RULE 1202. HEXAVALENT CHROMIUM - COOLING TOWERS

(Adopted 5/28/91; Rev. Effective 7/25/95)

(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** [Rev. Effective 7/25/95]

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

- (1) "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.
- (2) "New Cooling Tower Equipment" means any cooling tower equipment installed after May 28, 1991.

(d) **STANDARDS** [Rev. Effective 7/25/95]

- (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 hexavalent chromium concentration within six months after May 28, 1991. Except as specified in Subsections (d)(4)(ii), (d)(4)(iii) or (d)(4)(iv), 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) Except as specified in Subsection (d)(4)(ii), circulating water is tested to determine the hexavalent chromium concentration every month;
- (iv) Except as specified in Subsection (d)(4)(ii), 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 May 28, 1992, 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) Circulating water is tested to determine the hexavalent chromium concentration upon start-up of the cooling tower or the owner certifies in writing to the District that the cooling tower is a new cooling tower and chromate additives have never been used, and maintains a copy of this certification at the site where the cooling tower is located; and
 - (ii) The District is notified in writing at least 15 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, or

- (iii) If hexavalent chromium-containing additives have not been used in the cooling tower for at least one-year prior to the compliance date and the required test demonstrates a hexavalent chromium concentration less than 0.15 milligrams of hexavalent chromium per liter of circulating water, further testing will be not be required. The Air Pollution Control Officer may, for good cause, require that such testing be resumed, or
- (iv) If hexavalent chromium-containing additives have never been used in the cooling tower and the required test demonstrates 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) or (d)(2) 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 to the District upon request.

(e) COMPLIANCE SCHEDULE

- (1) Any person subject to Subsections (d)(1) or (d)(2) of this rule shall on or before August 28, 1991, 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 November 28, 1991, 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 May 28, 1992, 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.