



R. J. Sommerville  
Air Pollution Control Officer

DATE: April 2, 1991  
TO: Air Pollution Control Board  
SUBJECT: Adoption of Amendments to Rule 67.10 (Kelp Processing and Bio-Polymer Manufacturing Operations)

**SUMMARY:**

Rule 67.10 (Kelp Processing and Bio-Polymer Manufacturing Operations) regulates volatile organic compounds (ozone precursors) from kelp processing and bio-polymer manufacturing operations. The changes correct deficiencies identified by the Environmental Protection Agency. Failure to correct deficiencies may result in withholding 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 to the deficiency corrections, the rule makes changes in control efficiency requirements and revises the fugitive liquid leak requirements. The changes are expected to result in approximately 40 tons per year of additional emission reductions. They will impact one facility.

**Issue**

Should the Board adopt amendments to Rule 67.10 (Kelp Processing and Bio-Polymer Manufacturing Operations) to correct deficiencies that have been identified by the Environmental Protection Agency and to achieve additional reductions of volatile organic compounds (ozone precursors) necessary to attain the state and federal clean air standards for ozone?

**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 67.10 of the Rules and Regulations of the San Diego County Air Pollution Control District.

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 Dora Casaña  
Deputy

APR 2 1991

No. 10 APCB

**SUBJECT: Adoption of Amendments to Rule 67.10 (Kelp Processing and Bio-Polymer Manufacturing Operations)**

**SUMMARY: [CONTINUED]**

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 67.10 and, (b) make appropriate findings of necessity, authority, clarity and consistency, as required by Section 40727 of the State Health and Safety Code.

**Advisory Statement**

The Air Pollution Control Advisory Committee recommended adopting the proposed changes at its March 13, 1991 meeting. The Committee took no position on the test method specified in Section (f) to determine capture efficiency.

**Fiscal Impact**

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

**Alternatives**

Not adopt the proposed changes to Rule 67.10 to correct deficiencies. Failure to correct Rule 67.10 deficiencies may result in the Environmental Protection Agency withholding 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. Also, the resulting emission reductions would not be realized.

**BACKGROUND:**

Rule 67.10 regulates volatile organic compound (ozone precursors) emissions from kelp processing and bio-polymer manufacturing operations. The proposed changes correct deficiencies with the rule identified by the Environmental Protection Agency (EPA). These corrections revise the volatile organic compound definition consistent with EPA requirements and add additional exempt compounds because they are not ozone precursors. An exemption is also added for low volatility compounds with a normal boiling point of 185°C or more. Test methods used to determine compliance with the rule are added as are recordkeeping requirements. The changes also specify the period for compliance determination will be at least 16 hours but not more than 24 hours. Shorter test periods for compliance determination are allowed to save testing time and cost. Abbreviated tests cannot be used to determine noncompliance with the rule. The rule also requires system operating parameters be maintained.

In addition to deficiency corrections, the changes make the fugitive liquid leak criteria more stringent by increasing its applicability to a greater number of liquid streams. Liquid leak requirements for incorporators remain the same. Control efficiency requirements for bio-polymer manufacturing lines, and for kelp processing lines where the primary volatile

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**BACKGROUND [CONTINUED]**

organic compound emitted is not a process reactant or a by-product of a process reaction, have been increased from 90 to 95 percent. The existing control equipment for these processes has been tested and found to achieve the 95 percent control efficiency. The 95 percent performance requirement for these operations will likely satisfy the California Clean Air Act's requirement for Best Available Retrofit Control Technology.

The changes also revise the control efficiency requirements for kelp processing lines from 90 to 80 percent, where the primary volatile organic compound emitted is a process reactant or a byproduct of a process reaction. The revised definition of "volatile organic compound" now requires more compounds (previously exempt) be controlled. Hence, the change from 90 to 80 percent does not relax current control requirements. The 80 percent control efficiency, when considered together with the additional compounds now subject to the rule, represents an emission reduction equivalent to the 90 percent control required in the current rule. Based on available test data, analysis indicates the 80 percent requirement is being achieved by currently installed control equipment. However, additional test data is needed to confirm this. It should be available by the time of the public hearing. If data indicates 80 percent is not achieved, after all reasonable efforts are made, this issue will be discussed with the Board at the public hearing. It should also be noted, it is the District's intent to further evaluate the feasibility of achieving additional emission reductions beyond the 80 percent requirement from this kelp processing line and, if appropriate, propose additional revisions to Rule 67.10 to require such additional reductions at a later date.

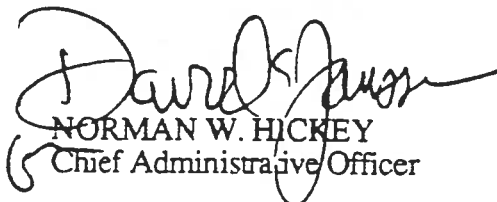
The revisions to Rule 67.10 also delete language which allows a reduced control efficiency (85 percent) to be met if the required control efficiency (90 percent) cannot be achieved. The control equipment currently installed has been tested and this language is no longer necessary. Other language no longer necessary has also been deleted.

Lastly, the changes clarify that emissions occurring during transfer of materials into or out of a drier or reactor are to be included when determining emissions.

The estimated cost to meet the new requirements is relatively small.

A public workshop on the proposed changes was held on December 11, 1990. The workshop report is attached. In addition, a number of subsequent discussions with the one affected company have been held.

Concurrence:

  
NORMAN W. HICKEY  
Chief Administrative Officer

Respectfully submitted,

  
R. J. SOMMERVILLE  
Air Pollution Control Officer

**AIR POLLUTION CONTROL BOARD  
AGENDA ITEM  
INFORMATION SHEET**

**SUBJECT:** Adoption of Amendments to Rule 67.10 (Kelp Processing and Bio-Polymer Manufacturing Operations)

**SUPV DIST.:** All

**COUNTY COUNSEL APPROVAL:** Form and Legality ☒ Yes ☐ N/A  
☐ Standard Form ☐ Ordinance ☒ Resolution

**AUDITOR APPROVAL:** ☒ N/A ☐ Yes **4 VOTES:** ☐ Yes ☒ No

**FINANCIAL MANAGEMENT REVIEW:** ☐ Yes ☒ No :

**CONTRACT REVIEW PANEL:** ☐ Approved \_\_\_\_\_ ☒ N/A

**CONTRACT NUMBER(S):** N/A

**PREVIOUS RELEVANT BOARD ACTION:** 1/30/85 (#1)

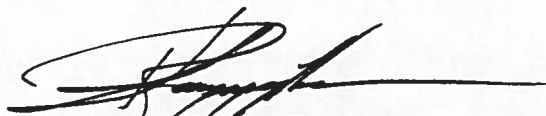
**BOARD POLICIES APPLICABLE:** N/A

**CITIZEN COMMITTEE STATEMENT:** The Air Pollution Control District Advisory Committee recommended approval of the proposed changes at its March 13, 1991 meeting. The Committee took no position regarding the test procedure specified in Section (f) to be used to determine capture efficiency.

