

NEGATIVE DECLARATION

June 13, 2002

PROJECT SPONSOR

Bay Area Air Quality Management District

PROJECT LOCATION

This rule applies within the area covered by the Bay Area Air Quality Management District. The District includes all of seven counties - Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa - and portions of two others - southwestern Solano and southern Sonoma.

PROJECT DESCRIPTION

Regulation 8, Rule 51 establishes volatile organic compound (VOC) content limits for adhesives and sealants used by industrial and commercial facilities and by consumers. VOC emissions are a precursor to ozone or urban smog. The proposed amendments would exempt methyl acetate from the definition of volatile organic compound (VOC) found in the rule because methyl acetate has been found by the U.S Environmental Protection Agency to be negligibly reactive in forming ozone. In addition, the amendments would add references to test methods that the BAAQMD lab would use in determining compliance with VOC limits for products containing methyl acetate and other exempt compounds.

DETERMINATION

Pursuant to the California Environmental Quality Act (Public Resources Code Section 21000 et seq.), the District is the Lead Agency for the described project. The District has prepared an Initial Study (attached), and on the basis of that study, has determined that the project will not have a significant effect on the environment.

REVIEW PERIOD

Interested persons are invited to send written comments on the Negative Declaration to Ellen Garvey, Air Pollution Control Officer, Bay Area Air Quality Management District, 939 Ellis Street, San Francisco, California, 94109. Comments must be received by 5:00 p.m. on Monday, July 8, 2002.

Questions regarding the project or the Negative Declaration should be directed to Bill Guy at (415) 749-4773 or by e-mail to wguy@baaqmd.gov.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
939 ELLIS STREET
SAN FRANCISCO, CA 94109

CEQA INITIAL STUDY
BACKGROUND

Project

Proposed amendments to Bay Area Air Quality Management District Regulation 8, Rule 51: Adhesive and Sealant Products.

Lead Agency

Bay Area Air Quality Management District
939 Ellis Street
San Francisco, CA 94109

Contact Person

The contact person at BAAQMD for questions regarding the proposed amendments to the rule or this initial study is Bill Guy, at (415) 749-4773 or by e-mail at wguy@baaqmd.gov.

Project Location

This rule applies within the area covered by the Bay Area Air Quality Management District. The District includes all of seven counties - Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa - and portions of two others - southwestern Solano and southern Sonoma.

Project Description

The proposal consists of amendments to an existing rule. The rule imposes volatile organic compound (VOC) limits on adhesive and sealant products. The rule was originally adopted in 1992 and implemented control measure A11 of the Bay Area 1991 Clean Air Plan.

The VOC limits in the rule went into effect in 1995. In 1994, 1996, 1998, and 2001, the BAAQMD Board of Directors adopted amendments to the rule's VOC limits to provide for greater statewide uniformity for the limits, to adjust several limits to the available technologies, and to address a limited approval / limited disapproval of the rule by EPA in 1999. EPA has now fully approved the rule into

the state implementation plan (SIP) for the national ozone standard (see 67 Fed. Reg. 8721, February 26, 2002).

The proposed amendments to the rule add methyl acetate to the list of compounds in the rule's definition of "volatile organic compound" that are not counted as VOCs in determining the VOC content of an adhesive or sealant product. The amendments also add references to appropriate test methods for these "exempt compounds."

The practical effect of the proposed amendments is to allow product formulators to reduce VOC content by substituting methyl acetate for conventional solvents like hexane and toluene, which are classified as VOCs by the rule and as toxic air contaminants by the California Air Resources Board. These substitutions will occur primarily in contact adhesives. Since methyl acetate emissions from existing products would no longer be counted as VOCs, the amendments may slightly reduce VOC emissions from adhesive and sealant use within the BAAQMD. They are also likely to decrease emissions of toxic air contaminants.

