apcd
County of San Diego

R. J. Sommerville
Air Pollution Control Officer

NOTICE OF WORKSHOP
FOR DISCUSSION OF PROPOSED RULE 1202
HEXAVALENT CHROMIUM - COOLING TOWERS

The San Diego Air Pollution Control District will hold a public meeting to consider the adoption of a new rule, Rule 1201 - Hexavalent Chromium - Cooling Towers and companion addition to District Rule 40 - Permit and Other Fees. Comments concerning the proposed rule may be submitted in writing before, or made at the workshop which is scheduled as follows:

DATE:	November 8, 1990
TIME:	9:30 a.m.
PLACE:	Farm Advisor's Conference Room County Operations Center Building #4 5555 Overland Avenue San Diego, CA 92123

Rule 1202 is a new rule designed to eliminate emissions of hexavalent chromium [Cr(VI)] from cooling towers at facilities that use materials containing hexavalent chromium in the cooling tower circulating water. Affected facilities may include many large and small industries, hospitals, hotels, schools, and large buildings. The definition of cooling tower includes, but is not limited to, evaporative condensers, quench towers and cooling towers used in heating, ventilation, cooling or air conditioning processes. Any facility operating a cooling tower will be subject to the rule, regardless of the material used in the circulating water, the nature of the operation or size of the cooling tower. District permits will not be required for affected cooling towers.

Rule 1202 will prohibit the use of Cr(VI) compounds in any cooling tower operated in San Diego County. Existing cooling towers will be required to meet a Cr(VI) content limit of 0.15 milligrams per liter of circulating water within six months of rule adoption. Wooden cooling towers will be required to meet this limit within twelve months. New cooling towers will be immediately subject to the rule requirements.

Within three months of adoption of the rule, operators of cooling towers must notify the District regarding operation of the cooling tower and how compliance will be achieved. Within six months of adoption of the rule, operators must discontinue use of materials containing Cr(VI) in the cooling tower and test the cooling tower circulating water. The results of all required tests as well as records of additives used in cooling towers will be required to be maintained for at least two years.

Rule 1202 is similar to the Air Toxic Control Measure developed and adopted by the California Air Resources Board (ARB) under the Tanner (AB 1807) process. This State law requires that local air pollution control districts adopt regulations no less stringent than those adopted by the ARB.

OVER

Concurrent changes to District Rule 40 are being proposed that would allow the District to collect fees from cooling tower operators in order to cover the District's costs to implement and enforce Rule 1202 requirements. The charge for affected facilities is expected to be an initial fee of $85. Future charges for cooling tower water sampling and analysis would also be allowed.

If you would like a copy of proposed Rule 1202 and changes to Rule 40, please call Juanita Ogata at (619) 694-3307. If you have any questions concerning the proposal, please call Joe Yager at (619) 695-3324 or me at (619) 694-3303.

Richard J. Smith

RICHARD J. SMITH
Deputy Director

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Proposed addition of Rule 1202 to Regulation XII and addition of Section (p) to Rule 40 of Regulation II.

1. Proposed addition of Rule 1202 is to read as follows:

RULE 1202 HEXAVALENT CHROMIUM - COOLING TOWERS

(a) APPLICABILITY

This rule applies to any person who owns or operates, or who plans to build, own, or operate, cooling tower equipment within San Diego County.

(b) EXEMPTIONS

This rule is not applicable to any cooling tower utilized exclusively in connection with any structure which is designed and used as a dwelling for not more than four families.

(c) DEFINITIONS

For the purposes of this rule the following definitions shall apply:

(1) **"Chromium"** means hexavalent chromium or chromate.

(2) **"Cooling Tower"** means a device which uses fans or natural draft to evaporate circulating water in order to remove heat from a process, a building, or a refrigerator. This includes, but is not limited to, evaporative condensers, quench towers or cooling towers used for heating, ventilation, or air conditioning (HVAC) or cooling industrial processes.

(3) **"New Cooling Tower Equipment"** means any cooling tower equipment installed after (*Date of Notice of APCD Public Workshop*).

(d) STANDARDS

(1) Except as provided in Subsection (d)(2), no person shall operate a cooling tower unless:

(i) Hexavalent chromium-containing compounds are not added to the cooling tower circulating water;

(ii) The hexavalent chromium concentration in the circulating water does not equal or exceed 0.15 milligrams hexavalent chromium per liter of circulating water; and

(iii) Circulating water is tested to determine the chromium concentration within six months after (*Date of Adoption*). Except as specified in Subsection (d)(4)(ii), such testing shall be performed every six months.