**CONCURRENCES:** N/A

**ORIGINATING DEPARTMENT:** Air Pollution Control District

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



**R. J. SOMMERVILLE**  
DEPARTMENT AUTHORIZED REPRESENTATIVE

**April 2, 1991**  
MEETING DATE

**RESOLUTION AMENDING RULE 67.10  
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 67.10 are to read as follows:

**RULE 67.10. KELP PROCESSING AND BIO-POLYMER MANUFACTURING OPERATIONS**

**(a) APPLICABILITY**

Except as otherwise provided in Section (b), this rule is applicable to any kelp processing or bio-polymer manufacturing line where volatile organic compounds (VOC's) are used as reactants, solvents or extractants or used to separate or purify the products of kelp processing or bio-polymer manufacturing line operations.

**(b) EXEMPTIONS**

This rule shall not be applicable to:

- (1) Any kelp processing or bio-polymer manufacturing line where emissions of VOC's, at the maximum design capacity of the line, are no greater than 15 pounds in any one day, provided total emissions of VOC's from all kelp processing or bio-polymer manufacturing equipment located at a stationary source are no greater than 100 pounds in a

day. It shall be the responsibility of a person claiming this exemption to maintain daily records necessary for the District to determine the applicability of such an exemption; and

(2) Fuel oil; and

(3) Laboratory and pilot plant facilities used exclusively for research and development provided that monthly records are kept of the usage of VOC containing materials; and

(4) Any low volatility organic compound which has a normal boiling point of 185°C or more. Any person claiming this exemption shall maintain written records which substantiate the claim such as applicable manufacturer's specifications or, for pure compounds, standard reference texts.

All records pursuant to Subsections (b)(1), (b)(3) and (b)(4) shall be retained on site for at least two years and shall be submitted to the District upon request.

**(c) DEFINITIONS**

(1) **"Approved Air Pollution Control Device"** means a single piece of equipment or combination of pieces of equipment which is approved by the Air Pollution Control Officer.

(2) **"Drier"** means a device used to remove water and/or VOC's from a material by applying heat, by flowing unsaturated air, or by subjecting the material to vacuum, or any combination thereof.

(3) **"Fugitive Liquid Leak"** means a visible leak of liquid, containing greater than 10 percent by weight VOC, at a rate sufficient to cause a continuous stream or a pressurized spray of liquid droplets. An exposed process stream containing VOC moving from one piece of process equipment to another or within a piece of process equipment is not a fugitive liquid leak.

(4) **"Incorporator"** means a device in which a solid and a VOC introduced into the device are mixed, where it is not intended that the VOC chemically modify the solid.

(5) **"Kelp Processing Line"** means one or more pieces of equipment linked by a process flow in which kelp or any of its derivatives is dried, extracted, filtered, mixed, or reacted with any VOC where the end product cannot be produced if any piece of equipment is removed or not functioning.

(6) **"Press"** means a mechanical device for separating liquids from solids.

(7) **"Reactor"** means a device in which a chemical reaction takes place between two or more materials introduced into the device, where a VOC chemically modifies one or more materials.

(8) **"Bio-polymer Manufacturing Line"** means one or more pieces of equipment linked by a process flow in which a bio-polymer or any of its precursors is dried, extracted, filtered, mixed or reacted with any VOC where the end product cannot be produced if any piece of equipment is removed or not functioning.

(9) **"Stationary Source"** means the same as is defined in Rule 20.1.

(10) **"Stationary Storage Tank"** means any tank, reservoir, or other container used to store, but not transport, VOC. Stationary storage tanks do not include tanks used to separate solids from process streams.

(11) **"Still"** means a device designed to separate, in whole or in part, the constituents of a mixture of miscible liquids by heating the liquid mixture and preferentially condensing and collecting the vapors.

(12) **"Volatile Organic Compound" (VOC)** means any compound containing at least one atom of carbon, except: methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate, methylene chloride, 1,1,1-trichloroethane, trichlorofluoromethane (CFC-11), dichlorodifluoromethane (CFC-12), chlorodifluoromethane (CFC-22), trifluoromethane (CFC-23), trichlorotrifluoroethane (CFC-113), dichlorotetrafluoroethane (CFC-114), and chloropentafluoroethane (CFC-115), dichlorotrifluoroethane (HCFC-123), dichlorofluoroethane (HCFC-141b), tetrafluoroethane (HFC-134a) and chlorodifluoroethane (HCFC-142b).

**(d) STANDARDS**

(1) A person shall not operate any kelp processing or bio-polymer manufacturing line unless all aboveground stationary storage tanks, having capacities greater than 20,000 gallons, containing VOC used in conjunction with the line are equipped with pressure-vacuum relief valves which have minimum relief settings of 5 oz/sq. in. (pressure) and 0.5 oz/sq. in. (vacuum). Tanks with capacities greater than 50,000 gallons shall have minimum relief settings of 0.5 oz/sq. in. (pressure) and 0.5 oz/sq. in. (vacuum).

(2) A person shall not operate any kelp processing or bio-polymer manufacturing line unless all piping, valves, fittings, tanks, stills, process equipment (excluding presses) and other devices used to transport, store, react or process VOC or materials containing VOC are free of fugitive liquid leaks. A fugitive liquid leak from incorporators shall only be considered a violation of this rule if the liquid contains more than 50 percent by weight of VOC.

Repair of a fugitive liquid leak may be delayed until the leaking equipment is next scheduled to be off-line provided:

(i) The time, date and location of the leak are recorded promptly following detection;

(ii) All practicable steps to minimize the magnitude of the leak are taken as soon as possible following detection;

(iii) The repair is made within 72 hours of detection; and

(iv) The record required by Subsection (d)(2)(i) is made available to the Air Pollution Control Officer upon request.

An unrecorded leak shall be considered a violation of this rule. Effective *(12 months after date of adoption)* any part of kelp processing or bio-polymer operating line which becomes subject to this subsection due to change in the definition (c)(3) shall be in compliance with Subsection (d)(2).

This subsection shall not apply to liquid losses occurring during maintenance, repair or back flushing of process and storage equipment.

(3) A person shall not operate any kelp processing or bio-polymer manufacturing line unless each in-process tank for material containing VOC is equipped with an apparatus or cover which completely covers the tank but not necessarily provides a vapor tight seal, and which is closed or in place at all times except as necessary to meet operating requirements or for maintenance.

(4) A person shall not operate any bio-polymer manufacturing line unless the total emissions of VOC's to the atmosphere from all driers used in conjunction with all lines are reduced by means of a control device by at least 95 percent by weight. This requirement shall not apply to driers whose exhaust contains VOC at an average concentration of 200 ppmv or less over a complete batch or cycle. Emissions of VOC occurring during the transfer of materials containing VOC into or out of a drier shall be included when determining emissions from that drier.

(5) A person shall not operate a kelp processing line unless the total emissions of VOC to the atmosphere from all driers and reactors used in conjunction with all affected lines are reduced by means of a control device as follows:

(i) For kelp processing lines or portions of lines where the primary VOC being emitted is not a process reactant or byproduct of a process reaction, by at least 95 percent by weight.