Environmental Setting

The Bay Area Air Quality Management District encompasses the counties of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara and portions of western Solano and Southern Sonoma, totaling approximately 5,600 square miles. The Bay Area physiography is characterized by a large shallow basin surrounded by coastal mountain ranges tapering into sheltered inland valleys. The combined climatic and topographic factors present in the Bay Area result in an increased potential for accumulation of air pollutants in the inland valleys and a reduced potential for buildup of air pollutants along the coast.

The climatology of the Bay Area, in combination with the topography and pollutant emissions, determines the atmospheric pollution potential. The atmospheric pollution potential is the potential for a given quantity of air emissions to be dispersed as a result of the combined influence of atmospheric and geographic conditions, either lowering or increasing the potential for exceedances of ambient air quality standards. In the Bay Area there is a wide range of atmospheric pollution potential resulting predominantly from four factors; winds, atmospheric stability, solar radiation and sheltering terrain.

Winds can disperse pollutants. Atmospheric pollution potential increases in the sheltered valleys of the Bay Area because the terrain tends to reduce wind speeds. Reduced wind speed in the valleys combined with daytime up-valley and nighttime down-valley air flow can result in the accumulation of pollutants. Temporally, these low wind speeds usually occur in conjunction with periods of high pollution emissions, typically during the early morning and late afternoon or evening commute traffic, and on clear, cold winter nights.

Whereas winds are indicative of horizontal dispersion of air pollution, atmospheric stability determines the ability of air pollutants to be dispersed vertically. In the Bay Area, the ability of air pollutants to be dispersed vertically is frequently limited by inversions. An inversion, a blanket of warm air trapping a layer of cooler air underneath, forms an almost impenetrable barrier to the vertical dispersion of air pollutants at the boundary between the two air masses. Inversions result from a variety of climatic factors and the different types of inversion have a wide seasonal variation.

Between late spring and early fall, a layer of warm air often overlays a layer of cool air from the Delta and San Francisco Bay, resulting in an inversion. Typical winter inversions are formed when the sun heats the upper layers of air, trapping below them air that has been cooled by contact with the colder surface of the earth during the night. Although each inversion type predominates at certain times of the year, both types can occur at any time of the year. Local topography produces many variations that can affect the inversion base and thus influence local air quality.

The BAAQMD is classified as a nonattainment area for the California and federal ambient air quality standards for ozone.

Other Approvals Required

None

Environmental Factors Potentially Affected

A check beside an impact category below indicates that, for the category, this project involves at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- | | | |
|--|---|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture Resources | <input type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Geology / Soils |
| <input type="checkbox"/> Hazards/Hazardous Mat'l | <input type="checkbox"/> Hydrology/Water Quality | <input type="checkbox"/> Land Use/Planning |
| <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Noise | <input type="checkbox"/> Population/Housing |
| <input type="checkbox"/> Public Services | <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation/Traffic |
| <input type="checkbox"/> Utilities/Service Systems | <input type="checkbox"/> Mandatory Findings of Significance | |
| <input checked="" type="checkbox"/> No Potentially Significant Impacts | | |

DETERMINATION

On the basis of this initial evaluation:

- I find the proposed project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.

- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by the project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared.

- I find the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.

- I find the proposed project **MAY** have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.

- I find that, although the proposed project could have a significant effect on the environment, there **WILL NOT** be a significant effect in this case because all potentially significant effects (1) have been analyzed adequately in an earlier EIR pursuant to applicable standards, and (2) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures from the EIR that are imposed upon the proposed project.

William H. Guy
Principal Air Quality Specialist

Date

ENVIRONMENTAL IMPACT CHECKLIST

(Note: All answers are explained on attached sheets.)

