

**REGULAR MEETING OF THE GROUNDWATER QUALITY COMMITTEE
OF THE BOARD OF DIRECTORS
WATER REPLENISHMENT DISTRICT OF SOUTHERN CALIFORNIA
12621 E. 166th Street (Corner, Bloomfield & 166th), Cerritos, California
2:30 P.M., MONDAY, AUGUST 9, 2004**

AGENDA

EACH ITEM ON THE AGENDA, NO MATTER HOW DESCRIBED, SHALL BE DEEMED TO INCLUDE ANY APPROPRIATE MOTION, WHETHER TO ADOPT A MINUTE MOTION, RESOLUTION, PAYMENT OF ANY BILL, APPROVAL OF ANY MATTER OR ACTION, OR ANY OTHER ACTION. ITEMS LISTED AS "FOR INFORMATION" MAY ALSO BE THE SUBJECT OF AN "ACTION" TAKEN BY THE BOARD OR A COMMITTEE AT THE SAME MEETING.

- I. DETERMINATION OF A QUORUM**
- II. PUBLIC COMMENT**
- III. MINUTES OF THE REGULAR GROUNDWATER QUALITY COMMITTEE MEETING OF JULY 12, 2004**
Staff Recommendation: That the Committee approve the minutes as submitted.
- IV. REQUEST FROM CBMWD FOR EXTENSION OF NON-CONSUMPTIVE WATER USE PERMIT**
Staff Recommendation: That the Committee recommend that the Board extend the non-consumptive use permit to Central Basin Municipal Water District for a period of 6 months.
- V. GROUNDWATER QUALITY – ACTION LEVELS UPDATE**
Staff Recommendation: For information.
- VI. GROUNDWATER CONTAMINATION UPDATE**
Staff Recommendation: For information.
- VII. WRD DESALTER UPDATE**
Staff Recommendation: For information.
- VIII. MEMBERS' PRIVILEGE – DIRECTORS REPORTS, INQUIRIES, AND DIRECTIONS TO STAFF**
- IX. ADJOURNMENT**

Agenda posted by Abigail C. Andom, Deputy Secretary, August 4, 2004.

MINUTES OF JULY 12, 2004
A REGULAR MEETING OF THE GROUNDWATER QUALITY COMMITTEE
OF THE BOARD OF DIRECTORS
WATER REPLENISHMENT DISTRICT OF SOUTHERN CALIFORNIA

A regular meeting of the Groundwater Clean-up Committee of the Board of Directors of the Water Replenishment District of Southern California was held on July 12, 2004, at 1:35 p.m., at the District Office, 12621 E. 166th Street, Cerritos, California. Chairperson Norm Ryan called the meeting to order and presided thereover. Deputy Secretary Abigail C. Andom recorded the minutes.

I. DETERMINATION OF A QUORUM

Committee: Directors Norm Ryan and Albert Robles

Staff: Mario Garcia, Mary Sellers, Nancy Matsumoto,
Hoover Ng, Charlene King, Paul Fu

II. PUBLIC COMMENT

None.

III. MINUTES OF THE REGULAR GROUNDWATER CLEAN-UP COMMITTEE MEETING OF JUNE 7, 2004

The minutes were approved as submitted.

IV. NORWALK TANK REPLENISHMENT ASSESSMENT EXEMPTION

Assistant General Manager/Chief Engineer Mario Garcia stated that the District periodically receives exemption requests to the Replenishment Assessment (RA) for groundwater treatment programs that remedy groundwater contamination and do not put the treated water to beneficial use. Mr. Garcia explained that a request was received from the Defense Energy Support Center and Kinder Morgan Energy Partners (Norwalk Tank Farm). The firms are conducting cleanup operations consisting of soil vapor extraction by extraction wells and also groundwater production through shallow wells. The extracted groundwater is treated and discharged to the storm sewer.

Mr. Garcia stated that the requested exemption is for 10 years, not to exceed 150 acre feet per year. Discussion followed on the length of time for the exemption. The Committee recommended that the Board adopt Resolution No. 04-XXX granting an exemption from the replenishment assessment to Defense Energy Support Center and Kinder Morgan Energy Partners for a period of five years with no assignment rights.