(ii) For kelp processing lines or portions of lines where the primary VOC being emitted is a process reactant or byproduct of a process reaction, by at least 80 percent by weight.

Emissions of VOC occurring during the transfer of materials containing VOC into or out of a drier or reactor shall be included when determining emissions from the drier or reactor.

(6) Equipment, devices and systems in use to transport and control VOC emissions pursuant to Subsections (d)(4) and (d)(5) shall be maintained so as to be free of visible holes, breaks, openings or separations between adjoining components, that are not consistent with their design and intended operating function, from which fugitive VOC vapors would be emitted to the atmosphere.

(7) An operation and maintenance program shall be submitted to the Air Pollution Control Officer for approval for new equipment required by Subsections (d)(4) and (d)(5). An existing operation and maintenance program that has been approved by the Air Pollution Control Officer need not be resubmitted for approval as a result of amendments to this rule unless such approved operation and maintenance program is revised. Each program shall be implemented and maintained on approval of the Air Pollution Control Officer.

Each operation and maintenance program submitted for approval shall:

(i) Maintain the VOC emission reduction efficiency required under Subsections (d)(4) and (d)(5); and

(ii) Identify and maintain all key system operating parameters. Key system operating parameters are those parameters necessary to maintain the VOC emission reduction efficiency required under Subsections (d)(4) and (d)(5); and

(iii) Include proposed inspection schedules, anticipated ongoing maintenance steps and proposed daily recordkeeping practices regarding the key system operating parameters.



Each program will apply only to the equipment necessary to meet the requirements of Subsections (d)(4) and (d)(5) and need not include inspection, maintenance or recordkeeping relevant to compliance with Subsection (d)(7).

(8) Compliance with Subsections (d)(4) and (d)(5) shall be determined based upon tests or observations of the process equipment and air pollution control system during a period of at least 16 hours, but not more than 24 hours. Affirmative determination of compliance may be demonstrated through tests or observations for a shorter period of time provided such period of time has been determined appropriate by the Air Pollution Control Officer. Such a shorter test period shall not be the basis for determining non-compliance.

**(e) RECORDKEEPING**

Any person subject to the requirements of Section (d) of this rule shall maintain the following records:

(1) A current list of VOC's, subject to this rule that are in use, and

(2) Daily records of process and key system operating parameters and maintenance performed pursuant to Subsections (d)(4), (d)(5) and (d)(7).

All records shall be retained on site for at least two years, and shall be made available to the District upon request.

**(f) VOC TEST METHODS**

The VOC content of fluids subject to Subsection (c)(3) of this rule shall be determined in accordance with ASTM Standard Recommended Practices for General Gas Chromatography Procedures, E 260-73, General Techniques of Infrared Quantitative Analysis, E 168-67, or General Techniques of Ultraviolet Quantitative Analysis, E 169-63.

The determination of the normal boiling point of an organic compound pursuant to Subsection (b)(4) shall be conducted in accordance with ASTM Standard Test Method for Distillation Range of Volatile Organic Liquids, D 1078-86 or, for pure compounds, may be made from technical data contained in standard reference texts.

Measurements of VOC emissions subject to Subsections (d)(4), (d)(5), (d)(6) and (d)(8) of this rule shall be conducted in accordance with EPA Test Methods 18 and 25 (40 CFR, Appendix A) and EPA Guidelines for Developing Capture Efficiency Protocols as they existed on (*date of adoption*). An alternative method to EPA Test Method 18 and to EPA Guidelines for Developing Capture Efficiency Protocols may be used provided such method has been approved, in advance, by the Air Pollution Control Officer and U. S. Environmental Protection Agency for the specific processes being tested.

**IT IS FURTHER RESOLVED AND ORDERED** that the subject amendments to Rule 67.10, 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:** Supervisors Bailey, Williams and MacDonald  
**NOES:** Supervisors None  
**ABSENT:** Supervisors Bilbray and Golding

STATE OF CALIFORNIA)  
COUNTY OF SAN DIEGO) ss.

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.

(SEAL)

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

By Maria A. Tiscareno  
Maria A. Tiscareno, Deputy

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Re Rules and Regulations of the)  
Air Pollution Control District    )  
of San Diego County . . . . .)

**RESOLUTION AMENDING RULE 67.10  
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 67.10 are to read as follows:

**RULE 67.10. KELP PROCESSING AND BIO-POLYMER MANUFACTURING OPERATIONS**

**(a) APPLICABILITY**

Except as otherwise provided in Section (b), this rule is applicable to any kelp processing or bio-polymer manufacturing line where volatile organic compounds (VOC's) are used as reactants, dissolvers or extractants or used to separate or purify the products of kelp processing or bio-polymer manufacturing line operations.

**(b) EXEMPTIONS**

This rule shall not be applicable to:

- (1) Any kelp processing or bio-polymer manufacturing line where emissions of ~~volatile organic compounds~~ VOC's, at the maximum design capacity of the line, are no greater than 15 pounds in any one day, provided total emissions of ~~volatile organic compounds~~ VOC's from all kelp processing or bio-polymer manufacturing equipment

located at a stationary source are no greater than 100 pounds in a day. ; It shall be the responsibility of a person claiming this exemption to maintain daily records necessary for the District to determine the applicability of such an exemption; and

(2) Fuel oil; and

(3) Laboratory and pilot plant facilities used exclusively for research and development provided that monthly records are kept of the usage of VOC containing materials; and-

(4) Any low volatility organic compound which has a normal boiling point of 185°C or more. Any person claiming this exemption shall maintain written records which substantiate the claim such as applicable manufacturer's specifications or, for pure compounds, standard reference texts.

All records pursuant to Subsections (b)(1), (b)(3) and (b)(4) shall be retained on site for at least two years and shall be submitted to the District upon request.

### (c) DEFINITIONS

(1) **"Approved Air Pollution Control Device"** means a single piece of equipment or combination of pieces of equipment which is approved by the Air Pollution Control Officer.

(2) **"Drier"** means a device used to remove water and/or ~~volatile organic compounds~~ VOC's from a material by applying heat, by flowing unsaturated air, or by subjecting the material to vacuum, or any combination thereof.

(3) **"Fugitive Liquid Leak"** means a visible leak of liquid, containing greater than ~~50~~ 10 percent by weight VOC, at a rate sufficient to cause a continuous stream or a pressurized spray of liquid droplets. An exposed process stream containing VOC moving from one piece of process equipment to another or within a piece of process equipment is not a fugitive liquid leak.

(4) **"Incorporator"** means a device in which a solid and a VOC introduced into the device are mixed, where it is not intended that the VOC chemically modify the solid.

(5) **"Kelp Processing Line"** means one or more pieces of equipment linked by a process flow in which kelp or any of its derivatives is dried, extracted, filtered, mixed, or reacted with any VOC where the end product cannot be produced if any piece of equipment is removed or not functioning.

(6) **"Press"** means a mechanical device for separating liquids from solids.

(7) **"Reactor"** means a device in which a chemical reaction takes place between two or more materials introduced into the device, where a VOC chemically modifies one or more materials.