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
1. Aesthetics. Would the proposal:				
a. Have a substantial adverse effect on a scenic vista?	_____	_____	_____	_____ X _____
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	_____	_____	_____	_____ X _____
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	_____	_____	_____	_____ X _____
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	_____	_____	_____	_____ X _____
2. Agriculture Resources. Would the proposal:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	_____	_____	_____	_____ X _____
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	_____	_____	_____	_____ X _____
c. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	_____	_____	_____	_____ X _____
3. Air Quality. Would the proposal:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	_____	_____	_____	_____ X _____

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	_____	_____	_____	<u> X </u>
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	_____	_____	_____	<u> X </u>
d. Expose sensitive receptors to substantial pollutant concentrations?	_____	_____	_____	<u> X </u>
e. Create objectionable odors affecting a substantial number of people?	_____	_____	_____	<u> X </u>

4. Biological Resources. Would the project:

a. Have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	_____	_____	_____	<u> X </u>
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	_____	_____	_____	<u> X </u>
c. Have a substantial adverse effect on federally-protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	_____	_____	_____	<u> X </u>

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	_____	_____	_____	<u> X </u>
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	_____	_____	_____	<u> X </u>
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	_____	_____	_____	<u> X </u>

5. Cultural Resources. Would the project:

a. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	_____	_____	_____	<u> X </u>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	_____	_____	_____	<u> X </u>
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	_____	_____	_____	<u> X </u>
d. Disturb any human remains, including those interred outside of formal cemeteries?	_____	_____	_____	<u> X </u>

6. Geologic and Soils. Would the project:

a. Expose people or structure to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to the Division of Mines and Geology Special Publication 42)	_____	_____	_____	<u> X </u>

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
ii. Strong seismic ground shaking?	_____	_____	_____	<u> X </u>
iii. Seismic-related ground failure, including liquefaction?	_____	_____	_____	<u> X </u>
iv. Landslides?	_____	_____	_____	<u> X </u>
b. Result in substantial soil erosion or the loss of topsoil?	_____	_____	_____	<u> X </u>
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	_____	_____	_____	<u> X </u>
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	_____	_____	_____	<u> X </u>
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	_____	_____	_____	<u> X </u>

7. Hazards and Hazardous Materials. Would the project:

a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	_____	_____	_____	<u> X </u>
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	_____	_____	_____	<u> X </u>
c. Emit hazardous materials or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	_____	_____	_____	<u> X </u>

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment?	_____	_____	_____	<u> X </u>
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	_____	_____	_____	<u> X </u>
f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	_____	_____	_____	<u> X </u>
g. Impair the implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	_____	_____	_____	<u> X </u>
h. Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	_____	_____	_____	<u> X </u>
8. Hydrology and Water Quality. Would the project:				
a. Violate any water quality standards or waste discharge requirements?	_____	_____	_____	<u> X </u>
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net reduction in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	_____	_____	_____	<u> X </u>

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	_____	_____	_____	<u> X </u>
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	_____	_____	_____	<u> X </u>
e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	_____	_____	_____	<u> X </u>
f. Otherwise substantially degrade water quality?	_____	_____	_____	<u> X </u>
g. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	_____	_____	_____	<u> X </u>
h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	_____	_____	_____	<u> X </u>
i. Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	_____	_____	_____	<u> X </u>
j. Inundation by seiche, tsumani, or mudflow?	_____	_____	_____	<u> X </u>
9. Land Use and Planning. Would the project:				
a. Physically divide an established community?	_____	_____	_____	<u> X </u>

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	_____	_____	_____	<u> X </u>
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?	_____	_____	_____	<u> X </u>

10. Mineral Resources. Would the project:

a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	_____	_____	_____	<u> X </u>
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	_____	_____	_____	<u> X </u>

11. Noise. Would the project result in:

a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	_____	_____	_____	<u> X </u>
b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	_____	_____	_____	<u> X </u>
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	_____	_____	_____	<u> X </u>
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	_____	_____	_____	<u> X </u>

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	_____	_____	_____	<u> X </u>
f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	_____	_____	_____	<u> X </u>

12. Population and Housing. Would the project:

a. Induce substantial growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	_____	_____	_____	<u> X </u>
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	_____	_____	_____	<u> X </u>
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	_____	_____	_____	<u> X </u>

13. Public Services. For any of the following public services, would the project require the construction of new or physically-altered governmental facilities to maintain acceptable service ratios, response times, or other performance objectives, thereby producing significant environmental impacts:

a. Fire protection?	_____	_____	_____	<u> X </u>
b. Police protection?	_____	_____	_____	<u> X </u>
c. Schools?	_____	_____	_____	<u> X </u>
d. Parks?	_____	_____	_____	<u> X </u>
e. Other public facilities?	_____	_____	_____	<u> X </u>

Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
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14. Recreation.

