and the seal of said Air Pollution Control Board, this 23rd day of May, 1991.

THOMAS J. PASTUSZKA
Clerk of the Air Pollution Control Board
San Diego County Air Pollution Control District

(SEAL)

By Maria A. Tiscareno, Deputy
RESOLUTION AMENDING RULE 67.7
OF REGULATION IV
OF THE RULES AND REGULATIONS OF THE
SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT

On motion of Member _____________, seconded by Member ______________, the following resolution is adopted:

WHEREAS, the San Diego County Air Pollution Control Board, pursuant to Section 40702 of the Health and Safety Code, adopted Rules and Regulations of the Air Pollution Control District of San Diego County; and

WHEREAS, said Board now desires to amend said Rules and Regulations; and

WHEREAS, notice has been given and a public hearing has been had relating to the amendment of said Rules and Regulations pursuant to Section 40725 of the Health and Safety Code.

NOW THEREFORE IT IS RESOLVED AND ORDERED by the San Diego County Air Pollution Control Board that the Rules and Regulations of the Air Pollution Control District of San Diego County be and hereby are amended as follows:

Proposed amendments to Rule 67.7 are to read as follows:

RULE 67.7. CUTBACK AND EMULSIFIED ASPHALTS

(a) APPLICABILITY

(1) The provisions of this rule apply to the application and sale of cutback and emulsified asphalt materials for the paving, construction or maintenance of parking lots, driveways, streets and highways.

(b) EXEMPTION

(2)(1) The provisions of this rule shall not apply to any asphalt material sold in the District San Diego County for shipment and use outside the District San Diego County.

It shall be the responsibility of any person claiming the above exemption to clearly label each container of materials subject to this exemption or provide shipping records to demonstrate that the asphalt material is not for use within San Diego County.

(2) The provisions of Section (e) shall not apply to any person who uses or applies asphalt materials utilized exclusively in connection with any structure which is designed and used exclusively as a dwelling for not more than four families.

3/20/91
DEFINITIONS

(1) "Asphalt" means a brownish-black cementitious material (solid or semi-solid mixture) of which the main constituents are bitumens which occur naturally or obtained by distillation from coal or petroleum, an oil asphalt or a homogeneous mixture of refined liquid and solid asphalts suitable for use in the manufacture of asphalt concrete.

(2) "Cutback Asphalt" means paving grade asphalts liquified with petroleum distillate and as further defined by American Society for Testing and Materials (ASTM) specifications as follows:

- Rapid cure type: ASTM D2028
- Medium cure type: ASTM D2027
- Slow cure type: ASTM D2026

(3) "Dust Palliative" means any light application of liquified asphalt (cutback or emulsified asphalt) for the express purpose of controlling loose dust.

(4) "Emulsified Asphalt" means any asphalt liquified with water containing an emulsifier. The two kinds of emulsions most pertinent are the anionic and cationic types.

(5) "Exempt Compound" is any of the following compounds: methylene chloride, 1,1,1-trichloroethane, trichlorofluoromethane (CFC-11), dichlorodifluoromethane (CFC-12), chlorodifluoromethane (CFC-22), trifluoromethane (CFC-23), trichlorotrifluoroethane (CFC-113), dichlorotetrafluoroethane (CFC-114), chloropentafluoroethane (CFC-115), dichlorotrifluoroethane (HCFC-123), tetrafluoroethane (HFC-134a), dichlorodifluoromethane (HCFC-141b), and chlorodifluoromethane (HCFC-142b).

(5)(6) "Penetrating Prime Coat" means any application of asphalt to an absorptive surface to penetrate and bind the aggregate surface and promote adhesion between it and the new superimposed construction. Prime coats do not include palliatives or tack coats.

(6)(7) "Road Oils" shall be synonymous synonymous with slow cure asphalts.

(7)(8) "Tack Coat" means any application of asphalt applied to an existing surface to provide a bond between new surfacing and existing surface and to eliminate slippage places where the new and existing surfaces meet.

(9) "Volatile Organic Compounds (VOC)" means any volatile compound of carbon, excluding methane, carbon monoxide, carbon dioxide, carbonic acid, ammonium carbonate, metallic carbides, metallic carbonates, and exempt compounds which may be emitted to the atmosphere during the application of asphalt materials subject to this rule.

EXEMPTIONS

(1) Until January 1, 1982, the provisions of this rule shall not apply to:

(i) The use of medium-cure cutback asphalt solely as a penetrating prime coat;

(ii) The use of medium-cure cutback asphalt when the National Weather Service official forecast of the high temperature for the immediate vicinity of the asphalt application for the 24-hour period following application is below 50° F (10° C).
(b)(d) STANDARDS

(1) After July 1, 1980, a person shall not sell, offer for sale, use or apply for paving, construction or maintenance of parking lots, driveways, streets or highways any cutback asphalt material or road oils which contain more than 0.5 percent by volume organic compounds VOC which evaporate at 260° C (500° F) or less, as determined by ASTM Method D402-73T.

(2) After January 1, 1982, a person shall not sell, offer for sale, use or apply for paving, construction or maintenance of parking lots, driveways, streets or highways any emulsified asphalt material which contains more than 3.0 percent by volume organic compound VOC which evaporate at 260° C (500° F) or less, as determined by ASTM Method D244-75T.

(c) RECORDKEEPING

Any person who sells, offers for sale, uses or applies for paving, construction or maintenance of parking lots, driveways, streets or highways any asphalt material subject to this rule shall maintain a current list of all asphalt materials in use and Material Safety Data Sheets (MSDS) or manufacturer specifications for each asphalt material containing sufficient information to readily determine compliance with Subsections (d)(1) or (d)(2) of this rule, as applicable. These records shall be kept on site for at least three years and made available to the District upon request.

