

**MEETING OF THE GROUNDWATER QUALITY COMMITTEE
OF THE BOARD OF DIRECTORS
WATER REPLENISHMENT DISTRICT OF SOUTHERN CALIFORNIA
4040 PARAMOUNT BOULEVARD, LAKEWOOD, CA 90712
8:30 A.M., WEDNESDAY, JULY 12, 2017**

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 ANY "ACTION" TAKEN BY THE BOARD OR A COMMITTEE AT THE SAME MEETING.

- 1. DETERMINATION OF A QUORUM**
- 2. PUBLIC COMMENT**
Pursuant to Government Code Section 54954.3
- 3. APPROVAL OF MINUTES OF JUNE 21, 2017**
Staff Recommendation: Approve the minutes as submitted.
- 4. SAFE DRINKING WATER PROGRAM - DISADVANTAGED COMMUNITIES
OUTREACH PILOT PROGRAM UPDATE**
Staff Recommendation: For discussion.
- 5. ENVIRONMENTAL SITES REVIEW**
Staff Recommendation: For information.
- 6. DIRECTORS REPORTS, INQUIRIES AND FOLLOW UP OF DIRECTIONS TO
STAFF**
- 7. ADJOURNMENT**
The Committee will adjourn to the next regular meeting currently scheduled for August 9, 2017 at 8:30 A.M.

Agenda posted by Sherri Brown, Senior Administrative Specialist on July 7, 2017. In compliance with ADA requirements, this document can be made available in alternative formats upon request.

In compliance with the Americans with Disabilities Act (ADA), if special assistance is needed to participate in the meeting, please contact Senior Administrative Specialist Sherri Brown at (562) 921-5521 for assistance to enable the District to make reasonable accommodations.

All public records relating to an agenda item on this agenda are available for public inspection at the time the record is distributed to all, or a majority of all, members of the Board. Such records shall be available at the District office located at 4040 Paramount Boulevard, Lakewood, California 90712.

Agendas and minutes are available at the District's website, www.wrd.org.

EXHAUSTION OF ADMINISTRATIVE REMEDIES – If you challenge a District action in court, you may be limited to raising only those issues you or someone else raised at the public hearing described in this notice, or in written correspondence delivered to the District office at, or prior to, the public hearing. Any written correspondence delivered to the District office before the District's final action on a matter will become a part of the administrative record.



MEMORANDUM

ITEM NO. 3

DATE: JULY 12, 2017
TO: GROUNDWATER QUALITY COMMITTEE
FROM: ROBB WHITAKER, GENERAL MANAGER
SUBJECT: APPROVAL OF MINUTES OF JUNE 21, 2017

**MINUTES OF JUNE 21, 2017
SPECIAL MEETING OF THE GROUNDWATER QUALITY COMMITTEE
OF THE BOARD OF DIRECTORS
WATER REPLENISHMENT DISTRICT OF SOUTHERN CALIFORNIA**

A special meeting of the Groundwater Quality Committee of the Board of Directors of the Water Replenishment District of Southern California was held on Wednesday, June 21, 2017 at 2:10 p.m., at the District Office, 4040 Paramount Boulevard, Lakewood, California 90712. Committee Chair John D. S. Allen called the meeting to order and presided thereafter. Senior Administrative Assistant Sherri Brown recorded the minutes.

1. DETERMINATION OF A QUORUM

A quorum was present, which included:

Committee: Committee Chair John D. S. Allen; President Rob Katherman

Staff: Ken Ortega; Ted Johnson; Charlene King; Brian Partington; Pete Brown; Jim McDavid; Howard Salamanca; Everett Ferguson

Public: None

2. PUBLIC COMMENT

Pursuant to Government Code Section 54954.3

None.

3. APPROVAL OF MINUTES OF MEETING MAY 9, 2017

The Committee unanimously approved the minutes as submitted.

**8. SAFE DRINKING WATER PROGRAM - DISADVANTAGED COMMUNITIES
OUTREACH PILOT PROGRAM UPDATE**

This item was taken out of order.

Communications and Education Services (CES) Manager Pete Brown provided a report about recent meetings in which WRD Board members updated legislators on subjects that included the Safe Drinking Water Program; and plans for upcoming opportunities to present to City Council members. Discussion followed. No action was taken.