- | | | | | |
|--|-------|-------|-------|-----------------|
| a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | _____ | _____ | _____ | <u>X</u> |
| b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? | _____ | _____ | _____ | <u>X</u> |

15. Transportation and Traffic. Would the project:

- | | | | | |
|--|-------|-------|-------|-----------------|
| a. Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)? | _____ | _____ | _____ | <u>X</u> |
| b. Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways? | _____ | _____ | _____ | <u>X</u> |
| c. Produce a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? | _____ | _____ | _____ | <u>X</u> |
| d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersection) or incompatible uses (e.g., farm equipment)? | _____ | _____ | _____ | <u>X</u> |
| e. Result in inadequate emergency access? | _____ | _____ | _____ | <u>X</u> |
| f. Result in inadequate parking capacity? | _____ | _____ | _____ | <u>X</u> |
| g. Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)? | _____ | _____ | _____ | <u>X</u> |

Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
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16. Utilities and Service Systems. Would the project:

- | | | | | |
|---|-------|-------|-------|---------------------|
| a. Exceed the wastewater treatment requirements of the applicable Regional Water Quality Control Board? | _____ | _____ | _____ | <u> X </u> |
| b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | _____ | _____ | _____ | <u> X </u> |
| c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | _____ | _____ | _____ | <u> X </u> |
| d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? | _____ | _____ | _____ | <u> X </u> |
| e. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | _____ | _____ | _____ | <u> X </u> |
| f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? | _____ | _____ | _____ | <u> X </u> |
| g. Comply with federal, state, and local statutes and regulations related to solid waste? | _____ | _____ | _____ | <u> X </u> |

Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
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17. Mandatory Findings of Significance.

- | | | | | |
|---|-------|-------|-------|---------------------|
| a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory? | _____ | _____ | _____ | <u> X </u> |
| b. Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.) | _____ | _____ | _____ | <u> X </u> |
| c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | _____ | _____ | _____ | <u> X </u> |

DISCUSSION OF ENVIRONMENTAL IMPACTS

Proposed Amendments to Regulation 8, Rule 51: Adhesive and Sealant Products.

Introduction

This section of the Initial Study explains the reasons for checking the particular items checked in the checklist. Explanations are provided both for those items involving some potential impact and those for which no impact is anticipated.

Background

This projects consists of amendments to an existing rule. Almost all adhesive users comply with the rule by using adhesives that comply with the volatile organic compound (VOC) limits in the rule. Another compliance option, the use of afterburners or other abatement equipment, is rarely used. As a result, compliance with the rule almost never involves construction of facilities or equipment. The changes to the rule made by the proposed amendments have little potential to create an alteration in overall emissions of VOCs from adhesive use. They may slightly change which compounds are emitted within the Bay Area. These changes should be beneficial as they are expected to consist primarily of the substitution of methyl acetate for more toxic solvents. These changes are discussed in detail in the section below regarding air quality. There are no other impacts from these amendments.

1. Aesthetics

Because adhesives are applied within existing buildings and because the proposed rule amendments are not expected to result in any change in quantities of adhesive used, no building alterations are expected. In addition, because methyl acetate is exempt in most areas in California and throughout the U.S., exemption of methyl acetate within the Bay Area is not expected to result in any inducement to manufacture adhesive products in the Bay Area. As a result, the proposed rule amendments are not expected to have any impact on aesthetics.

