

**REGULAR MEETING OF THE GROUNDWATER CLEAN-UP COMMITTEE
OF THE BOARD OF DIRECTORS
WATER REPLENISHMENT DISTRICT OF SOUTHERN CALIFORNIA
12621 E. 166th Street (Corner, Bloomfield & 166th), Cerritos, California
8:00 A.M., TUESDAY, DECEMBER 16, 2003**

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 MEETING OF NOVEMBER 20, 2003**
STAFF RECOMMENDATION: Approve the minutes as submitted.
- IV. CONSIDERATION OF RESOLUTION NO. 03-684 -
ASHLAND CHEMICAL REPLENISHMENT ASSESSMENT EXEMPTION**
STAFF RECOMMENDATION: That the Committee recommend that the Board adopt Resolution 03-684.
- V. SAFE DRINKING WATER PROGRAM UPDATE**
STAFF RECOMMENDATION: For information.
- VI. GROUNDWATER QUALITY ACTION LEVELS**
STAFF RECOMMENDATION: For information.
- VII. ROBERT W. GOLDSWORTHY DESALTER UPDATE**
STAFF RECOMMENDATION: For information.
- VIII. ADJOURNMENT**

MINUTES OF NOVEMBER 20, 2003
A REGULAR MEETING OF THE GROUNDWATER CLEAN-UP 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 November 20, 2003, at 8:15 a.m., at the District Office, 12621 E. 166th Street, Cerritos, California. Chairperson Robert W. Goldsworthy called the meeting to order and presided thereover. Acting Deputy Secretary Abigail C. Andom recorded the minutes.

I. DETERMINATION OF A QUORUM

Committee: Directors Robert Goldsworthy and Albert Robles

Staff: Robb Whitaker, Hoover Ng, Kavous Emami, Paul Fu,
and Ted Johnson

II. PUBLIC COMMENT

None.

III. MINUTES OF THE REGULAR MEETING OF OCTOBER 6, 2003

The minutes were approved as submitted.

IV. AMERICAN WATER WORKS ASSOCIATION RESEARCH FOUNDATION MEMBERSHIP FEES

Senior Engineer Hoover Ng stated that the American Water Works Association Research Foundation (AWWARF) sponsors applied research for all aspects of the drinking water industry including water resources, supply, quality, and distribution. AWWARF is funded through subscriber membership fees, which are typically based on the annual amount of water delivered or served to customers.

WRD paid \$40,000 membership last year. The AWWARF has requested payment for the same amount to continue membership for the period October 2003 to September 2004.

General Manager Robb Whitaker added that the membership fee includes the groundwater portion of supply for the District's purveyors. Imported water suppliers, which includes Central Basin and West Basin Municipal Water Districts and the Metropolitan Water District of Southern California, are also members of AWWARF and provide to pumpers opportunities to obtain access and participate in state-of-the-art research developments in the water industry.

The Committee recommended that the Board renew the District's membership in the AWWARF for \$40,000.

V. TEMPORARY ACCESS AND LICENSE AGREEMENT

Assistant General Manager Kavous Emami stated that the Alamitos Physical Barrier project is a Deep Soil Mixed (DSM) Wall which is an alternative and or a complement to the existing Alamitos Seawater Barrier Project. Psomas and their sub-consultant partners on this project, CH2MHill and GeoPentech, have been retained by WRD to develop the environmental, geotechnical and feasibility evaluation on the demonstration project and the full scale project, which may ultimately result in construction of a two mile long underground DSM Wall. In an effort to complete the geotechnical field investigation for construction of the demonstration wall, WRD staff has met with the Pacific Energy Group, who owns the vacant property along the future DSM Wall alignment and has requested permission for GeoPentech, the geotechnical consultant on this project, to enter their property and conduct the required field investigation for the demonstration project. The Pacific Energy Group has verbally approved the entrance to their property.

In order to formalize the entrance to their property, legal Counsel has drafted a temporary access and license agreement. The Committee recommended that the Board approve execution of the license agreement between WRD and the Pacific Energy Group for entering their property and performing geotechnical investigation for construction of the Demonstration Wall.

