AGENDA NO.____

WEST BASIN MUNICIPAL WATER DISTRICT **OCTOBER 23, 2000**

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INFORMATION CALENDAR

WATER QUALITY UPDATE – HEXAVALENT CHROMIUM

SUMMARY:

Recently, Hexavalent Chromium VI in drinking water has been in the spotlight by local and state government officials and highlighted in the print media. Below is a summary of the relevant issues.

- Chromium VI is an inorganic chemical used in electroplating, wood treatment, and cooling tower treatment for corrosion control.
- Chromium VI can enter drinking water supplies from industry discharges, leaching of hazardous wastes into the soil, and erosion of natural deposits.

Four main reasons this constituent has become a "hot water quality topic":

1. San Fernando Valley groundwater was discovered to contain elevated Chromium VI levels in isolated areas (1998).
2. The Office of Environmental Health Hazard Assessment set a new Public Health Goal of 2.5 parts per billion (ppb) (2000) – the current drinking water standard is for a total chromium of 50 ppb.
3. The release of the Erin Brockovich movie and associated hyperbole's (2000).
4. Recent infusion of articles in the Los Angeles Times.

There are two forms of chromium that can be present in drinking water and that make up total chromium:

- Chromium III that is an essential nutrient in our daily diet, and
- Chromium VI that is a type of health concern.

Presently, the Environmental Protection Agency (EPA) and the State Department of Health Services (DHS) regulate drinking water quality for only total chromium.

- EPA set a standard of total chromium of 100 ppb (1991).
- State DHS set a standard for total chromium of 50 ppb (1994).
- The Office of Environmental Health Hazard Assessment set a Public Health Goal of 2.5 ppb (1999).

Historically, water agencies have only tested their drinking water supplies for total chromium. With the current state standard of 50 ppb for total chromium, the vast majority of agencies have met the existing drinking water standard. That could change if there is a new, low-level, Chromium VI standard.

West Basin and Central Basin have offered voluntary Chromium VI screening through its Cooperative Basin-Wide Title 22 Groundwater Quality Monitoring Program. Of the 32 participating agencies six have tested their wells. To date, preliminary results indicate that 20 of 22 wells were "non-detect," one South Gate well contained 50-64 ppb (and has been taken out of service), and one Park Water Company well tested at 1.4 ppb.

AGENCY	WELLS TESTED	DETECTED CHROMIUM VI
South Gate	2	1 (50-64ppb)
Cerritos	3	0
Torrance	2	0
Walnut Park	2	0
Park Water	11	1 (1.4 ppb)
Whittier	2	0
Total	**22**	**2**

Beginning in 2001, DHS will require agencies to specifically test Chromium VI. In addition, the governor has signed legislative initiatives to speed up DHS' review of the current drinking water standard. DHS estimates approximately two years to collect statewide Chromium VI data, review available treatment technology and conduct a cost of compliance (cots/benefit) analysis. To our knowledge, California is the only state addressing the Chromium VI issue.

Metropolitan Water District of Southern California has tested for Chromium VI on two occasions and has detected between 0.01 ppb and 0.18 ppb.

Finally, the scientific health data used to calculate the Chromium VI cancer risk in drinking water is extremely limited with substantially different views and interpretation. The scientific community concurs that Chromium VI is a carcinogen by inhalation, but does not concur there is conclusive evidence for drinking water.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

Not required.

COMMITTEE STATUS:

This item was reviewed at the Water Resources Committee meeting on October 3, 2000.

RECOMMENDED MOTION:

This item is for information only.