2. Agriculture Resources

No effect on agricultural resources is expected since the proposed rule amendments apply to existing uses of adhesives and sealants. Most of these uses takes place in existing facilities, and the amendments neither require nor are likely to result in construction either inside or outside of those facilities. No changes in manufacturing locations or facilities are expected. No adhesives used in agricultural operations are expected to be affected.

3. Air Quality

The proposed amendments are expected to primarily affect contact adhesives. The VOC limits in Regulation 8, Rule 51 for contact adhesives are 400 grams per liter for “special substrates” and 250 grams per liter for all other contact adhesive bonding.

In making solvent-based products, contact adhesive formulators have taken two approaches to meeting the Regulation 8, Rule 51 VOC limits. One approach has been to produce “high-solids” adhesives by reducing the quantity of solvent in the products. These products can have over 50% by weight solids content, rather than the typical 20% of older solvent-based products. However, when solvent content is reduced, viscosity increases, potentially to a point where the adhesive can no longer be sprayed. To overcome this problem, manufacturers have developed specialized processing that cuts long polymer chains and reduces viscosity. However, these high solids products are still quite viscous and have not been readily accepted in the market.

The second approach to meeting the VOC limits has been the replacement of some of the hexane, toluene, and other solvents in an adhesive with acetone. Since acetone is not counted as a VOC, this lowers the VOC content of the adhesive. However, there are limits to how much acetone can be substituted because acetone is not as good a solvent for polychloroprene (the principal polymer used in contact bond adhesives) as the solvents traditionally used. Acetone also may evaporate too quickly, creating drying time problems. Products relying exclusively on acetone substitution have not met with wide market acceptance because of these problems. But several manufacturers have developed products that rely on a combination of acetone and methyl acetate as substitute solvents to reduce VOC content. One manufacturer has obtained a product variance that allows it to sell its product in the Bay Area.

The amendments would have the effect of legalizing the contact adhesive product currently being sold under a variance so that there would be no further need for the variance. This would have no effect on emissions.

As a result of the amendments, manufacturers of high-solids contact adhesives would be likely to halt polymer processing and reformulate their products using solvent substitution. Based on material safety data sheets, the most likely outcome of the proposed amendments would be a reduction by about 10% in emissions of hexane and toluene as these solvents are replaced by methyl acetate. The average content of hexane and toluene in these products is about .75 lbs/gallon. Assuming all 3000 gallons of solvent-based contact adhesives that are sold for industrial use in the Bay Area each month are reformulated in this manner, emissions of VOCs would be reduced by about 225 pounds per month with corresponding increases in methyl acetate, which would no longer be considered a VOC. It is more likely that a smaller quantity of reformulated products will be sold and that VOC reductions will be smaller. In any case, the amendments are expected to produce a net reduction in emissions of VOCs. As a result no adverse air quality impacts are expected from the amendments.

4. Biological Resources

The amendments are not expected to result in any construction outside of existing facilities. No impacts on biological resources such as flora or fauna are expected.

5. Cultural Resources

No construction outside of existing facilities is expected. As a result, the proposed rule amendments are not expected to have any impact on cultural resources.

6. Geology and Soils

As noted, the proposed amendments will not result in any construction and, as a result, no geologic or soil impacts are anticipated.

7. Hazards and Hazardous Materials

As a result of the amendments, manufacturers of high-solids contact adhesives would be likely to halt polymer processing and reformulate their products using solvent substitution. For this product class, the likely result is that methyl acetate will replace toluene, hexane, and cyclohexane in the solvent mix.