(8) **"Bio-polymer Manufacturing Line"** means one or more pieces of equipment linked by a process flow in which a bio-polymer or any of its precursors is dried, extracted, filtered, mixed or reacted with any VOC where the end product cannot be produced if any piece of equipment is removed or not functioning.

(9) **"Stationary Source"** means the same as is defined in Rule 20.1.

(10) **"Stationary Storage Tank"** means any tank, reservoir, or other container used to store, but not transport, VOC. Stationary storage tanks do not include tanks used to separate solids from process streams.

(11) **"Still"** means a device designed to separate, in whole or in part, the constituents of a mixture of miscible liquids by heating the liquid mixture and preferentially condensing and collecting the vapors.

(12) **"Volatile Organic Compound" (VOC)** means any compound containing at least one atom of carbon, except: methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate, methylene chloride, 1,1,1-trichloroethane, trichlorofluoromethane (CFC-11), dichlorodifluoromethane (CFC-12), chlorodifluoromethane (CFC-22), trifluoromethane (CFC-23), trichlorotrifluoroethane (CFC-113), dichlorotetrafluoroethane (CFC-114), and chloropentafluoroethane (CFC-115), dichlorotrifluoroethane (HCFC-123), dichlorofluoroethane (HCFC-141b), tetrafluoroethane (HFC-134a) and chlorodifluoroethane (HCFC-142b), that, in its pure state, has an absolute vapor pressure greater than 25 mm Hg (0.5 psi) at 20° C.

(d) **STANDARDS**

(1) ~~On and after June 1, 1985, a~~ A person shall not operate any kelp processing or bio-polymer manufacturing line unless all aboveground stationary storage tanks, having capacities greater than 20,000 gallons, containing VOC used in conjunction with the line are equipped with pressure-vacuum relief valves ~~meeting specifications approved by the Air Pollution Control Officer and having~~ which have minimum relief settings of 5 oz/sq. in. (pressure) and 0.5 oz/sq. in. (vacuum). Tanks with capacities greater than 50,000 gallons shall have minimum relief settings of 0.5 oz/sq. in. (pressure) and 0.5 oz/sq. in. (vacuum).

(2) ~~On and after June 1, 1985, a~~ A person shall not operate any kelp processing or bio-polymer manufacturing line unless all piping, valves, fittings, tanks, stills, ~~incorporators~~, process equipment (excluding presses) and other devices used to transport, store, react or process VOC or materials containing VOC are free of fugitive liquid leaks. A fugitive liquid leak from incorporators shall only be considered a violation of this rule if the liquid contains more than 50 percent by weight of VOC.

Repair of a fugitive liquid leak may be delayed until the leaking equipment is next scheduled to be off-line provided:

(i) The time, date and location of the leak are recorded promptly following detection;

(ii) All practicable steps to minimize the magnitude of the leak are taken as soon as possible following detection;

(iii) The repair is made within 72 hours of detection; and

(iv) The record required by Subsection (d)(2)(i) is made available to the Air Pollution Control Officer upon request.

An unrecorded leak shall be considered a violation of this rule. Effective (12 months after date of adoption) any part of kelp processing or bio-polymer operating line which becomes subject to this subsection due to change in the definition (c)(3) shall be in compliance with Subsection (d)(2).

This subsection shall not apply to liquid losses occurring during maintenance, repair or back flushing of process and storage equipment.

(3) ~~On and after June 1, 1985, a~~ A person shall not operate any kelp processing or bio-polymer manufacturing line unless each in-process tank for material containing VOC is equipped with an apparatus or cover which completely covers the tank, ~~which is designed to retard VOC evaporation~~ but not necessarily provides a vapor tight seal, and which is closed or in place at all times except as necessary to meet operating requirements or for maintenance.

(4) ~~Effective October 1, 1986, a~~ A person shall not operate any bio-polymer manufacturing line unless the total emissions of VOC's to the atmosphere from all driers used in conjunction with all lines are reduced by means of a control device ~~designed to reduce the total VOC emissions to the atmosphere~~ by at least ~~90~~ 95 percent by weight. This requirement shall not apply to driers whose exhaust contains VOC at an average concentration of 200 ppmv or less over a complete batch or cycle. Emissions of VOC occurring during the transfer of materials containing VOC into or out of a drier shall be included when determining emissions from that drier.

(5) A person shall not operate a kelp processing line ~~after the effective dates listed below~~ unless the total emissions of VOC to the atmosphere from all driers and reactors used in conjunction with all affected lines are reduced by means of a control device as follows: designed to reduce the total VOC emissions to the atmosphere by at least 90 percent by weight. Emissions of VOC occurring during the transfer of materials containing VOC into or out of a drier or reactor shall be included when determining emissions from the drier or reactor. ~~The effective dates for kelp processing lines shall be as follows:~~

(i) For kelp processing lines or portions of lines where the primary VOC being emitted is not a process reactant or byproduct of a process reaction, by at least 95 percent by weight. the effective date shall be July 1, 1988.

(ii) For kelp processing lines or portions of lines where the primary VOC being emitted is a process reactant or byproduct of a process reaction, by at least 80 percent by weight. the effective date shall be June 1, 1990.

Emissions of VOC occurring during the transfer of materials containing VOC into or out of a drier or reactor shall be included when determining emissions from the drier or reactor.

(6) ~~Notwithstanding the design VOC emission reduction level specified in Subsections (d)(4) and (d)(5), a person shall not operate any bio-polymer manufacturing line or any kelp processing line unless the VOC emissions subject to control under Subsections (d)(4) and (d)(5) are reduced by at least 90 percent by weight. This 90 percent reduction requirement shall not apply if such VOC emissions are reduced by at least 85 percent by weight and the requirements of Subsection (d)(8) have been met.~~

~~Only reductions in VOC emissions from bio-polymer manufacturing lines and kelp processing lines in excess of the 90 percent level may be used as offsets or credits for VOC emissions increases under any other Rule or Regulation of the Air Pollution Control District.~~

(7)(6) Equipment, devices and systems in use to transport and control VOC emissions pursuant to Subsections (d)(4) and (d)(5) shall be maintained so as to be free of visible holes, breaks, openings or separations between adjoining components, that are not



consistent with their design and intended operating function, from which fugitive VOC vapors would be emitted to the atmosphere.

~~(8)(7)~~ An operation and maintenance program shall be submitted to the Air Pollution Control Officer for approval for new equipment required by Subsections (d)(4) and (d)(5). An existing operation and maintenance program that has been approved by the Air Pollution Control Officer need not be resubmitted for approval as a result of amendments to this rule unless such approved operation and maintenance program is revised. Each submittal shall be made not more than thirty days after the applicable compliance date specified in Subsections (d)(4) and (d)(5). Each program shall be implemented and maintained on approval of the Air Pollution Control Officer.

Each operation and maintenance program submitted for approval shall:

(i) ~~Seek to maintain~~ Maintain the VOC emission reduction efficiency design criteria required under Subsections (d)(4) and (d)(5); and

(ii) Identify and maintain all key system operating parameters. Key system operating parameters are those ~~reasonable and necessary~~ parameters that ~~are intended necessary~~ to maintain the design criteria VOC emission reduction efficiency required under Subsections (d)(4) and (d)(5); and

(iii) Include proposed inspection schedules, anticipated ongoing maintenance steps and proposed daily recordkeeping practices regarding the key system operating parameters.