(f) TEST METHODS

(1) Measurement of VOC content in cutback asphalts pursuant to Subsection (d)(1) of this rule shall be conducted and reported in accordance with ASTM Test Method D 402-76.

(2) Measurement of VOC content in cutback asphalts pursuant to Subsection (d)(2) of this rule shall be conducted and reported in accordance with ASTM Test Method D 244-89.

(3) Measurement of exempt compound content in cutback asphalts pursuant to Subsections (d)(1) and (d)(2) of this rule shall be conducted and reported in accordance with ASTM Test Method D 4457-85.

IT IS FURTHER RESOLVED AND ORDERED that the subject amendments to Rule 67.7, of Regulation IV, shall take effect upon adoption.

PASSED AND ADOPTED by the Air Pollution Control Board of the San Diego County Air Pollution Control District, State of California, this __________ day of __________, 1991 by the following votes:

AYES:

NOES:

ABSENT:

Rule 67.7 -3-
RULE 67.7
CUTBACK AND EMULSIFIED ASPHALTS

WORKSHOP REPORT

A workshop notice was mailed to the companies involved in the application and sale of cutback and emulsified asphalt materials in San Diego County, the U.S. Environmental Protection Agency (EPA), the California Air Resources Board (ARB), and other interested parties. The workshop was held on February 28, 1991. The comments and District responses are as follows:

WORKSHOP COMMENT

If the asphalt materials to be shipped for use outside San Diego County are in compliance with the VOC standards of Rule 67.7, do the containers of these materials still have to be labeled according to the provisions specified in Subsection (b)(1)?

DISTRICT RESPONSE

No, they do not have to be labeled. The container must be labeled (or shipping records be provided) to demonstrate that the asphalt material is not for use within San Diego County only if the asphalt material is a non-compliance asphalt and is claimed under the exemption of Subsection (b)(1).

WORKSHOP COMMENT

Is the District going to require any additional labeling of transport vehicles of any kind above or beyond the established requirements specified by the Department of Transportation (DOT).

DISTRICT RESPONSE

No additional labeling beyond the established DOT requirements for transport vehicles will be required by the District.

WORKSHOP COMMENT

There have been some problems in the past of getting MSDSs or manufacturer specifications for some asphalt materials from suppliers. Will the District issue a Notice of Violation (NOV) if the data cannot be obtained?

DISTRICT RESPONSE

Yes, a NOV will be given in this case. According to the provisions of Section (e), the person who sells, offers for sale, uses or applies any asphalt material subject to Rule 67.7 is responsible for having the records required in this section on site.
ARB COMMENT

In Subsections (c)(5) and (c)(9), asphalts do not normally contain substantial proportions of exempt solvents nor is it reasonable to discriminate between exempt and non-exempt compounds in this rule. It is recommended that these sections be revised to conform to the normal composition of the materials being regulated, the test methods specified, and the rules of other districts which do not define exempt compounds in regulating asphalt.

DISTRICT RESPONSE

The reference to exempt compounds in Subsections (c)(5) and (c)(9) has been included to make the definition of VOC consistent with other District rules. A test method for determining the exempt compounds content has been added to Rule 67.7.

ARB COMMENT

Subsection (c)(1) should be modified to clarify the definition of asphalt.

DISTRICT RESPONSE

Subsection (c)(1) has been modified as suggested.

ARB COMMENT

Subsection (c)(2) should be modified to add slow cure to the definition of cutback asphalt.

DISTRICT RESPONSE

Subsection (c)(2) has been modified to include slow cure asphalt.

ARB COMMENT

Subsection (c)(7) should be modified to clarify the definition of road oils.

DISTRICT RESPONSE

Since road oils are considered to be synonymous with slow cure asphalts and since slow cure asphalts have been defined in Subsection (c)(1), it is not necessary to revise Subsection (c)(7).

ARB COMMENT

In Subsection (c)(5), the compounds chlorodifluoromethane and trifluoromethane are incorrectly abbreviated. The correct abbreviation for chlorodifluoromethane and trifluoromethane are (HCFC-22) and (HFC-23), respectively.

DISTRICT RESPONSE

The District agrees that the suggested abbreviations are more appropriate. However, the abbreviations used in Subsection (c)(5) are the only notations acceptable to the EPA.
ARB COMMENT

Subsection (c)(9) should be modify to clarify the definition of volatile organic compounds (VOC).

DISTRICT RESPONSE

The District contents that the definition of VOC provided in Subsection (c)(9) is adequately clear and therefore does not need to be modified. Since this definition has been incorporated into most of the District's VOC rules, revising the wording of this definition for Rule 67.7 alone is not practical at the present time.

EPA COMMENT

Section (a) should be modified to extend the applicability of Rule 67.7 to include manufacturers of cutback and emulsified asphalt.

DISTRICT RESPONSE

Since there is no manufacturers of cutback and emulsified asphalts in San Diego County, the suggested addition to Section (a) is not necessary.

EPA COMMENT

Subsection (b)(2) should be modified to restrict this exemption to persons who use or apply asphalt materials utilized at dwelling for four families or less.

DISTRICT RESPONSE

Subsection (b)(2) has been modified as suggested.

EPA COMMENT

A definition of "slow cure asphalts" should be added to Section (c).

DISTRICT RESPONSE

A definition of "slow cure asphalts" has been added to Rule 67.7.

EPA COMMENT

The ASTM test methods specified in Rule 67.7 have not been approved by the EPA. Therefore, a copy of each of these ASTM test methods must be submitted to the EPA for approval.

DISTRICT RESPONSE

Copies of the referenced ASTM test methods will be submitted to the EPA with the proposed Rule 67.7.