According to Environmental Defense's "Scorecard" (www.scorecard.org), a compilation of data regarding chemical hazards, the solvents affected by the proposed amendments have the following hazard rankings:

Chemical	Scorecard Evaluation
cyclohexane	More hazardous than most chemicals in 4 out of 11 ranking systems
hexane	More hazardous than most chemicals in 3 out of 7 ranking systems
methyl acetate	Less hazardous than most chemicals in 2 ranking systems
methyl ethyl ketone	More hazardous than most chemicals in 2 out of 10 ranking systems
toluene	More hazardous than most chemicals in 3 out of 10 ranking systems

All of these solvents that might be replaced by methyl acetate are considered to be more hazardous than methyl acetate. Hexane, methyl ethyl ketone, and toluene are classified as toxic air contaminants (TACs) by the California Air Resources Board and as hazardous air pollutants (HAPs) by the U.S. Environmental Protection Agency. Methyl acetate is not classified as a TAC or a HAP.

Based on material safety data, the most likely outcome of the proposed amendments would be a reduction by about 10% in emissions of toxic air contaminants like hexane and toluene as these solvents are replaced by methyl acetate. The average content of hexane and toluene in these products is about .75 lbs/gallon. Assuming all 3000

gallons of solvent-based contact adhesives that are sold for commercial and industrial use in the Bay Area each month are reformulated in this manner, emissions of toxic air contaminants would be reduced by about 225 pounds per month with corresponding increases in methyl acetate. It is more likely that a smaller quantity of reformulated products will be sold and that the reductions of toxic air contaminants will be smaller. In any case, the amendments are expected to produce a net reduction in emissions of toxic air contaminants.

Though no other adhesive products regulated by Rule 51 currently appear likely to be reformulated using methyl acetate, it is possible that makers of other types of products will substitute methyl acetate for other solvents. Because the organic solvents most commonly used in adhesives of all kinds are aliphatic hydrocarbons like hexane, a toxic air contaminant, and aromatic hydrocarbons like toluene and xylene, both toxic air contaminants, use of methyl acetate in other products is also likely to lead to a reduction in hazards.

Because methyl acetate is likely to replace more hazardous chemicals in adhesives, no adverse hazard impacts are expected from the amendments.

8. Hydrology and Water Quality

No construction is expected to result from these amendments, so no impacts on drainage, groundwater, or risks to structures are anticipated. In addition, the primary means of complying with the proposed amendments is through the use of low-VOC adhesives and sealants rather than through the use of abatement equipment. The amendments are therefore unlikely to transfer air emissions to another media such as water. As a result, the proposed rule amendments are not expected to affect hydrology or water quality.

9. Land Use and Planning

No effect on land use is expected since the proposed rule amendments apply to existing uses of adhesives and sealants. Most of this use takes place in existing facilities, and the amendments neither require nor are likely to result in construction either inside or outside of those facilities.

10. Mineral Resources

As noted, the proposed rule amendments are not expected to result in construction outside any existing facility. In addition, the amendments are not expected to result in the use of any mineral resource in formulating or applying adhesives. No impacts on mineral resources are expected.

11. Noise

Because the rule only potentially affects activities inside of existing buildings, the proposed rule amendments are not expected to result in any increases in existing noise levels or exposure of people to severe noise levels.

12. Population and Housing

No effect on population or housing is expected since the proposed rule amendments will not induce population growth or related housing development.

13. Public Services

The facilities affected by the proposed rule amendments are not expected to require any new or additional public services as a consequence of the amendments. No effects on the need for public services such as police, fire, schools, or public roadway maintenance are expected.

14. Recreation

The proposed rule amendments have no impact on recreation.

15. Transportation and Traffic

No construction either inside or outside of existing facilities is expected and no changes in transportation or pedestrian and vehicular circulation are anticipated. In addition, where these amendments would require a facility to change the adhesive used, the facility is most likely to comply by substituting one adhesive for another and will therefore not require additional shipments.

16. Utilities and Service Systems

Because affected facilities are expected to comply by using different adhesives rather than abatement technologies that require energy to operate, the proposed rule amendments are not expected to result in increased demand for energy. No increases in demand for public utilities are expected as a result of the proposed rule amendments.

17. Mandatory Findings of Significance

No impacts that would required mandatory findings of significance are expected.