VI. GROUNDWATER CONTAMINATION PREVENTION – SANTA FE SPRINGS

Mr. Ng stated that several major cleanup investigations are currently in progress in Santa Fe Springs at various sites. Concern has been raised regarding the potential migration of contaminants off site. Several meetings have been held among the various regulatory agencies and the District. It was agreed that a regional approach to understanding the extent of contamination and potential impacts on drinking water aquifers and replenishment activities should be explored. As a first step, a Memorandum of Understanding (MOU) was drafted and circulated for review on October 23, 2003. It sets forth a basic understanding that each agency will work together cooperatively and that the District will serve as a repository or clearinghouse for the data being collected. No commitments regarding funding are included at this time in this MOU.

Mr. Johnson stated that this effort will provide a more scientific and systematic approach in identifying potential pathways of groundwater contamination.

VII. ROBERT W. GOLDSWORTHY DESALTER UPDATE

Senior Engineer Paul Fu gave an update on the Goldsworthy Desalter. He stated that approximately 162 acre-feet of drinking water was delivered to the City of Torrance in the month of October. The chloride levels remained within 1,000 to 1100 mg/L in October.

Dr. Fu added that the motor bearings of the reverse-osmosis (RO) feed pump and on one of the finished water pumps have been replaced with new bearings. The Desalter was shut down for one week in October to conduct the repair work and the pumps are now functioning normally.

The RO train has experienced a high differential pressure through the Stage 1 unit. To relieve the high differential pressure condition, a reverse flush was performed on the RO train on September 30th. The reverse flush was partially successful; a membrane cleaning with a special cleaning agent will be scheduled to fully correct the problem.

The immersion heater and the control panel for the membrane cleaning system are not functioning. Staff has diagnosed the problems, and the repair work is in progress.

Senior Hydrogeologist Ted Johnson stated that staff is proceeding with the evaluation of drilling a horizontal well as backup to the existing well. Staff is conducting a survey in the contractor community for their ability, experience, and interest to design and build such a well on a performance basis (the well performs or WRD does not pay for it). Discussion followed.

The Committee recommended holding off on the horizontal well but continue discussions with Schlumberger (the only known contractor identified to date who could do the horizontal drilling). Staff was instructed to also evaluate the following options: talk to the City of Torrance regarding water rights, talk to WBMWD regarding the Brewer Desalter, drill another vertical well and put a test hole. The Committee requested staff to provide a matrix of its evaluations.

VIII. GROUNDWATER QUALITY – PERCHLORATE AND ARSENIC UPDATE

Senior Engineer Hoover Ng stated that Governor Arnold Schwarzenegger had issued an executive order that suspends progress in all regulatory items for 180 days so that his office can review them.

Mr. Ng noted that the State Department of Health Services (DHS) is required by law to adopt a new maximum contaminant level (MCL) for perchlorate by January 1, 2004, and also intended to propose an arsenic MCL as well.

IX. ADJOURNMENT

There being no more business to come before the Committee, the meeting was adjourned.

Chairperson

ATTEST:

Director



MEMORANDUM

ITEM NO. IV

Prepared by: Jason Weeks

Reviewed by: Robb Whitaker

DATE: DECEMBER 16, 2003

TO: GROUNDWATER CLEAN-UP COMMITTEE

FROM: ROBB WHITAKER

**SUBJECT: CONSIDERATION OF RESOLUTION NO. 03-684 -
ASHLAND CHEMICAL REPLENISHMENT ASSESSMENT EXEMPTION**

SUMMARY

WRD has the authority to provide exemptions to the Replenishment Assessment (RA) for groundwater treatment programs that remedy groundwater contamination and do not put the treated water to beneficial use. This authority is described in Section 60318 of the California Water Code.

Ashland Chemical, located in Santa Fe Springs in the Central Basin, has been granted such an exemption for more than 10 years, most recently by the WRD Board of Directors in Resolution 96-520. The term of this exemption was five years and has expired. Another resolution by the WRD Board of Directors is required in order to allow Ashland Chemical to continue to extract and treat contaminated groundwater exempt from the RA.

This item was brought up for discussion at previous Groundwater Clean-up Committee meetings. Committee members instructed staff to acquire additional information on the constituents contained in the contaminated groundwater and to evaluate the possibility of putting the water to beneficial use.

District staff most recently reviewed this item at the October Groundwater Clean-Up Committee meeting, in which Staff presented the application submitted by Ashland Chemical, which characterized the contamination. Additionally, staff briefed the Committee on the findings of a meeting held with the City of Santa Fe Springs to identify a potential method to put the water to beneficial use. District staff informed the committee the greatest potential for cost effectively putting the water to beneficial use was to use it as an irrigation source for a nearby park and elementary school. It was the consensus of the Committee that this would not be a prudent use of the water.

