

08/22/1983

VOC570822831

Category: 57 – Exemptions/Applicability

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DATE: August 22, 1983

SUBJECT: Bay Area Semiconductor Manufacturing VOC Rule

FROM: David L. Calkins, Chief
Air Programs Branch, EPA Region 9

TO: Air Branch Chiefs
Regions 1-8, and 10

Enclosed for your information is a copy of a recently adopted VOC rule covering semiconductor manufacturing operations. We feel this measure may have applicability in other parts of the country for ozone nonattainment areas.

If you have any questions regarding this rule, please contact Peter Hess at the Bay Area District at the number indicated on the cover letter, or Vivian Thomson of our staff at FTS 454-8207.

Attachment

Attachment

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

July 7, 1983

Mr. David Howekamp
Environmental Protection Agency
215 Fremont Street
San Francisco, California 94105

Dear Sir:

Please find attached recently adopted rules and regulations of the Bay Area Air Quality Management District. These rules and regulations are being forwarded to you as amendments to the San Francisco-Bay portion of the California State Implementation Plan.

The attached rules and regulations have been duly noticed and adopted by the Board of Directors of the Bay Area Air Quality Management District. A copy of the appropriate resolutions, regulations and a summary of evaluation is included for your review.

Please note the Semiconductor Rule is the first of its kind in the nation. We would appreciate Region IX's disbursement of the Rule to other ozone non-attainment areas for inclusion into their NAP or as a definition as LAER.

These papers have also been transmitted to the State of California Air Resources Board for their formal inclusion and transmittal to you. If you have any questions regarding this matter, please feel free to contact Peter Hess of this office.

Sincerely,

Milton Feldstein
Air Pollution Control Officer

MF:js
enclosures

Enclosure 1

BEFORE THE BOARD OF DIRECTORS
OF THE
BAY AREA AIR QUALITY MANAGEMENT DISTRICT

In the Matter of Adopting
Regulation 8, Rule 30,
Relating to the Control of
Emissions From Semiconductor
Manufacturing Operations

RESOLUTION NO. 1475

WHEREASE, the District staff has recommended that this Board revise the District's Rules and Regulations by adopting a rule to limit the emissions of precursor organic compounds from semiconductor manufacturing operations;

WHEREASE, the District staff has prepared a proposed Rule 30 of Regulation 8, a copy of which is attached hereto and incorporated herein by this reference, to limit the emissions of precursor organic compounds from semiconductor manufacturing operations;

WHEREASE, the subject matter of the proposed new rule was reviewed with the affected and interested parties in several workshops and the proposed rule is the result of staff evaluation of all of the viewpoints provided;

WHEREASE, the proposed rule is essential to the achievements of ozone air quality standards in the Santa Clara Valley;

WHEREASE, this Board has determined that the proposed new rule will aid the District in carrying out its mandate to control air pollution and that it will assist in enhancing and protecting air quality within the District;

WHEREASE, this Board desires to adopt the proposed new rule attached hereto; and

WHEREASE, this matter has been duly noticed and heard conformity with the requirements of the Health and Safety Code.

NOW, THEREFORE, BE IT RESOLVED that this Board hereby amends the District's Rules and Regulations by adding new Rule 30 of Regulation 8, attached hereto, to the Rules and Regulations.

The foregoing resolution was duly and regularly introduced, passed and adopted at a regular meeting of the Board of Directors of the Bay Area Air Quality Management District on the motion of the Director ARAMBURU, seconded by Director DOETSCH, on the 6th day of July, 1983 by the following vote of the Board:

AYES: ARAMBURU, BRITT, COOPER, CORCORAN, CUNNINGHMA, DIRIDON, DOETSCH, HUGHAN, LANDIS, McPEAK, MOSKOWITE, RUDEE, SILVER, WILSON.

NOES: NONE.

ABSENT: NICOLOPULOS, OGAWA, SPEIER.

ABSTAINING: BORT.

Enclosure 2

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
939 Ellis Street
San Francisco, California 94109 (415) 771-6000

REGULATION 8-RULE 30

THE CONTROL OF ORGANIC COMPOUNDS
FROM SEMICONDUCTOR MANUFACTURING OPERATIONS
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REGULATION 8-RULE 30

THE CONTROL OF ORGANIC COMPOUNDS FROM SEMICONDUCTOR MANUFACTURING OPERATIONS

8-30-100 GENERAL

8-30-101 Description: The purpose of this Rule is to limit the emissions precursor organic compounds from Semiconductor Manufacturing Operations. For the purpose of this Rule, Semiconductor Manufacturing operations are limited to the manufacture of Semiconductor and other related integrated circuits.

8-30-110 Exemption, Small Semiconductor Operation: The provisions Sections 8-30-302, 303, 401, and 501 shall not apply to any facility that emits less than 6.8 kg (15 lb) per day of precursor organic compounds from Semiconductor Manufacture.

8-30-200 DEFINITIONS

8-30-201 Freeboard Height: The distance from the top of the solvent or solvent drain to the top of the sink.

8-30-202 Freeboard Ratio: The freeboard height divided by the smaller of length or width of the sink or reservoir.

8-30-203 Masking: Application of a maskant material to a wafer to increase or decrease the masked area's resistance to chemical milling.

8-30-204 Organic Compounds: Any compounds of carbon, excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides, carbonates and ammonium carbonate.

8-30-205 Organic Compounds, Non-Precursor: Methylene chloride, 1,1,1 trichloroethane, 1,1,2 trichlorotrifluoroethane (CFC-113), trichlorofluoromethane (CFC-11), dichlorodifluoromethane (CFC-12), chlorotetrafluoroethane (CFC-114), chloropentafluoroethane (CFC-115), chlorodifluoromethane (CFC-22), and trifluoromethane (FC-).

8-30-206 Organic Compounds, Precursor: Any organic compound as defined in 30-204 excepting the non-precursors as designated in 8-30-205.

8-30-207 Photoresist Line: Equipment used to apply and develop photoresist masking solution on a wafer. Process includes preparation (except primary cleaning), soft bake, develop and hard bake.

8-30-208 Photoresist, Negative: Maskant hardens when exposed to light. Unhardened maskant is stripped, exposing wafer surface to touch. Typically uses formulated resin and developer solution.

8-30-209 Photoresist, Positive: Maskant softens when exposed to light.