4. GRIP WATER RESEARCH PROJECT WITH COLORADO SCHOOL OF MINES

Chief Hydrogeologist Ted Johnson provided the report. Discussion followed.

Upon a motion duly made by President Katherman, seconded by Director Allen and unanimously approved, it was

RESOLVED: The Groundwater Quality Committee recommends that the Board of Directors authorize the General Manager to enter into an agreement, subject to approval as to form by District Counsel, with the Colorado School of Mines Advanced Water Technology Center for a GRIP research project known as the "*Sequel to Performance Assessment of Surface Spreading Operations Receiving Different Blends of Tertiary/Fully Advanced Treated Recycled Water*" for an amount not to exceed \$81,000 and a termination date no later than June 30, 2018.

This item will be placed as a regular agenda item at the Board of Directors meeting scheduled for June 20, 2017.

5. CONTRACT AMENDMENT WITH WORLEYPARSONS FOR AS-NEEDED PROFESSIONAL ENVIRONMENTAL CONSULTING SERVICES – GROUNDWATER QUALITY AND CONTAMINATION ISSUES

Senior Hydrogeologist Brian Partington provided the report. Discussion followed.

Upon a motion duly made by President Katherman, seconded by Director Allen and unanimously approved, it was

RESOLVED: The Groundwater Quality Committee recommends that the Board of Directors authorize the General Manager to approve (1) a contract time extension through June 30, 2018 and (2) a budget increase in an amount not to exceed \$70,000 with WorleyParsons for As-Need Professional Environmental Consulting Services, subject to approval as to form by District Counsel.

This item will be placed on the Consent Calendar of the agenda of the Board of Directors meeting scheduled for June 20, 2017.

6. NO COST TIME CONTRACT EXTENSION WITH AQUIOLOGIC INC. FOR AS-NEEDED PROFESSIONAL ENVIRONMENTAL CONSULTING

Upon a motion duly made by President Katherman, seconded by Director Allen and unanimously approved, it was

RESOLVED: The Groundwater Quality Committee recommends that the Board of Directors authorize the General Manager to approve a no cost time extension through June 30, 2018 with Aquilogic Inc. for As-Needed Professional Environmental Consulting Services, subject to approval as to form by District Counsel.

This item will be placed on the Consent Calendar of the agenda of the Board of Directors meeting scheduled for June 20, 2017.

7. APPROVE CONTRACT AMENDMENT NO. 5 WITH KENNEDY COMMUNICATIONS

Associate Engineer Charlene King provided the report. Assistant General Manager Ken Ortega provided an additional overview. Discussion followed.

Upon a motion duly made by President Katherman, seconded by Director Allen and unanimously approved, it was

RESOLVED: The Groundwater Quality Committee recommends that the Board of Directors authorize the General Manager to execute Contract Amendment No. 5 with Kennedy Communications for professional consulting services, for an additional amount not to exceed \$75,000 through December 31, 2018, subject to approval as to form by District Counsel.

This item will be placed on the Consent Calendar of the agenda of the Board of Directors meeting scheduled for June 20, 2017.

8. SAFE DRINKING WATER PROGRAM - DISADVANTAGED COMMUNITIES OUTREACH PILOT PROGRAM UPDATE

Ms. King provided the report. Discussion followed. No action was taken.

9. ENVIRONMENTAL SITES REVIEW

Mr. Partington provided the report on two Santa Fe Springs, California sites – Ashland Chemical and Waste Disposal. Discussion followed.

Mr. Partington asked that the Committee verbally support his suggestion to change the rating of the Waste Disposal site to a green triangle. The Committee concurred with Mr. Partington's suggested action on this property.

No official recommendation or formal action was taken.

10. DIRECTORS REPORTS, INQUIRIES, AND FOLLOW-UP OF DIRECTIONS TO STAFF

None.

11. ADJOURNMENT

There being no further business to come before the Committee, the meeting was adjourned at 2:44 P.M.