FISCAL IMPACT

No net financial impact. Treatment will continue at current levels.

STAFF RECOMMENDATION

That the Committee recommend that the Board adopt Resolution 03-684.

RESOLUTION NO. 03-684

**A RESOLUTION OF THE BOARD OF DIRECTORS OF THE
WATER REPLENISHMENT DISTRICT OF SOUTHERN
CALIFORNIA EXEMPTING CERTAIN GROUNDWATER
EXTRACTIONS BY ASHLAND CHEMICAL COMPANY FROM
ASSESSMENT PURSUANT TO WATER CODE SECTION 60318
UPON CERTAIN CONDITIONS.**

A. Recitals

- i. Ashland Chemical Company (“Applicant”) was granted an exemption from replenishment assessment for a five-year period by Resolution 96-520 under Water Code Section 60318 for its facility at 10505 South Painter Avenue, Santa Fe Springs. It has been found that the groundwater is contaminated with VOC’s including benzene, toluene, 1,2-dichloroethylene, TCE and PCE in excess of the California Department of Health Services’ drinking water action levels. The contamination is also present as free liquid, floating on the surface of the groundwater.
- ii. Applicant is continuing its groundwater clean-up efforts, however, Resolution 96-520 has expired.
- iii. Applicant requested an extension of the exemption from replenishment assessment for its facility at 10505 South Painter Avenue, Santa Fe Springs.
- iv. The Board of Directors has received a staff report supporting the findings hereinafter made and action hereafter taken.

B. Resolution

BE IT RESOLVED by the Board of Directors of the Water Replenishment District of Southern California as follows:

1. It is found and determined:

(a) That there exists a problem of groundwater contamination as set forth in the above recitals.

(b) Subject to the conditions imposed by paragraph 4 below, the quantity of proposed extractions by Applicant over the period of

time as both are set forth in paragraph 3 below will ameliorate said problem of groundwater contamination.

(c) The groundwater to be extracted is unusable and cannot be economically blended for use with other water.

2. The exemption from the replenishment assessment herein granted shall not apply to any quantity of water applied to beneficial surface use.
3. The following groundwater extractions by Applicant are exempt from the replenishment assessment, subject to all terms, conditions and provisions of this Resolution:

Groundwater extracted on the referenced property as a part of the clean-up program, for a period commencing May 26th, 1999 and ending June 30th, 2008, may not exceed a total of 625 acre feet.

4. The said exemption from the replenishment assessment herein granted shall apply only if the following additional terms and conditions are satisfied:
 - i. The groundwater extractions are from the wells now existing on the parcel of property to which the request relates and are in all respects as set forth therein.
 - ii. The Applicant shall file monthly reports with the District on groundwater production as a result of this clean-up program; the accuracy of the report shall be verified by the Central Basin Watermaster and the Applicant shall also file a report annually with the District during the period of exemption setting for this progress to ameliorate said problem of groundwater contamination and stating any changes in conditions from those shown in the original application. The Applicant shall also advise the District within thirty (30) calendar days of any change in conditions that would affect the exemption under this Resolution and Water Code Section 60318.
5. The exemption herein applies only to produce groundwater which is not applied to beneficial use with or without blending. The exemption herein is

also subject to rescission or modification in accordance with Water Code Section 60318.

- 6. The resolution shall not be operative until Applicant acknowledges in writing, received by this District, that it has received a copy of this resolution, referred to this resolution by resolution number, and agreeing to be bound by all of the terms and conditions hereof.

WHEREFORE, THE Board of Directors of the Water Replenishment District of Southern California has adopted this Resolution as of the ____ day of _____, 2004.

WILLARD H. MURRAY, President

ATTEST:

ROBERT W. GOLDSWORTHY, Secretary



MEMORANDUM

ITEM NO. V

Prepared by: Hoover Ng

Reviewed by: Robb Whitaker

DATE: DECEMBER 16, 2003

TO: GROUNDWATER CLEAN-UP COMMITTEE

FROM: ROBB WHITAKER

SUBJECT: SAFE DRINKING WATER PROGRAM UPDATE

SUMMARY

The District is currently managing several projects under the District's Safe Drinking Water Program (SDWP), which provides wellhead treatment facilities to remove contaminants and improve water quality. The following is an update of activities.

There are four projects in the design and/or construction phase.