(2) No person shall operate a wooden cooling tower unless:

(i) Hexavalent chromium-containing compounds are not added to the cooling tower circulating water;

(ii) The Air Pollution Control Officer is notified in writing that the tower has wooden components that are exposed to the circulating water;

(iii) Circulating water is tested to determine the hexavalent chromium concentration every month;

(iv) The hexavalent chromium concentration in the cooling tower circulating water decreases each month as determined by the testing specified in Subsection (d)(2)(iii);

(v) The hexavalent chromium concentration in the circulating water does not exceed 8 milligrams hexavalent chromium per liter of circulating water; and

(vi) By (*12 months after effective date*) the hexavalent chromium concentration in the circulating water does not exceed 0.15 milligrams hexavalent chromium per liter of circulating water.

(3) In addition to the requirements of Subsections (d)(1) and (d)(2), as appropriate, no person shall operate any new or replacement cooling tower unless:

(i) Upon start-up of the cooling tower, circulating water is tested to determine the chromium concentration; and

(ii) The District is notified in writing at least 90 days prior to operation of the equipment of the following:

(A) The owner and operator of the cooling tower;
(B) The location of the cooling tower;
(C) When the cooling tower will start operation; and
(D) A statement that hexavalent chromium-containing compounds will not

be used in the circulating water of the cooling tower.

(4) Testing Requirements:

(i) Testing of the circulating water of a cooling tower shall be conducted in accordance with Method 312B. "Method 312B" means American Public Health Association Method 312B for testing aqueous solutions for hexavalent chromium. The method is presented in *Standard Methods of Examination of Water and Wastewater, Sixteenth Edition,* or most recent edition, published by the American Public Health Association.

(ii) When two consecutive required tests each demonstrate a hexavalent chromium concentration less than 0.15 milligrams of hexavalent chromium per liter of circulating water, further testing will not be required. The Air Pollution Control Officer may, for good cause, require that such testing be resumed.

(5) Recordkeeping: Any person subject to Subsections (d)(1), (d)(2) and (d)(3) of this rule shall maintain records for two years of the results of all required tests of circulating water, the trade name and address of the manufacturer of, and the chemical names of each water treatment additive used. These records shall be provided immediately to the District upon request.

(e) **COMPLIANCE SCHEDULE**

(1) Any person subject to Subsections (d)(1) and (d)(2) of this rule shall on or before (*Date of Adoption + 90 days*), submit a compliance plan containing the following information:

(i) The facility address and the specific location of each cooling tower at the facility;

(ii) The name, address and phone number of the facility owner and operator;

(iii) What portions of each cooling tower, if any, are constructed of wood;

(iv) A statement specifying whether or not the cooling tower uses hexavalent chromium-containing compounds; and

(v) A statement specifying how compliance with this rule will be achieved.

(2) On or before (*Date of Adoption + 180 days*) any person subject to Subsection

(d)(1) shall demonstrate compliance with the requirements of Subsection (d)(1) of this rule to the satisfaction of the Air Pollution Control Officer.

(3) On or before (*Date of Adoption + 12 months*) any person subject to Subsection (d)(2) shall demonstrate compliance with the requirements of Subsection (d)(2)(vi) of this rule to the satisfaction of the Air Pollution Control Officer.

2. Proposed addition of Section (p) is added to Rule 40 to read as follows:

RULE 40. PERMIT AND OTHER FEES

(p) **COOLING TOWER FEES**

The owner or operator of any stationary source for which a plan is required pursuant to Rule 1202 of the Rules and Regulations of the Air Pollution Control District shall pay to the District a fee of $85 for the evaluation of each plan.

The fees required by this rule shall be due at the time the plan is received. If the appropriate fee is not paid within 60 days of the due date, a penalty fee equal to 30 percent of the applicable fee shall be added to the plan review fee. An additional penalty of 10 percent of the applicable fee shall be added for each subsequent calendar month, or portion thereof.

Whenever the Air Pollution Control Officer finds that it is necessary for the Air Pollution Control District to collect a sample(s) of the cooling tower circulating water for off-site analysis, the cost of analysis shall be paid by the source. The cost shall be equal to the cost determined by using the labor rates specified in Schedules 94 and the actual cost of collection and analysis of the sample(s).