V. WHITTIER NARROWS OPERABLE UNIT UPDATE

Senior Hydrogeologist Nancy Matsumoto stated that the Whittier Narrows Operable Unit (WNOU) has not been operable since October 2003. The U.S. Environmental Protection Agency (EPA) and the City of Whittier are continuing with discussions regarding arrangements for Whittier to take over operations of the WNOU. Ms. Matsumoto noted that the EPA and Whittier anticipate completing negotiations by the end of summer 2004.

VI. GROUNDWATER QUALITY – PERCHLORATE UPDATE

Senior Engineer Hoover Ng gave an update on perchlorate, a component of solid propellant in rockets, missiles, explosives, and fireworks, and which is also used in fertilizers. Mr. Ng stated that perchlorate has been found in numerous drinking water sources, including imported Colorado River water from the Metropolitan Water District of Southern California. Perchlorate can inhibit the uptake of iodide by the thyroid gland, which leads to impairment of metabolism, proper development of young children, and creation of tumors in the thyroid.

Mr. Ng noted that in March 2004 the California Office of Environmental Health Hazard Assessment (OEHHA) established a Public Health Goal (PHG) for perchlorate at 6 ppb. Concurrently, the State Department of Health Services (DHS) established an action level of 6 ppb for perchlorate. There is no federal standard.

Two studies were presented that demonstrated the divergence of information and range of parameters to be considered in setting drinking water standards. One study concluded that most people would not have any health effects at 100 ppb, which is over 15 times the current action level. Another study found perchlorate in milk at about 1 ppb, and most likely originated from the water used for irrigating the feed of the dairy cows.

VII. SAFE DRINKING WATER PROGRAM UPDATE

Assistant Engineer Charlene King provided an update to the Safe Drinking Water Program. There are four projects in the design and/or construction phase: construction has been completed at the Norwalk Well 8 Project and the City of Norwalk is waiting final approval from the California Department of Health Services to place the system on-line; the public bid opening for the Southern California Water Company's (SCWC) Converse Well was held June 24, 2004 and four bids were received. The contract will be awarded to Pacific Hydrotech; the public bid opening for the City of Commerce's Well 4L was held June 23, 2004 with five bids received. The project may be put out to bid again, and will be referred to the Administrative Committee for policy review; and the bid opening for SCWC's Imperial Wells 1,2,& 3, Project was held June 8, 1004. Only one

bid was received from Pacific Hydrotech. SCWC and WRD are currently reviewing the bid for compliance.

VIII. GROUNDWATER CONTAMINATION UPDATE

Senior Hydrogeologist Nancy Matsumoto stated that the final draft Memorandum of Understanding (MOU) between the WRD and the EPA, USGS, RWQCB, DTSC was distributed at the May 27, 2004 meeting for review. This MOU will formalize guidelines for these agencies to work cooperatively in sharing data and managing site monitoring/cleanup efforts. Ms. Matsumoto stated that it is anticipated that the MOU will be finalized at the September 16 meeting.

As reported in previous updates, WRD staff began conducting weekly visits to the DTSC offices, to review case files on their 12 highest-priority groundwater contamination sites (as identified by DTSC personnel).

Staff presented case files on Montrose Chemical Corporation located in Torrance and Stauffer Chemical located in Carson.

IX. WRD DESALTER UPDATE

Senior Engineer Paul Fu stated that the Goldsworthy Desalter delivered approximately 191 acre-feet of drinking water to the City of Torrance in the month of June 2004. The chloride level in the well water remained within 1,050 to 1,120 mg/L.

Dr. Fu also added that Carollo Engineers had invited WRD to participate in a research proposal to the American Water Works Association Research Foundation (AwwaRF) for a research project focusing on brine minimization for desalination facilities. He explained that the project goal is evaluation and development of technologies for maximization of system recovery and minimization of concentrate volume. Dr. Fu stated that, as a participating utility, the District is asked to contribute approximately 50 hours of staff time over the entire duration (estimated at 2 years) of the project as in-kind services. According to Carollo Engineers, other water utilities such as Metropolitan Water District of Southern California, Irvine Ranch Water District, and Santa Ana Watershed Project Authority have verbally committed to participate in this proposal.