- 1) The Board authorized awarding the contract for construction of a granular activated carbon system for the Norwalk Well 8 project to Pacific Hydrotech Corporation on April 2, 2003. A Notice of Award was mailed on April 3, 2003; however, the City of Norwalk has requested that the District delay construction until well modifications are complete at the affected well. In addition, DHS has required the City to implement additional monitoring parameters prior to construction of a wellhead treatment system. Once complete, Pacific Hydrotech can begin construction of the treatment system.
- 2) Don Howard Engineers has completed the designs and specifications for the Southern California Water Company Converse well. The Converse project will use the treatment vessels from the Hoffman project and the Southern California Water Company will be the lead agency, procuring all contracts in accordance with WRD's current contract policy. District counsel provided a revised agreement to be finalized between WRD and the Southern California Water Company.
- 3) Don Howard Engineers has completed the designs and specifications for the City of Commerce Well 4L (operated by Cal Water Service) and the Board authorized initiating the bid process. The environmental public review period ended August 29, 2003 with no comments received and the negative declaration was adopted by the Board on November 19, 2003.
- 4) An amendment to the agreement with the Southern California Water Company (SCWC) was executed on September 17, 2003 to incorporate a reimbursement program for the Imperial Wells 1, 2, & 3 project. SCWC will be the lead agency, procuring all contracts in accordance with WRD's current contract policy. WRD will make progress payments upon submittal of invoices by SCWC for an amount not to exceed \$346,500.

The District is currently evaluating new candidates for the Safe Drinking Water Program. Several purveyors have made inquiries. The well data, type of contaminants and affected duration of their wells will be used to prioritize the candidate list.

There are currently ten (11) WRD wellhead treatment facilities in operation. The cities of Huntington Park and Norwalk each have two facilities online. The other facilities are located in the cities of Bell Gardens, Commerce, Signal Hill, South Gate, Pico Rivera, Bell, and Paramount. The arsenic removal pilot system in SCWC's Century Well in the City of Paramount continues to provide important information for groundwater producers within and outside the District. SCWC has completed the first phase pilot testing and determined that Granular Ferric Hydroxide (GFH) worked best out of the four tested media. The second and third phase will test removal efficiency at different pH levels and loading rates. WRD will continue to monitor and analyze the data received from these new treatment technologies.

FISCAL IMPACT

These projects total \$2.8 million and were included in the FY 01-02 Budget under the Safe Drinking Water Program.

STAFF RECOMMENDATION

For information.



MEMORANDUM

ITEM NO. VI

Prepared by: Hoover Ng

Reviewed by: Robb Whitaker

DATE: DECEMBER 16, 2003

TO: GROUNDWATER CLEAN-UP COMMITTEE

FROM: ROBB WHITAKER

SUBJECT: GROUNDWATER QUALITY ACTION LEVELS

SUMMARY

Section 116455 of the Health and Safety Code currently requires owners of domestic wells to notify the local governing body if a chemical exceeds an action level. It is also recommended that they remove wells from service if they exceed the action level by 10 times or 100 times the action level, depending upon the nature of the constituent and potential health effects.

Metropolitan Water District of Southern California has prepared revisions to redefine action levels as "notification" and "response" levels, which are intended to clarify their use. They have also suggested including surface water supplies.

Staff will provide comments to the committee on potential impacts to the District.

FISCAL IMPACT

None.

STAFF RECOMMENDATION

For information.



MEMORANDUM

ITEM NO. VII

Prepared by: Paul Fu

Reviewed by: Robb Whitaker

DATE: DECEMBER 16, 2003

TO: GROUNDWATER CLEAN-UP COMMITTEE

FROM: ROBB WHITAKER

SUBJECT: ROBERT W. GOLDSWORTHY DESALTER UPDATE

SUMMARY

The Goldsworthy Desalter delivered approximately 210 acre-feet of drinking water to City of Torrance in the month of November 2003. The chloride level in the well water remained within 1,100 to 1,200 mg/L in November. Watermaster will collect their annual chloride verification sample on December 9, 2003.

The immersion heater and the control panel for the membrane cleaning system are being repaired. A new temperature controller has been ordered for replacement.

The 10-micron size cartridge filters (replacing the 20-micron size) have been used for over 3 months. They provide good protection to the RO membranes while not needing too frequent filter replacement compared to the 5-micron size tested earlier.

Per the Committee's request at the last meeting, Staff has put a hold on going forward with the horizontal well as other options are explored for a backup to the extraction well.

FISCAL IMPACT

None.

STAFF RECOMMENDATION

For information.