California Air Resources Board Regulation for Chromate Treated Cooling Towers

(a) **Definitions.**

In this regulation, hexavalent chromium and chromate are substances identified as toxic air contaminants by the Air Resources Board. You, yours, I and my mean the person who owns or operates, or who plans to build, own or operate a cooling tower. The district is the local air pollution control district or air quality management district. A cooling tower is a device which evaporates circulating water to remove heat from a process, a building, or refrigerator, and puts the heat into the ambient air. Must means a provision is mandatory, and may means a provision is permissive.

(b) Who must comply with this regulation?

Any person who owns or operates, or who plans to build, or own, or operate, a cooling tower must comply with this regulation.

(c) What must I do to comply with this regulation?

To comply with this regulation, you must:

notify the district in writing about your cooling tower,

and

not add any hexavalent chromium-containing compounds to the cooling tower circulating water.

and

keep the hexavalent chromium concentration in the cooling tower circulating water less than 0.15 milligrams hexavalent chromium per liter of circulating water,

and

test the circulating water to determine the concentration of hexavalent chromium every six months,

and

keep the results of all require tests of circulating water for two years, and give them to the district when asked.

(d) What information must I send the district?

Within 90 days after the effective date of this regulation, you must write and tell the district the following:

that you own or operate a cooling tower,

and

where the cooling tower is located, and

who is the owner or operator of cooling tower,

and

whether or not you use hexavalent chromium in the cooling tower,

and

if you are using hexavalent chromium, when you plan to stop.

(e) When must I comply with the hexavalent chromium limits?

You must stop adding hexavalent chromium-containing compounds to the circulating water in you cooling tower and meet the 0.15 milligrams per liter hexavalent chromium concentration limit no later that 180 days after the effective date of the regulation. This is the compliance date for the regulation.

(f) For how long do I have to test the circulating water?

If, after the effective date of this regulation, 2 consecutive required tests showing concentrations of hexavalent chromium less than 0.15 milligrams of hexavalent chromium per liter of circulating water, then the testing requirement is ended. All other requirements remain the same. The district may, however, require you to resume testing the circulating water at any time if the district has information that the circulating water may contain hexavalent chromium.

(g) How do I test the circulating water for hexavalent chromium?

You must test the circulating water to determine hexavalent chromium concentrations using American Public Health Association Method 312B, or an equivalent method approved by the district. You will find Method 312B in a book called Standard Methods for the Examination of Water and Wastewater, Sixteenth Edition, published by the American Public Health Association, and available at libraries and bookstores nationwide.

(h) I use hexavalent chromium in a wooden cooling tower. Even if I stop adding hexavalent chromium on the compliance date, hexavalent chromium from the wood may cause the concentration in the circulating water to exceed 0.15 milligrams per liter for a time after the compliance date. How may I avoid being cited immediately after the compliance date?

You may avoid being cited for violations of the 0.15 milligrams per liter hexavalent chromium concentration limit for up to six months after the compliance date. In order to not be cited during the transition period, you must:

comply with all other requirements of this regulation,

and

notify the district in writing that your cooling tower has wooden components that are exposed to the circulating water, and that you plan to take advantage of this section,

and

test the circulating water to determine the concentration of hexavalent chromium monthly,

and

show a decrease in hexavalent chromium concentrations in the circulating water each month.

and

keep the results of the tests of circulating water for two years and give them to the district when asked,

and

the hexavalent chromium concentration in the circulating water must no exceed 8 milligrams hexavalent chromium per liter of circulating water.

(i) I am planning to build a cooling tower after the effective date of this regulation. Do I need to notify the district?

Yes, no later than 90 days before you begin to operate the cooling tower, you must write and tell the district the following:

who is the owner and operator of the cooling tower,

and

where the cooling tower will be located,

and

when you plan to start operation.

(j) I switched to non-chromate treatments before this regulation became effective, do I have to meet the same requirements?

If you have not used hexavalent chromium in your cooling tower for at least one year immediately before the compliance date, or if your cooling tower has never used hexavalent chromium, and you can demonstrate this to the district, then the district may waive the testing requirement. Such demonstration may be made by written certification signed by a company officer, that hexavalent chromium compounds have not been used within the year immediately before the compliance date. The district may, however, require you to test the circulating water at any time, if the district has information that the circulating water may contain hexavalent chromium.