The Committee recommended participation in the development of this new technology which they felt was good exposure for the District.

X. ADJOURNMENT

There being no more business to come before the Committee, the meeting was adjourned at 2:28 p.m.

Chairperson

ATTEST:

Director



MEMORANDUM

ITEM NO. IV

Prepared by: Mary Sellers

Reviewed by: Mario Garcia

DATE: AUGUST 9, 2004

TO: GROUNDWATER QUALITY COMMITTEE

FROM: ROBB WHITAKER, GENERAL MANAGER

SUBJECT: REQUEST FROM CBMWD FOR EXTENSION OF NON-CONSUMPTIVE WATER USE PERMIT

The Central Basin Water Quality Protection Plan (WQPP) is a project managed by CBMWD and is designed to intercept a groundwater contamination plume passing through the Whittier Narrows and into the northeast portion of the Central Groundwater Basin. This project utilizes two production wells to extract groundwater for treatment and delivery for potable purposes.

In July 2002, CBMWD applied for a non-consumptive water use permit partnering with the Southeast Water Coalition (SEWC) as a consortium of parties to the Judgment. In August 2002, the WRD Board of Directors granted the permit request for a duration of 6 months and a total flow of 3,250 acre-feet. On July 2, 2003, WRD authorized an extension of the permit for a period of one year while the project completes its start-up phase.

CBMWD completed construction of the project earlier this year and has been pumping and treating groundwater since March 11, 2004. The total amount of water pumped by the WQPP through July 3, 2004 is 117.6 acre-feet. This treated water has been returned to the groundwater basin via discharge to the San Gabriel River and the Montebello Forebay.

Due to delays in obtaining the final Drinking Water Supply Permit from the State Department of Health Services, CBMWD has not yet been able to deliver this water to the participating retail agencies as planned. CBMWD is therefore requesting that the non-consumptive water use permit be extended another six months.

FISCAL IMPACT

No net financial impact.

STAFF RECOMMENDATION

That the Committee recommend that the Board extend the non-consumptive use permit to Central Basin Municipal Water District for a period of 6 months.



MEMORANDUM

ITEM NO. V

Prepared by: Hoover Ng

Reviewed by: Ted Johnson

DATE: AUGUST 9, 2004
TO: GROUNDWATER QUALITY COMMITTEE
FROM: ROBB WHITAKER, GENERAL MANAGER
SUBJECT: GROUNDWATER QUALITY – ACTION LEVELS UPDATE

SUMMARY

The State Department of Health Services currently creates action levels for new contaminants that they consider to be a potential threat to public health and may be found in drinking water supplies. They are non enforceable standards, and must be subjected to further evaluations regarding health effects and technical and economic feasibility before they become enforceable standards, also known as Maximum Contaminant Levels (MCLs).

The following is from their website,

<http://www.dhs.ca.gov/ps/ddwem/chemicals/AL/actionlevels.htm>

Local Government Notification (Requirement for drinking water wells): Health & Safety Code §116455 requires a drinking water system to notify the governing body of the local agency in which users of the drinking water reside (*i.e.*, city council and/or county board of supervisors) when a contaminant in excess of an AL or an MCL is discovered in drinking water well, or when the well is closed due to the contaminant's presence. This notification is to occur within 30 days of the discovery or closure.

Consumer Notice (Recommendation): If a contaminant is over its AL in drinking water that is provided to consumers, DHS recommends that the utility inform its customers and consumers about the presence of the contaminant, and its potential for adverse health effects at high levels of exposure. If the utility decides to provide consumer notice, it may want to consider using its annual [Consumer Confidence Report](#), a separate mailing, or other method.

Removal of Source from Service (Recommendation): DHS recommends that the drinking water system take the source out of service if a contaminant is present at more than:

- 10 times the AL, if the AL is based on noncancer endpoints. A level greater than 10 times the AL reduces the margin of safety provided by the AL.
- 100 times the AL, if the AL is based on cancer risk and at the 10^{-6} risk level. A level 100 times the AL corresponds to a theoretical lifetime risk of up to one excess case of cancer in 10,000 people, the upper value of the 10^{-6} to 10^{-4} risk range typically allowed by regulatory agencies.

