

**WEST BASIN MUNICIPAL WATER DISTRICT**

**OCTOBER 4, 2001 – Water Resources**

McDonald, Little

**OCTOBER 22, 2001 – Board Meeting**

Prepared by: Cheryl Ross

Submitted by: Richard Nagel

Approved by: Darryl G. Miller

INFORMATION CALENDAR

WATER QUALITY UPDATE - HEXAVALENT CHROMIUM

SUMMARY:

Amidst conflicting science and public and political pressure for official action, the Department of Health Services (DHS) and CalEPA announced plans in March 2001 to address state regulation of hexavalent chromium ("chrome 6") in drinking water. The process will begin with the development of a new, scientifically sound Public Health Goal (PHG) by spring of 2003. OEHHA first proposed a chrome 6 PHG of 0.2 µg/l in 1998, but was never adopted due to insufficient scientific support. The new PHG and additional health affects studies, either underway or pending startup, will be used as the basis of the first chrome 6 drinking water standard in the country.

Concurrent with the March announcement, CalEPA established an independent blue ribbon panel from the University of California to review the existing controversial health effects studies linking ingested chrome 6 and cancer. Although demonstrated to be a human carcinogen when inhaled, there is some disagreement on chrome 6's carcinogenicity when ingested. The panel published their findings last month. Their review of existing epidemiological and animal data showed that there is no scientific basis for the carcinogenicity of ingested chrome 6. The report suggests that the current state Maximum Contaminant Level (MCL) for total chromium of 50 micrograms per liter (µg/l) is protective of public health based on current information. This is twice as stringent as the federal MCL of 100 µg/l. The UC study also confirmed water community assertions that the proposed 1998 PHG was based on OEHHA's flawed interpretation of data from a single, 30-year old rat study.

The panel also concluded that additional chrome 6 occurrence information in drinking water is needed statewide, along with validation of sampling and EPA testing procedures.

Statewide Occurrence: The Department of Health Services (DHS) required public water system testing statewide as of 2001 in order to develop baseline data for regulatory purposes. The results from over 1,500 sources tested so far are as follows:

- |                        |             |
|------------------------|-------------|
| • Not detected         | 626 sources |
| • 1-10 µg/l            | 747         |
| • 11-30 µg/l           | 117         |
| • 31-50 µg/l           | 11          |
| • greater than 50 µg/l | 1           |

Occurrence in West Basin Wells: All active West Basin Wells in the Title 22 monitoring Program have been tested at least once this year as required by DHS for either chrome 6 or a specially-approved total chromium screen that systems could substitute as an economical surrogate. Both tests have the capability of detecting down to 1µg/l. No chromium of either type was detected. A second round of mandated chromium testing will take place the last quarter of 2001.

Occurrence in MWD Water: MWD source waters and treatment plant effluents were tested routinely since 1985. Only 4 out 398 samples showed chrome 6 at very low levels (2-3 µg/l). MWD continues routine monitoring in compliance with current state regulations.

Impact: No current impact on West Basin agencies. There have been no chrome 6 detections in the service area since state-mandated testing began earlier this year.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

This item was reviewed by the Water Resources Committee on October 4, 2001 and agendaized to the October 22, 2001 Board meeting as information.

RECOMMENDED MOTION:

This item is for information only.