Each program will apply only to the new equipment necessary that ~~must be installed~~ to meet the requirements of Subsections (d)(4) and (d)(5) and need not include inspection, maintenance or recordkeeping relevant to compliance with Subsection (d)(7).

~~Records required by this subsection shall be kept for two years and provided upon request to the Air Pollution Control Officer.~~

~~The operator of equipment subject to this rule may appeal to the Hearing Board the decision of the Air Pollution Control Officer to conditionally approve or disapprove a program submitted for approval pursuant to this subsection. The Hearing Board, after notice and a public hearing held within 30 days after the petition is filed, may sustain, reverse or modify the action of the Air Pollution Control Officer, such order may also be made subject to specified conditions.~~

~~If VOC emissions subject to control under Subsections (d)(4) and (d)(5) are reduced by at least 90 percent by weight, this subsection shall not be the basis for a determination of non-compliance.~~

~~(8)(9)~~ Compliance with Subsections (d)(6) (4) and (d)(5) shall be determined based upon tests or observations of the process equipment and air pollution control system during a period of at least 16 hours, but not more than 24 hours. Affirmative determination of ~~Compliance~~ may be demonstrated through tests or observations for a shorter period of time provided such period of time has been determined appropriate by the Air Pollution Control Officer. Such a shorter test period shall not be the basis for determining non-compliance.

~~(10)~~ Within seven months of each compliance date specified by Subsection (d)(5) the Air Pollution Control Officer shall evaluate the VOC reduction efficiency actually achieved in practice by equipment used to meet the requirements of Subsection (d)(6). ~~If the~~

required VOC reduction efficiency cannot be met on an ongoing basis, after all reasonable efforts to achieve compliance have been made, the Air Pollution Control Officer shall advise the Air Pollution Control Board and make a recommendation to revise this rule to reflect the maximum VOC reduction efficiency that can reasonably be met on an ongoing basis. In the case of such inability to meet the required VOC reduction efficiency, the requirements of Subsection (d)(6) shall be deemed to have been met for the period from the date of final compliance specified in Subsection (d)(5) until such time as the Air Pollution Control Board acts on the recommendation of the Air Pollution Control Officer.

Reasonable efforts to achieve compliance shall include, but not be limited to, adherence to the operation and maintenance program approved pursuant to Subsection (d)(8).

**(e) SCHEDULE OF INCREMENTS OF PROGRESS**

Any person subject to this rule shall comply with the following increments of progress:

- (1) By March 1, 1985, submit to the Air Pollution Control Officer applications for Authorities to Construct and Permits to Operate an approved air pollution control device and any modifications to process equipment necessary to achieve compliance with Subsection (d)(4).
- (2) By June 1, 1985, be in compliance with Subsections (d)(1), (d)(2), and (d)(3).
- (3) By September 1, 1985, issue purchase orders for the basic VOC control device and other long delivery time components necessary to comply with Subsection (d)(4).
- (4) By October 1, 1986, be in compliance with Subsection (d)(4).
- (5) By January 1, 1987, submit to the Air Pollution Control Officer applications for Authorities to Construct and Permits to Operate an approved air pollution control device and any modifications to process equipment necessary to achieve compliance with Subsection (d)(5)(i).
- (6) By July 1, 1987, issue purchase orders for the basic VOC control device and other long delivery time components necessary to comply with Subsection (d)(5)(i).
- (7) By July 1, 1988, be in compliance with Subsection (d)(5)(i).
- (8) By December 1, 1988, submit to the Air Pollution Control Officer applications for Authorities to Construct and Permits to Operate an approved air pollution control device and any modifications to process equipment necessary to achieve compliance with Subsection (d)(5)(ii).
- (9) By June 1, 1989, issue purchase orders for the basic VOC control device and other long delivery time components necessary to comply with Subsection (d)(5)(ii).
- (10) By June 1, 1990, be in compliance with Subsection (d)(5)(ii).

**(e) RECORDKEEPING**

Any person subject to the requirements of Section (d) of this rule shall maintain the following records:

- (1) A current list of VOC's subject to this rule that are in use, and



(2) Daily records of process and key system operating parameters and maintenance performed pursuant to Subsections (d)(4), (d)(5) and (d)(7).

All records shall be retained on site for at least two years, and shall be made available to the District upon request.

**(f) VOC TEST METHODS**

The VOC content of fluids subject to Subsection (c)(3) of this rule shall be determined in accordance with ASTM Standard Recommended Practices for General Gas Chromatography Procedures, E 260-73, General Techniques of Infrared Quantitative Analysis, E 168-67, or General Techniques of Ultraviolet Quantitative Analysis, E 169-63.

The determination of the normal boiling point of an organic compound pursuant to Subsection (b)(4) shall be conducted in accordance with ASTM Standard Test Method for Distillation Range of Volatile Organic Liquids, D 1078-86 or, for pure compounds, may be made from technical data contained in standard reference texts.

Measurements of VOC emissions subject to Subsections (d)(4), (d)(5), (d)(6) and (d)(8) of this rule shall be conducted in accordance with EPA Test Methods 18 and 25 (40 CFR, Appendix A) and EPA Guidelines for Developing Capture Efficiency Protocols as they existed on (date of adoption). An alternative method to EPA Test Method 18 and to EPA Guidelines for Developing Capture Efficiency Protocols may be used provided such method has been approved, in advance, by the Air Pollution Control Officer and U. S. Environmental Protection Agency for the specific processes being tested.

**IT IS FURTHER RESOLVED AND ORDERED** that the subject amendments to Rule 67.10, 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 67.10  
KELP PROCESSING AND BIO-POLYMER  
MANUFACTURING OPERATIONS**

**WORKSHOP REPORT**

A workshop notice was mailed to the one company involved in kelp processing and bio-polymer manufacturing operations 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 December 11, 1990. Additional meetings and discussions, subsequent to the workshop, have also been held. Written comments were also received. The comments and District responses are as follows:

**WORKSHOP COMMENT**

The proposed change in the control equipment efficiency requirement from 90% to 95% may preclude the company from possible future plant expansion due to lost emission credits even though the existing scrubbers for removal of isopropyl alcohol emissions are considered LAER.

**DISTRICT RESPONSE**

The additional emission reductions that will be realized by the amended Rule 67.10 will not be available to the company as offsets for future expansion. However, emission reductions in excess of that required by Rule 67.10 would be available to offset future expansion.

The Health and Safety Code requires the application of Best Available Retrofit Control Technology (BARCT) to reduce VOC emissions as expeditiously as possible in districts that are designated as having either "serious" or "severe" air pollution problems. San Diego County will be classified as either "serious" or "severe" for ozone. Therefore, the District is obligated to adopt rules which contain BARCT for VOC emissions.

Section 40406 of Health and Safety Code defines BARCT as "an emission limitation that is based on the maximum degree of reduction achievable, taking into account environmental, energy, and economic impacts". The control efficiency (95%) specified in the amended Rule 67.10 has been achieved in the actual practice and is consistent with criteria defined in the guidance document for determining BARCT under the California Clean Air Act.