AB 2528 by Assemblymember Alan Lowenthal proposes to clarify the use of action levels. It was introduced on February 20, 2004 and has been amended several times. A key provision of the bill replaces the nomenclature “action level” with two newly created terms, “notification level” and “response level.”

Staff will provide more information regarding the amendments and schedule for adoption of this bill.

FISCAL IMPACT

None.

STAFF RECOMMENDATION

For information.

BILL NUMBER: AB 2528 AMENDED
BILL TEXT

AMENDED IN SENATE JUNE 14, 2004
AMENDED IN SENATE MAY 27, 2004
AMENDED IN ASSEMBLY APRIL 12, 2004

INTRODUCED BY Assembly Member Lowenthal
(Coauthors: Assembly Members Daucher and Maddox)

FEBRUARY 20, 2004

An act to repeal and add Section 116455 of the Health and Safety Code, relating to public water systems.

LEGISLATIVE COUNSEL'S DIGEST

AB 2528, as amended, Lowenthal. Public water systems.

Existing law, the California Safe Drinking Water Act, requires the State Department of Health Services to administer provisions relating to the regulation of drinking water and public water systems and, among other things, to adopt primary drinking water standards for contaminants in drinking water and to monitor regulated and unregulated contaminants. Existing law requires every public water system serving more than 10,000 service connections ~~and~~ that ~~detect~~ detects one or more contaminants in drinking water that exceed the public health goal to prepare a brief written report.

Existing law requires the person operating a public water system to, within 30 days of the closure of a well or of discovery of a contaminant exceeding the maximum containment level or action level, as defined, in a well that is used for drinking water, notify the governing body of the local agency in which users of drinking water reside.

This bill would delete this requirement and would, instead, require the operator of wholesale or retail public water systems, as defined, to provide notice relating to contamination of any drinking water that exceeds the maximum containment level, a response level, or a notification level, as defined, including, but not limited to, notification to the Public Utilities Commission if the public water system is a regulated public utility.

Vote: majority. Appropriation: no. Fiscal committee: yes.
State-mandated local program: no.

THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

SECTION 1. Section 116455 of the Health and Safety Code is repealed.

SEC. 2. Section 116455 is added to the Health and Safety Code, to read:

116455. (a) When drinking water delivered by a public water system for human consumption is first discovered to contain a contaminant in excess of a maximum contaminant level, a response level, or a notification level established by the department, then the following shall occur within 30 days of the discovery:

(1) If the public water system is a wholesale water system, then the person operating the wholesale water system shall notify the wholesale water system's governing body and the water systems that are directly supplied with that drinking water. If the wholesale

water system is a water company regulated by the California Public Utilities Commission, then the wholesale water system shall also notify the commission. The commission, in coordination with the department, in exercise of its general and specific powers to ensure the health, safety, and availability of drinking water served by the utilities subject to its jurisdiction, may order further action that, in its discretion, is necessary to ensure a water supply that is wholesome, potable, and in no way harmful or dangerous to public health.

(2) If the public water system is a retail water system, then the person operating the retail water system shall notify the retail water system's governing body and the governing body of any local agency ~~in which users of the drinking water reside~~ whose jurisdiction includes areas supplied with drinking water by the retail water system . If the retail water system is a water company regulated by the California Public Utilities Commission, then the retail water system shall also notify the commission. The commission, in coordination with the department, in exercise of its general and specific powers to ensure the health, safety, and availability of drinking water served by the utilities subject to its jurisdiction, may order further action that, in its discretion, is necessary to ensure a water supply that is wholesome, potable, and in no way harmful or dangerous to public health.

(b) The notification required by subdivision (a) shall identify the drinking water sources, its type, the origin, if known, of the contaminant, the maximum contaminant level, response level, or notification level, the concentration of the detected contaminant, and the operational status of the drinking water source.