Chair

ATTEST:

Member

Approved in minutes of:

Unapproved Minutes



MEMORANDUM

ITEM NO. 4

DATE: JULY 12, 2017

TO: GROUNDWATER QUALITY COMMITTEE

FROM: ROBB WHITAKER, GENERAL MANAGER

**SUBJECT: SAFE DRINKING WATER PROGRAM - DISADVANTAGED COMMUNITIES
OUTREACH PILOT PROGRAM UPDATE**

SUMMARY

The District administers the Safe Drinking Water Program (SDWP), providing grant or loan assistance to basin pumpers for wellhead treatment to remove contaminants and improve water quality. The Grant Program provides treatment for removing groundwater contaminants from man-made sources (e.g. Volatile Organic Compounds); whereas the Loan Program provides 10-year, zero-interest loans for water treatment, removing unacceptable levels of contaminants from natural sources (e.g. iron, manganese, and arsenic).

In 2016, the District approved three wellhead treatment projects through the Safe Drinking Water Program: California American Water Arlington Well, Huntington Park Well 15, and Lynwood Well 11. The wellhead treatment system at all three wells will consist of a complete granular activated filtration system built within the boundaries of the existing well sites owned and operated by the water systems. In addition, as part of Assembly Bill No. 240, the District was designated to manage and implement a water quality improvement project in the City of Maywood. The appropriated funds were assigned to the Maywood Avenue Wellhead treatment project for iron and manganese removal.

Safe Drinking Water Pilot Program

As an extension of the District's Safe Drinking Water Program, the District approved the creation of the Safe Drinking Water Disadvantage Communities (DAC) Pilot Program. The goal of this program is to assist water systems located in disadvantaged communities within the District's service area with state and federal funding to address the issues related to their drinking water wells. The focus of the program is to provide technical assistance and extensive outreach to help the systems secure funding that is set aside specifically for disadvantaged communities. Currently there are seven water systems participating in the program and receiving assistance: City of Bell Gardens, City of Compton, City of Huntington Park and City of Lynwood, Maywood Mutual Water Company No. 2, Maywood Mutual Water Company No. 3 and Sativa LA County Water District.

Safe Drinking Water Program Outreach Efforts

Outreach efforts continue as staff is preparing follow-up outreach to cities, particularly disadvantaged communities, to schedule presentations for upcoming city council meetings to further explain WRD's programs.

FISCAL IMPACT

None.

STAFF RECOMMENDATION

For discussion.



MEMORANDUM

ITEM NO. 5

DATE: JULY 12, 2017

TO: GROUNDWATER QUALITY COMMITTEE

FROM: ROBB WHITAKER, GENERAL MANAGER

SUBJECT: ENVIRONMENTAL SITES REVIEW

SUMMARY

WRD has and continues to take an active role in groundwater quality protection, cleanup, and investigation. As part of its Groundwater Contamination Prevention Program, WRD established the Central and West Coast Basin Groundwater Contamination Forum, a data-sharing and discussion forum with key stakeholders that include various cities, water purveyors, the United States Environmental Protection Agency (EPA), California Department of Toxic Substances Control (DTSC), Los Angeles Regional Water Quality Control Board (RWQCB), State Water Resources Control Board Division of Drinking Water (DDW), United States Geological Survey (USGS), and California Department of Water Resources (DWR).

In 2005, the stakeholders drafted and signed a Memorandum of Understanding ("MOU") agreeing to meet regularly and share data on major groundwater contaminated sites within the Central Basin and West Coast Basin. WRD acts as the meeting coordinator and data repository/distributor, helping stakeholders to characterize the extent of contamination to identify pathways for contaminants in shallow aquifers to reach deeper drinking water aquifers and develop optimal methods for remediating contaminated groundwater. The overall purpose of the Forum is to expedite the cleanup of these major contaminated sites in the basins.

With the cooperation and support of all stakeholders in the Groundwater Contamination Forum, WRD developed a list of high-priority groundwater contaminated sites ("environmental sites") located within the District. This list is a living document, subject to cleanup and "closure" of sites, as well as discovery of new sites warranting further attention. Currently, the list includes 48 sites located throughout the Central Basin and West Coast Basin. The list was developed based on the following criteria:

- Site location and hydrogeology
- Distance to nearest drinking water well
- Depth to shallowest water-supply aquifer beneath site
- Concentration of detected contaminants
- Fate and transport of detected contaminants
- Presence of contamination in nearby drinking water wells
- Status of site characterization with respect to groundwater contamination
- Status of site remediation with respect to groundwater contamination
- Stage of regulatory agency involvement

WRD works in close consultation with the lead regulatory agencies for each of these sites to provide data and technical support to facilitate site characterization and expedite cleanup. An

update is provided below for Powerine Oil Company (City of Santa Fe Springs) and Golden West Refinery (City of Santa Fe Springs). Both sites are located northeastern portion of the Central Basin.