In addition to the BARCT requirements, the emission reductions that will be realized by the amended Rule 67.10 are needed to further efforts toward ozone attainment.

**WORKSHOP COMMENT**

Applicability provision (a)(2) should be removed from the rule since this type of activity does not occur in kelp or bio-polymer processing.

**DISTRICT RESPONSE**

The District agrees. The provision (a)(2) has been deleted.

### **WORKSHOP COMMENTS**

The operations described in the Section (b) - Exemptions are the same from day to day. There is no purpose in performing daily record keeping.

### **DISTRICT RESPONSE**

Daily recordkeeping is necessary to ensure the enforceability of Subsection (b)(1) since this subsection refers to a daily emission limit. For the remainder of the Section (b), recordkeeping requirements have been modified to eliminate unnecessary paperwork.

### **WORKSHOP COMMENT**

Subsection (b)(3) refers to the distillation range of organic liquids. Aqueous solutions with low VOC concentrations used in some operations may have more than 10 weight percent evaporated at 150°C, but the distillate will contain only water.

### **DISTRICT RESPONSE**

The intent of the rule was to exempt organic compounds with very low volatility. Therefore, Subsection (b)(3) has been modified to reflect this intent. It now refers to the normal boiling point of organic compounds.

### **WORKSHOP COMMENT**

The new language added to Subsection (d)(2)(4), relating to an unrecorded leak, should be deleted because it is redundant.

### **DISTRICT RESPONSE**

This language improves the enforceability of the rule. Similar language is contained in other District's rules. Therefore this language has been retained.

### **WORKSHOP COMMENT**

Changing the VOC content in the definition of Fugitive Liquid Leak from 50% to 10% would force the redesign of the incorporators in Plant B. The emissions saved by this type of efforts are miniscule, and the cost per pound of emissions reduced would be very high.

### **DISTRICT RESPONSE**

In most of the operations involving liquid streams, the change in definition of Fugitive Liquid Leak will bring VOC emission reductions at a small cost to the company. A cost analysis was performed by the District using data on the cost of modification of the incorporators and the EPA emission factors for liquid leaks from pump seals in synthetic organic chemical manufacturing industry. This analysis showed that the modification of incorporators would not be cost-effective. Therefore, the incorporators have been exempted from the requirements of Subsection (d)(2).

### **WORKSHOP COMMENT**

The absence of daily records for operation and maintenance activities should only be considered a violation if daily records are not kept and the scrubber in question has been tested and found not to be operating at the specified removal efficiency.

### **DISTRICT RESPONSE**

The District must ensure continuous compliance with the rule on each and every operating day of the facility. District inspectors cannot be present every day to verify compliance. Therefore, the daily recordkeeping is necessary. In addition, it is not practical to conduct a complete source test to determine control efficiency whenever records have not been kept. Accordingly, daily records are required, and failure to maintain such records will be a violation of the rule.

### **WORKSHOP COMMENT**

There are chart recorders monitoring essential process parameters. Would such charts satisfy daily recordkeeping requirements?

### **DISTRICT RESPONSE**

Yes, if all essential parameters to determine compliance are being monitored. Those key system operating parameters not being recorded by chart recorders must be checked and recorded manually at least daily.

### **WRITTEN COMMENT**

Provisions should remain in the rule to allow for offsets or credits for VOC emissions. The language allowing the banking of emission reductions achieved beyond the regulated limits has been deleted from the proposed rule and should be reinstated.

### **DISTRICT RESPONSE**

Emission banking is regulated by District Rules 26.0 through 26.10. These rules are applicable for any emission reductions achieved beyond requirements of applicable District rules. Emission reductions in excess of those required by Rule 67.10 are eligible for banking pursuant to Rules 26.0 through 26.10.

### **WRITTEN COMMENT**

The proposed Subsection (d)(5)(ii) establishes reduction limits for VOC with a boiling point higher than 190°C. These limits are not based on technical knowledge of the current emissions or on evaluation of what type of additional emission control equipment may be cost-effective. The scope of emissions hasn't been quantified since the source test evaluation has not been completed by the District.

### **DISTRICT RESPONSE**

A preliminary evaluation of the source test data for the control equipment in question has shown that the 80% emission control requirement established by the rule can be achieved. Further study

of the processes at the facility and test results will be conducted in order to determine whether the current emission reduction systems should be capable of achieving the specified 80% requirement and, in the future, whether a higher level of emissions control is technically feasible and appropriate. If appropriate, such higher level of control will be required at a future date.

#### **POST-WORKSHOP COMMENT**

The existing emission control equipment that is subject to Subsection (d)(5)(i) was capable of only 96% efficiency when tested for the District. There is not a sufficient margin of safety between this performance level and the proposed 95% control requirement. The requirement should be lowered to provide for an adequate margin of safety.

#### **DISTRICT RESPONSE**

The referenced source testing was likely done during worst case conditions. Accordingly, system control efficiency during other operating conditions should be higher than 96%. Moreover, the design of the system, including bypassing of uncontrolled emissions, should allow for some adjustments, if necessary, to ensure compliance with the 95% requirement. Nevertheless, the District will again review the test data and, if appropriate, recommend changes to the requirement.

#### **EPA COMMENT**

What method will be used to quantify the VOC emissions occurring during the transfer of materials containing VOC into and out of a drier specified in Subsection (d)(4)? Without a test method or procedure for determining these emissions this provision of the rule would be unenforceable.

#### **DISTRICT RESPONSE**

The proposed rule has been modified to include the EPA Guideline for Developing of Capture Efficiency Protocols to quantify fugitive emissions.

#### **EPA COMMENT**

The word "and" should be added to the end of Subsection (b)(2).

#### **DISTRICT RESPONSE**

The word "and" has been added.

#### **EPA COMMENT**

Subsection (d)(1) needs some editorial changes to clarify it. Also, there is no need to specify P/V valve pressure settings for tanks greater than 50,000 gallons since they are already specified for tanks with capacities greater than 20,000 gallons.

### **DISTRICT RESPONSE**

Subsection (d)(1) has been changed as suggested. The settings of pressure-vacuum relief valves for tanks with capacities greater than 20,000 gallons and those with capacities greater than 50,000 gallons are different, and, therefore, do need to be specified for each tank size

### **EPA COMMENT**

The reference in the second paragraph of Section (f) to Subsection (b)(4) should be changed to (d)(4).

### **DISTRICT RESPONSE**

This reference has been corrected.

### **ARB COMMENT**

The exemption of low volatility liquids as described in Subsection (b)(3) can result in increased emissions of volatile organic compounds and therefore is a weakening of the rule.

### **DISTRICT RESPONSE**

This provision is, in fact, a strengthening of the existing rule. Low volatility liquids were exempt in existing Rule 67.10 according to the VOC definition in Subsection (c)(2). This definition exempted all volatile compounds that, in their pure state, have an absolute vapor pressure less than 25 mm Hg at 20°C.

The amended rule exempts only organic liquids with the initial boiling point of 190°C or higher. Most liquids with such boiling points will have vapor pressures at 20°C of less than 1 mm Hg. Thus, the change makes more compounds under the revised VOC definition subject to the rule.