(c) For purposes of this section, the following terms have the following meanings:

(1) "Drinking water source" means an individual groundwater well, an individual surface water intake, or in the case of water purchased from another water system, the water at the service connection.

(2) "Local agency" means a city or county, or a city and county.

(3) "Notification level" means the concentration level of a contaminant in drinking water delivered for human consumption that the department has determined, based on available scientific information, does not pose a significant health risk but warrants notification pursuant to this section. Notification levels are nonregulatory, health-based advisory levels established by the department for contaminants in drinking water for which maximum contaminant levels have not been established. Notification levels are established as precautionary measures for contaminants that may be considered candidates for establishment of maximum contaminant levels, but have not yet undergone or completed the regulatory standard setting process prescribed for the development of maximum contaminant levels and are not drinking water standards.

(4) "Response level" means the concentration of a contaminant in drinking water delivered for human consumption at which the department recommends that additional steps, beyond notification pursuant to this section, be taken to reduce public exposure to the contaminant. Response levels are established in conjunction with notification levels for contaminants that may be considered candidates for establishment of maximum contaminant levels, but have not yet undergone or completed the regulatory standard setting process prescribed for the development of maximum contaminant levels and are not drinking water standards.

(5) "Retail water system" means a public water system that supplies water directly to the end user.

(6) "Wholesale water system" means a public water system that supplies water to other public water systems for resale.



MEMORANDUM

ITEM NO. VI

Prepared by: Nancy Matsumoto

Reviewed by: Ted Johnson

DATE: AUGUST 9, 2004

TO: GROUNDWATER QUALITY COMMITTEE

FROM: ROBB WHITAKER, GENERAL MANAGER

SUBJECT: GROUNDWATER CONTAMINATION UPDATE

SUMMARY

As reported in previous updates, several major cleanup investigations are currently in progress at various sites in Santa Fe Springs. A Final Draft Memorandum of Understanding (MOU) was distributed at the group's May 27th meeting for review and signature between the stakeholders (WRD, EPA, USGS, RWQCB, DTSC, City of Santa Fe Springs). This MOU will formalize guidelines for these agencies to work cooperatively in sharing data and managing site monitoring/cleanup efforts. The MOU is anticipated to be finalized at the next group meeting, scheduled for September 16, 2004.

As reported previously, WRD has initiated a District-wide investigation to identify and prioritize WRD's level of effort in assisting regulatory agencies in overseeing monitoring and remediation of high-priority groundwater contamination sites across the District. WRD staff conducted weekly visits to the DTSC offices, to review case files on their 12 highest-priority groundwater contamination sites (as identified by DTSC personnel). Staff generated concise summaries of these case files. Other case files from the RWQCB and EPA are being similarly reviewed and summarized. Staff will continue to provide monthly updates on these case file reviews to the Committee as this effort proceeds.

Summaries of the last two RWQCB case files reviewed are attached as reference, and will be discussed at the Committee meeting.

FISCAL IMPACT

None.

STAFF RECOMMENDATION

For information.

Risk To Potable Supply Aquifers/LOE Needed To Properly Track This Project (High, Medium, or Low):_____

