

State of California  
AIR RESOURCES BOARD

Resolution 86-25

March 28, 1986

Agenda Item No.: 86-4-1

WHEREAS, Sections 39600 and 39601 of the Health and Safety Code authorize the Air Resources Board (the "Board") to do such acts and to adopt such regulations as may be necessary for the proper execution of the powers and duties granted to, and imposed upon, the Board by law;

WHEREAS, Chapter 3.5 (commencing with Section 39650) of Part 2 of Division 26 of the Health and Safety Code establishes procedures for the identification of toxic air contaminants by the Board;

WHEREAS, Section 39655 of the Health and Safety Code defines a "toxic air contaminant" as an air pollutant which may cause or contribute to an increase in mortality or an increase in serious illness, or which may pose a present or potential hazard to human health, and specifies that substances which have been identified by the Environmental Protection Agency (EPA) as hazardous air pollutants pursuant to Section 112 of the federal Clean Air Act (42 U.S.C. Section 7412) shall be identified by the Board as toxic air contaminants;

WHEREAS, Section 39662 of the Health and Safety Code directs the Board to list, by regulation, substances determined to be toxic air contaminants, and to specify for each substance listed a threshold exposure level, if any, below which no significant adverse health effects are anticipated;

WHEREAS, EPA has identified asbestos as a hazardous air pollutant pursuant to Section 112 of the federal Clean Air Act;

WHEREAS, asbestos is emitted from sources such as mining and milling of asbestos ore, manufacturing of asbestos products, automobile braking, and quarrying, and has been measured in the atmosphere;

WHEREAS, pursuant to the request of the Board, the Department of Health Services (DHS) evaluated the health effects of asbestos in accordance with Section 39660 of the Health and Safety Code;

WHEREAS, DHS concluded in its evaluation that asbestos is an animal and human carcinogen, and has been documented to cause cancer in humans in both occupational and nonoccupational settings; asbestos should be treated as a substance without a carcinogenic threshold; health effects other than cancer are not expected to occur at existing ambient asbestos levels nor are present levels expected to result in asbestosis; and the maximum excess lifetime risk

from asbestos exposure of lung cancer is estimated to range between 11 and 110 cases per million for each 100 PCM (phase contrast microscopy) fibers per cubic meter of asbestos exposure, and for mesothelioma is estimated to range between 38 and 190 cases for each 100 PCM fibers per cubic meter of asbestos exposure.

WHEREAS, for the reasons set forth in its evaluation, DHS has concluded that, in the absence of strong positive evidence that carcinogenic substances act only through mechanisms which ought to have a threshold, these substances should be treated as acting without a threshold, and DHS has determined that no positive evidence of a carcinogenic threshold exists with respect to asbestos;

WHEREAS, upon receipt of the DHS evaluation, staff of the Board prepared a report including and in consideration of the DHS evaluation and recommendations and in the form required by Section 39661 of the Health and Safety Code and, in accordance with the provisions of that section, made the report available to the public and submitted it for review to the Scientific Review Panel (SRP) established pursuant to Section 39670 of the Health and Safety Code;

WHEREAS, in accordance with Section 39661 of the Health and Safety Code, the SRP reviewed the staff report, including the scientific procedures and methods used to support the data in the report, the data itself, and the conclusions and assessments on which the report was based, considered the public comments received regarding the report, and, on January 15, 1986 submitted its written findings to the Board;

WHEREAS, the SRP found to be prudent interpretations of the available evidence the propositions that:

Asbestos (including chrysotile, actinolite, amosite, anthophyllite, crocidolite, and tremolite) is a human and animal carcinogen, and has been documented to cause cancer in humans in both occupational and nonoccupational settings.

Although the mechanism of asbestos carcinogenicity is unknown, there is no compelling evidence that this process is characterized by a threshold.

Health effects other than cancer are not anticipated at current exposure levels.

WHEREAS, the SRP found the staff report to be without serious deficiency, and included in its findings the statement that it agreed that asbestos should be listed by the Air Resources Board as a toxic air contaminant, but was unable to recommend an exposure level below which carcinogenic effects would not occur;

WHEREAS, the California Environmental Quality Act and Board regulations require that no project having significant adverse environmental impacts be adopted as originally proposed if feasible alternatives or mitigation measures are available;

WHEREAS, a public hearing and other administrative proceedings have been held in accordance with provisions of Chapter 3.5 (commencing with Section 11340), Part 1, Division 3, Title 2 of the Government Code;

WHEREAS, in consideration of the staff report, including DHS' evaluation and recommendations, the available evidence, the findings of the SRP, and the written comments and public testimony it has received, the Board finds that:

Asbestos [asbestiform varieties of serpentine (chrysotile), riebeckite (crocidolite), cummingtonite-grunerite (amosite), tremolite, actinolite, and anthophyllite] is an animal and human carcinogen.