The estimated amount of VOC emissions exempt under the existing rule is approximately 126 tons/year (98% of these emissions were VOC's with the boiling point of 130°C). The amount of emissions exempt under the amended rule will be an estimated 2.7 tons/year (propylene glycol only) which represent less than 0.5 percent of total VOC emissions from the affected facility.

### **ARB COMMENT**

It is not apparent why the "Stationary Source" definition is needed. If it is kept in the rule it should be explained but not referenced to Rule 20.1

### **DISTRICT RESPONSE**

The definition has been deleted.

**ARB COMMENT**

Subsection (d)(1). The rule does not apply to storage tanks which have a capacity less than or equal to 20,000 gallons. To improve the effectiveness of the rule, the tank size exemption should be reduced to 260 gallons.

**DISTRICT RESPONSE**

The rule, in general, is applicable to all storage and in-process tanks at the affected facility. Subsection (d)(1) exempts only the above ground tanks smaller than 20,000 gallon size from the requirement for pressure-vacuum relief valves requirement. At the one facility affected by this rule, there are three such tanks with a capacity of 7500 gallons each. The total amount of VOC emissions from these tanks is less than one pound per day.

**ARB COMMENT**

EPA Method 25 does not discriminate between the halogenated organic compounds exempted by the rule VOC definition, and other organic compounds defined as VOC's. A supplementary test method such as EPA Test Method 18 or ARB Method 422 should be specified.

**DISTRICT RESPONSE**

The affected facility does not use, produce or emit exempt compounds and there are no future plans to do so. Therefore, the specification of supplemental test methods is unnecessary.

**ARB COMMENT**

Subsections (d)(5)(i) and (d)(5)(ii) make reference to "process reactants". This term should be defined.

**DISTRICT RESPONSE**

"Process reactant" is a common term widely used in chemical engineering practice. It does not have any unique meaning in the rule and therefore does not need a separate definition.

**ARB COMMENT**

The rule should include the definitions for fugitive liquid leaks and fugitive vapor leaks similar to the ones used in Ventura County Rule 74.7 - Fugitive Emissions of Reactive Organic Compounds from Petroleum Refineries and Chemical Plants.

**DISTRICT RESPONSE**

There is no requirement in the rule for fugitive vapor leaks and therefore the definition is not needed. A fugitive liquid leak definition similar to Rule 74.7 of Ventura County cannot be used for help processing operations since, unlike refinery operations, they are not continuous but rather batch processes such as filtration and batch reactions. The transfer of products containing VOC's sometimes takes place not in continuous enclosed lines but through transfer tanks and other similar equipment.

#### **ARB COMMENT**

Subsection (d)(6) should be shortened to include the requirement that all equipment, devices and systems used in kelp processing and bio-polymer manufacturing operations are to be free of leaks.

#### **DISTRICT RESPONSE**

Subsection (d)(6) was specifically worded to exclude operations such as filtration using filter presses since otherwise they could be considered sources of liquid leaks. This is not the intent.

#### **ARB COMMENT**

The rule should specify the schedules and requirements for inspection and maintenance.

#### **DISTRICT RESPONSE**

Subsection (d)(7)(iii) specifies that an operation and maintenance program shall be submitted for approval to the APCO. It also specifies that such program includes inspection schedules, ongoing maintenance steps and proposed daily recordkeeping practices regarding key operating parameters of control systems. Such a program will satisfy the concern expressed.

#### **ARB COMMENT**

Subsection (d)(3) requires that in-process tanks be covered. To clarify this provision, the District should include a definition in the rule for "in-process tanks".

#### **DISTRICT RESPONSE**

The term "in-process" tank is self-explanatory and does not need a definition.

#### **COMMENT**

Rule 67.10 was originally developed with a specific understanding of process operations and typical process cycle times. If an inappropriately short period of time is used for testing, non-compliance could be indicated. However, if the testing time were extended compliance would be demonstrated. There is concern that if an inappropriately shorter period than the specified 16 hours is used for testing, a finding of non-compliance could result. Therefore, testing should be carried out at least 16 hours if the District believes a non-compliance problem exists. However, because of cost considerations, the District should be able to establish compliance using a test period of less than 16 hours.



**DISTRICT RESPONSE**

The District agrees there could be a problem if an inappropriately short test period is used. Rule 67.10 has been revised as suggested. However, if enforcement problems result from this change, it is the District's intent to propose additional revisions to Rule 67.10 to correct the problems.



R. J. Sommerville  
Air Pollution Control Officer

May 17, 1991

TO: Supervisor John MacDonald, Chairman, Air Pollution Control Board  
Supervisor Brian P. Bilbray, Vice Chairman  
Supervisor George F. Bailey  
Supervisor Susan Golding  
Supervisor Leon L. Williams

FROM: R. J. Sommerville  
Air Pollution Control Officer

**ADDITIONAL CHANGES TO DISTRICT RULES  
SCHEDULED FOR ADOPTION ON MAY 21, 1991**

On May 21, 1991, the Board will consider adopting a new Rule 67.1 (Alternative Emission Control Plans), and amendments to Rules 67.2 (Dry Cleaning Equipment Using Petroleum-Based Solvents), 67.7 (Cutback and Emulsified Asphalts), 67.9 (Aerospace Coating Operations), 67.10 (Kelp Processing and Bio-Polymer Manufacturing Operations), and 67.16 (Graphic Arts Operations) to correct deficiencies identified by the Environmental Protection Agency.

As a result of comments received from the Air Resources Board, the Environmental Protection Agency and industry during the public comment period, a number of minor changes are being proposed to Rules 67.1, 67.2, 67.9 and 67.10. They are as follows:

**RULE 67.1**

The word "new" has been added to the opening sentence of Subsection (c)(8), and the 60 day period specified in Subsection (g)(1) has been changed to a 120 day period.

**RULE 67.2**

The definition of "Petroleum-Based Organic Solvent" in Subsection (c)(4) has been revised to specify it is a liquid petroleum distillate at standard conditions. A test method for exempt compounds has been added to Section (f).

### **RULE 67.9**

Subsection (b)(1) has been revised to exempt the specified materials from the listing requirements of Subsection (d)(7). Subsection (b)(3) has been revised to exempt caulking and smoothing compounds, and preservative oils and compounds from the recordkeeping requirements of Subsection (f)(2). Subsection (b)(1)(vi) has been revised to clarify that the exemption relates to all preimpregnated (prepreg) composite materials. Subsections (b)(3) and (4) have been reworded to clarify the intent and to exempt the specified materials from the listing requirements of Subsection (d)(7).

The definition of "Form Release Agent" has been revised to include mold release agents. The definition of "Fuel Tank Coating" has been revised to include fuel fill and drainage tracks. The definition of "Stencil Coating" has been revised to include touch-up guns with capacities of 8 ounces or less. The definition of "Unicoat" has been revised to allow a Unicoat to be applied over an old coating without stripping.

Subsections (d)(7) and (8) have been replaced by Section (d)(7) which requires that aerospace companies provide the District a list of coatings used and the specific coating categories associated with those uses. Coatings cannot be used other than as listed.