Ashland Chemical
Key Facts At A Glance
Last Update: 7/28/04

- Location:** 10505 South Painter Avenue
Santa Fe Springs, CA 90670
Central Basin
Nearest active production well located ~1.03 miles south of site
- Description:** Ashland Chemical Company operated a chemical blending, packaging and distribution center at this 10-acre site. The facility utilized 46 USTs and 61 ASTs. Soil and groundwater beneath the site were impacted by historic releases of solvent chemicals. Ashland Chemical has performed soil and groundwater investigation and remediation activities at the site since 1984. The RWQCB and the City of Santa Fe Springs Fire Department have determined that no further soil remediation is required. However, groundwater remediation will continue until a "No Further Action" determination is made for groundwater. Following the "No Further Action" determination for site soils, Ashland Chemical sold the property to Painter Business Park, LLC. The property is currently being developed into a business park. Ashland Chemical will continue to be responsible for site groundwater remediation and monitoring.
- Chemicals Detected:** VOCs formerly in soil and still remaining in groundwater, such as:
Benzene
Toluene
Ethylbenzene
Xylenes
1,2-dichloroethene (DCE)
Trichloroethene (TCE)
Vinyl chloride
- Extent:** Soil contamination was remediated via removal and SVE
The Bellflower Aquiclude is the uppermost geologic unit at the site, varying in thickness from 5 feet in the southern portion of the site to 30 feet in the northern portion of the site, and overlying the merged Artesia/Gage Aquifers
The merged Artesia/Gage Aquifers occur from approximately 30 feet to 90 feet bgs beneath the property, and contain the "shallow groundwater" at the site (first encountered at approximately 55 feet to 60 feet bgs)
Shallow groundwater at the site shows VOC contamination. For example, according to February 2002 Groundwater Monitoring Report, benzene = 120 ug/L max, ethylbenzene = 7,000 ug/L max, xylenes = 24,600 ug/L max, 1,2-DCE = 12,000 ug/L max
There is also regional VOC contamination in shallow groundwater. For example, groundwater southwest (downgradient) of the facility is contaminated with VOCs such as: vinyl chloride at 690 ug/L, benzene at 160 ug/L, and TCE at 760 ug/L. The vinyl chloride in the off-site downgradient wells may be the result of degradation products from the historical on-site releases at the facility
An aquiclude approximately 30 feet thick underlies the Artesia/Gage Aquifers and separates them from the Hollydale Aquifer, which contains "deep groundwater" at the site
VOC contamination also appears to be in deep groundwater, based on historical water quality data from site groundwater monitoring reports
- Monitoring:** As of April 2004, ~19 monitoring wells in and around site, screened only in shallow groundwater (prior to site Redevelopment as a business park, there were ~33 monitoring wells, screened mostly in shallow groundwater, a few in deep groundwater)
Semiannual monitoring of water levels and VOC concentrations is performed
- Remediation:** Removal actions were conducted during 1998 through 1999 for all tanks and associated soils that were sources of VOC contamination. These actions were completed by March 1999 under the oversight of the Santa Fe Springs Fire Department. The RWQCB is responsible for oversight of additional corrective action.
On-site soils were extensively remediated. Based upon documented results of confirmatory soil sampling, RWQCB and City of Santa Fe Springs approved "Soil Closure" of the site and required "No Further Action". In 2003, the SVE system was decommissioned. In total over 1,000,000 pounds of VOCs were removed.
A groundwater pump-and-treat system continues to operate to reduce concentrations of VOCs in on-site shallow groundwater. Off-site shallow groundwater VOC concentrations are expected to be reduced as a result of this system. Also, off-site VOC concentrations are controlled downgradient due to the groundwater extraction and treatment system at The Powerine Refinery, located approximately ¼ mile southwest (downgradient) of the site.
- Procedures:** Ashland Chemical retains environmental consultant (URS Corporation) to manage its remediation and groundwater monitoring activities.
- Stakeholders:** Ashland Chemical Company, RWQCB

Risk To Potable Supply Aquifers/LOE Needed To Properly Track This Project (High, Medium, or Low): _____