Health effects other than cancer are not anticipated at current ambient asbestos exposure levels;

There is not sufficient available scientific evidence to support the identification of a threshold exposure level for asbestos; and

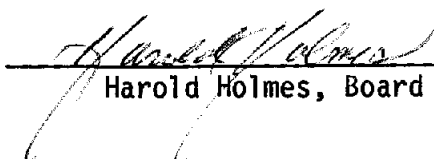
Asbestos is an air pollutant which, because of its carcinogenicity, may cause and contribute to an increase in mortality and an increase in serious illness, and poses a hazard to human health; and

WHEREAS, the Board has determined, pursuant to the requirements of the California Environmental Quality Act and Board regulations, that this regulatory action will have no significant adverse impact on the environment.

NOW, THEREFORE BE IT RESOLVED, that the Board approves the proposed regulatory amendments to Section 93000, Title 17, California Administrative Code, as set forth in Attachment A.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to adopt the amendments, as set forth in Attachment A, after making it available to the public for a period of 15 days, provided that the Executive Officer shall consider such written comments regarding the changes to the regulation as originally proposed as may be submitted during this period, shall make such modifications as may be appropriate in light of the comments received, and shall present the regulations to the Board for further consideration if he determines that this is warranted.

I hereby certify that the above is a true and correct copy of Resolution 86-25, as adopted by the Air Resources Board.

  
Harold Holmes, Board Secretary

Amend Title 17, California Administrative Code, Section 93000 to read as follows:

93000. Substances Identified As Toxic Air Contaminants. Each substance identified in this section has been determined by the state board to be a toxic air contaminant as defined in Health and Safety Code Section 39655. If the state board has found there to be a threshold exposure level below which no significant adverse health effects are anticipated from exposure to the identified substance, that level is specified as the threshold determination. If the board has found there to be no threshold exposure level below which no significant adverse health effects are anticipated from exposure to the identified substance, determination of "no threshold" is specified. If the board has found that there is not sufficient available scientific evidence to support the identification of a threshold exposure level, the "Threshold" column specifies "None identified."

<u>Substance</u>	<u>Threshold</u>
Benzene (C <sub>6</sub> H <sub>6</sub> )	None identified
Ethylene Dibromide (BrCH <sub>2</sub> CH <sub>2</sub> Br; 1,2-dibromoethane)	None identified
Ethylene Dichloride (ClCH <sub>2</sub> CH <sub>2</sub> Cl; 1,2-dichloroethane)	None identified
Hexavalent Chromium Cr(VI)*	None identified
<u>Asbestos-(in-the-following forms:-chrysotile,-actinolite, amosite,-anthophyllite, crocidolite,-and-tremolite)</u>	<u>None identified</u>
<u>Asbestos [asbestiform varieties of serpentine (chrysotile), riebeckite (crocidolite), cummingtonite-grunerite (amosite), tremolite, actinolite, and anthophyllite]</u>	

NOTE: Authority cited: Sections 39600, 39601 and 39662, Health and Safety Code. Reference: Sections 39650, 39660, 39661 and 39662, Health and Safety Code.

\* Compounds identified by an asterisk have been identified as toxic air contaminants by the Air Resources Board but not yet approved by the Office of Administrative Law.

State of California  
AIR RESOURCES BOARD

Response to Significant Environmental Issues

Item: Public Hearing to Consider the Adoption of a Regulatory Amendment  
Identifying Asbestos as a Toxic Air Contaminant

Agenda Item No.: 86-4-1

Public Hearing Date: March 28, 1986

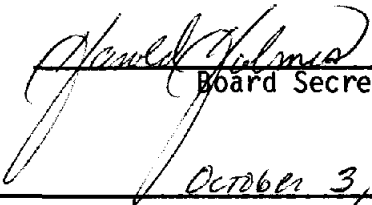
Response Date: May 1, 1986

Issuing Authority: Air Resources Board

Comments: No comments were received identifying any significant environmental  
issues pertaining to this item. The staff report identified no  
adverse environmental effects.

Response: N/A

CERTIFIED:

  
Board Secretary

Date:

October 3, 1986

# Memorandum

To : Gordon Van Vleck  
Secretary  
Resources Agency

Date : August 27, 1986

Subject: Filing of Notice  
of Decisions of  
the Air Resources  
Board

*Harold Holmes*  
From : Harold Holmes  
Board Secretary  
Air Resources Board

Pursuant to Title 17, Section 60007 (b), and in compliance with Air Resources Board certification under Section 21080.5 of the Public Resources Code, the Air Resources Board hereby forwards for posting the attached notice of decisions and response to environmental comments raised during the comment period.

## ATTACHMENTS

85-77  
85-78  
85-80  
86-4  
86-25  
86-43  
86-44  
86-45