Subsection (f)(1)(iv) has been revised to delete the requirement that the density of solvents be listed as part of the recordkeeping requirements. Subsection (f)(2) is revised to require daily dispensing records be kept for solvents used for equipment and surface cleaning operations, and of materials added to dip tanks used for dip coating operations.

Subsection (g)(1) has been revised to clarify the test method applies only to coatings. Subsection (g)(3) has been revised to more clearly specify EPA's Capture Efficiency Test Method. Subsection (g)(5) has been revised to specify the method for correcting vapor pressure measurements for partial pressures of water and exempt compounds. Subsection (g)(8) has been added to apply to strippers and cleaning materials.

### **RULE 67.10**

A new Subsection (d)(9) will be added to address procedures to be followed if technology forcing features of the rule are not completely achievable. Specific language is still being developed in concert with Kelco, state and federal agencies.


The Air Resources Board, the Environmental Protection Agency and industries participating in the workshop process have been advised of the changes to these rules and are in agreement. Copies of the revised rules are attached.

Members  
Air Pollution Control Board

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May 17, 1991

If you have any questions, please call me at 694 (750)-3300.

A handwritten signature in black ink, appearing to read 'R. J. Sommerville', with a long horizontal flourish extending to the right.

R. J. SOMMERVILLE  
Air Pollution Control Officer

RJS:RJSm:vch

cc: Lari Sheehan

Clerk of the Board



R. J. Sommerville  
Air Pollution Control Officer

May 21, 1991

TO: Supervisor John MacDonald, Chairman, Air Pollution Control Board  
Supervisor Brian P. Bilbray, Vice Chairman  
Supervisor George F. Bailey  
Supervisor Susan Golding  
Supervisor Leon L. Williams

FROM: R. J. Sommerville  
Air Pollution Control Officer

**ADOPTION OF AMENDMENTS TO RULE 67.10 (KELP PROCESSING AND  
BIO-POLYMER MANUFACTURING OPERATIONS)**

On May 21, 1991 the Board will consider amendments to Rule 67.10 that will correct deficiencies identified by the Environmental Protection Agency. Failure to correct deficiencies may result in withholding certain federal grant monies from the District, imposing a major source construction ban in San Diego County and/or withholding of federal highway and sewerage treatment funds.

One additional minor change has been made to Rule 67.10 as a result of comments received from the one company affected by the rule; Kelco. This change revises Subsection (f) to specify that an alternate test method to EPA Test Method 18 may be used if it is approved, in advance, by the District and the EPA.

There is still an issue. One of the deficiency corrections changed the definition of "Volatile Organic Compound" to meet Environmental Protection Agency requirements. Since the revised definition requires more compounds (previously exempt) be controlled, there was also a corresponding change in the emission reduction requirement for kelp processing lines from 90 to 80 percent. The District believes the proposed 80 percent emission reduction requirement and revised "Volatile Organic Compound" definition have an emission reduction impact equivalent to the emission reduction requirement and "Volatile Organic Compound" definition in the current rule. A second deficiency correction deleted language that allowed the 90 percent emission reduction standard to drop to 85 percent if control equipment is operated and maintained properly and the 90 percent standard can not be met. It also deleted language requiring the District to advise the Board if the required reduction efficiency cannot be met on an ongoing basis after all reasonable efforts have been made, to recommend the rule be revised to reflect the maximum reduction efficiency that can reasonably be met on an ongoing basis, and to deem the equipment in compliance until the Board acts on the recommendation to revise the rule. These deletions were necessary to meet Environmental Protection Agency requirements.

**AIR POLLUTION CONTROL DISTRICT**  
9150 Chesapeake Drive, San Diego, California 92123-1095  
(619) 694-3307 FAX (619) 694-2730

There has been recent testing of the kelp processing lines at Kelco. Based on the results, the District believes the 80 percent emission reduction standard and change in "Volatile Organic Compound" definition in the proposed amendments is equivalent to the emission reduction requirements in the current rule. However, the testing was inconclusive regarding whether the control equipment currently installed meets the emission reduction standard in the current rule, or whether it would meet the 80 percent standard in the proposed amendments. Additional testing must be done to make such a determination.

Kelco is concerned that additional testing may show that the equipment can not comply with the revised requirements after all reasonable efforts to do so have been made. They are also concerned that language in the current rule is being deleted that requires the District to recommend the Board revise the rule to reflect the maximum reduction efficiency that can reasonably be met on an ongoing basis if it is determined that the rule cannot be met after all reasonable efforts have been made. If additional testing shows the equipment can not meet the requirements of Subsection (d)(5)(ii) and there is no regulatory requirement for Board reconsideration of the emission reduction standard, Kelco does not want to be in a position of being unable to comply with the rule. The District agrees; however, retaining language that would accomplish this would not be approvable by the Environmental Protection Agency.

My May 17, 1991 letter to the Board regarding additional changes to District rules scheduled for adoption on May 21, 1991 noted that language was being developed to add a new Subsection (d)(9) to Rule 67.10 to specify procedures to be followed if the requirements of Subsection (d)(5)(ii) cannot be met. No regulatory language could be developed that was acceptable to both Kelco and the Environmental Protection Agency.

To address Kelco's concern, the District has agreed that if the VOC reduction efficiency required by Subsection (d)(5)(ii) cannot be achieved on an ongoing basis, after all reasonable efforts have been made, the District will, after consultation with the Environmental Protection Agency and the Air Resources Board, advise the Board and recommend Subsection (d)(5)(ii) be revised to reflect the maximum VOC reduction efficiency that can reasonably be met on an ongoing basis. The District will also recommend that equivalent emission reductions be obtained elsewhere to compensate for the emission reductions forgone by revising the reduction efficiency requirements of Subsection (d)(5)(ii). In addition, if, at any time, the District believes the test procedures specified in Rule 67.10 should be revised, the District will recommend such revisions to Rule 67.10 be adopted by the Board.

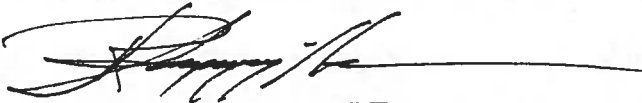
It is our understanding that Kelco will petition the Hearing Board for a variance to provide time to test the kelp processing line in question, and make any necessary improvements and conduct a retest if testing shows noncompliance. Since initial testing indicates that Kelco may be currently meeting the proposed 80 percent requirement, the District will not oppose a request for variance until June 1, 1992, if Kelco agrees to appropriate conditions on the variance to ensure diligent and timely action is taken, there is an appropriate commitment of resources, data is shared with the District, and the variance will terminate upon issuance of a permit to operate once the testing is completed and compliance is verified.

Members  
Air Pollution Control Board

3

May 21, 1991

If you have any questions, please call me at 694 (750)-3300.

A handwritten signature in black ink, appearing to read 'R. J. Sommerville', followed by a long horizontal line.

R. J. SOMMERVILLE  
Air Pollution Control Officer

RJS:RJS:m:veh

cc: Lari Sheehan, Deputy CAO