Honeywell Sepulveda Site
Key Facts At A Glance
Last Update: 6/30/04

Location:	9581 Sepulveda Boulevard Los Angeles, CA 90045 West Basin Nearest active production well located ~0.25 mile southeast of site
Description:	The Honeywell Sepulveda site, located immediately east of the Los Angeles International Airport, was used for various manufacturing operations by Garrett AirResearch from 1941 to 1987. The facility was subsequently decommissioned by AlliedSignal. In late 1992, the property was converted into a commercial parking lot, which is currently operated by Park One. The site has been the subject of extensive soil, soil gas, and groundwater investigations, periodic monitoring programs, pilot study testing, and extensive soil remediation
Chemicals Detected:	1,1,1-trichloroethane (1,1,1-TCA), 1,1-dichloroethene (1,1-DCE), trichloroethene (TCE), and 1,4-dioxane in soil and groundwater
Extent:	Soil contamination, still being remediated Groundwater contamination in several discontinuous perched water-bearing zones across site Groundwater contamination in Gage Aquifer (occurs at about +5 to -30 msl, or 100 to 135 feet bgs) Underlying Silverado Aquifer has not been evaluated (occurs at about -50 feet msl, or 155 feet bgs) El Segundo Aquitard reportedly separates Gage Aquifer from Silverado Aquifer beneath the site (~20 feet thick) As part of the Groundwater Remediation Work Plan (see below), it is proposed that three additional groundwater monitoring/extraction wells be installed to better define the lateral and vertical extent of contamination in the Gage Aquifer, and facilitate designing a groundwater remediation system. RWQCB is requiring that the soil borings for these wells be continuously cored to the top of the El Segundo Aquitard, to confirm its presence and the bottom of the Gage Aquifer. RWQCB is also requiring that one additional monitoring well be installed, and that its soil boring be drilled at least 1 foot into the top of the El Segundo Aquitard
Monitoring:	As of First Quarter 1994, ~34 monitoring wells in and around site (~25 in Gage Aquifer, remainder in perched water-bearing zones) Semiannual monitoring of water levels and VOC/1,4-dioxane concentrations is performed
Remediation:	Since 1990, a variety of remedial activities targeting the northwest quadrant vadose zone have occurred at the site. Remediation efforts have included soil excavation, soil vapor extraction, and a pilot program of soil vapor extraction with vacuum enhanced recovery (SVE/VER). A full-scale SVE/VER system has been in operation since 2000, and targets vapor and liquid-phase mass removal from the upper 105 feet of soil. On June 29, 2004, the RWQCB approved a Groundwater Remediation Work Plan focused on treating high levels of 1,4-dioxane in groundwater originating from the site. Two methods of remediation will be compared: hydrogen peroxide with ultraviolet light, and hydrogen peroxide with ozone.
Procedures:	Honeywell retains environmental consultants (GeoSyntec, Montgomery Watson Harza) to manage its remediation and groundwater monitoring activities.
Stakeholders:	Honeywell International, Inc., RWQCB



MEMORANDUM

ITEM NO. VII

Prepared by: Paul Fu

Reviewed by: Mario Garcia

DATE: AUGUST 9, 2004
TO: GROUNDWATER QUALITY COMMITTEE
FROM: ROBB WHITAKER, GENERAL MANAGER
SUBJECT: WRD DESALTER UPDATE

SUMMARY

The WRD Desalter delivered approximately 205 acre-feet of potable water to the City of Torrance in July 2004. During the month, the chloride level in the well water remained within 1,040 to 1,140 mg/L with an average concentration of 1089 mg/L. The table below summarizes the monthly water deliveries to Torrance and chloride concentrations for Fiscal Year 2003-04. The chloride concentrations have been amazingly consistent and remained within a narrow range throughout the year. Total annual quantity of water delivered to City of Torrance is approximately 2,447 acre-feet. The Desalter was online (i.e., in production) for 92.7 percent of Fiscal Year 2003-04.

WRD DESALTER				
Monthly Water Delivery and Chloride Monitoring for FY 2003-2004				
Month	Year	Qty Delivered to Torrance (AF)	Range of Concentrations (mg/L)	Average Chloride Concentration (mg/L)
JULY	2003	229	1100 - 1200	1122
AUG	2003	231	1100 - 1200	1111
SEP	2003	219	1100 - 1200	1111
OCT	2003	162	1000 - 1200	1083
NOV	2003	210	1100 - 1200	1113
DEC	2003	212	1100 - 1200	1125
JAN	2004	218	1000 - 1200	1100
FEB	2004	187	1120 - 1290	1196
MAR	2004	215	1050 - 1180	1123
APR	2004	187	1090 - 1200	1133
MAY	2004	185	1040 - 1140	1098
JUN	2004	192	1050 - 1120	1079

The desalter recently experienced occasional shutdowns due to low suction pressure at the RO feed pump. A troubleshooting investigation revealed a faulty pressure switch. A replacement switch was ordered, and the faulty unit was taken out of service to eliminate these unnecessary plant shutdowns.

FISCAL IMPACT

None.

STAFF RECOMMENDATION

For information.