POWERINE OIL COMPANY (SANTA FE SPRINGS, CENTRAL BASIN)

The ~55-acre former oil refinery operated from the 1930s to July 1995. Petroleum hydrocarbon related compounds are the primary constituents of concern in soil and groundwater (mainly benzene, methyl tertiary butyl ether [MTBE], and tertiary butyl alcohol [TBA]). The site also contains a large plume of light non-aqueous phase liquid (LNAPL). The refinery began dismantling its aboveground structures in approximately 2007. The Site is reportedly in the process of sale, cleanup, and redevelopment under the California Land Reuse and Revitalization Act agreements between a buyer / developer and the regulatory oversight agency (RWQCB).

The on-site groundwater flows to the southwest, then bends to the south with impacts identified locally in two water bearing zones including a Shallow Zone (~30 to 115 feet below ground surface [ft bgs]) and a Deep Zone (~125 to 250 ft bgs). The nearest downgradient active public water supply wells are owned and operated by Golden State Water Company (mainly Pioneer #3). Site constituents have not been detected in the production wells with the closest one located approximately 0.7-miles southwest of the Site. Powerine’s most recently reported groundwater sampling results are summarized below for November 2016.

Key Indicator Compounds in Groundwater			
Chemical	MCL	Shallow Zone	Deep Zone
Benzene	1	1,600 in MW-704*	0.99 in MW-15C
MTBE	13	2,000 in MW-704*	3.2 in MW-15C
TBA	NL-12	180 in MW-704*	140 in MW-15C

Maximum detection with results in micrograms per liter (µg/L), excluding on-site and off-site areas containing LNAPL
 NL = Notification Level / MCL = Maximum Contaminant Level / Asterisk (*) indicates result from February 2016.
 Data Source: Fourth Quarter 2016 Groundwater Monitoring Report (Murex Environmental dated January 15, 2017).

Site remediation is being implemented in a phased approach in close coordination with property redevelopment as approved by the RWQCB. The first phase includes the construction of commercial / industrial buildings and will address shallow soil contamination to approximately 10 ft bgs. The second phase will focus on the deeper impacts to soil / groundwater with an air sparging / bioventing remedy approved by the RWQCB. The anticipated completion date for the second phase remedial system installation is early 2018.

GOLDEN WEST REFINERY (SANTA FE SPRINGS, CENTAL BASIN)

The former oil refinery operated from the 1920s to 1997. Petroleum hydrocarbon related compounds are the primary constituents of concern in soil and groundwater (mainly benzene, naphthalene, MTBE, and TBA). The site also contains a large plume of LNAPL. The site was demolished and redeveloped into commercial / industrial buildings commencing in 1997. Site work is being overseen by the RWQCB.

Groundwater impacts have been identified locally in two water bearing zones including a southwest flowing Semi-Perched Aquifer (~20 to 50 ft bgs) and east-northeast flowing Artesia Aquifer (~65 to 100 ft bgs). The nearest downgradient active public water supply wells are owned and operated by the City of Norwalk (Well #10). Site constituents have not been detected in the production wells with the closest one located approximately 0.8-miles southwest of the Site. Golden West Refinery’s most recently reported groundwater sampling results are summarized below for September 2016.

Key Indicator Compounds in Groundwater			
Chemical	MCL	Semi-Perched Aquifer	Artesia Aquifer
Benzene	1	8,700 in PO-16	20,000 in A-17R
Naphthalene	NL-17	4,400 in PO-16	380 in A-17R
MTBE	13	No Detections	5,700 in A-17R
TBA	NL-12	No Detections	6,600 in A-17R

Maximum detection with results in µg/L, excluding on-site and off-site areas containing LNAPL

Data Source: Semi-Annual Groundwater Monitoring and Sampling Report (Source Group dated December 22, 2016).

Multiple treatment systems have operated over the years to address soil and groundwater contamination from the Site. A summary is provided as follows:

Type	Dates	Results
Shallow Excavation	Commencing in 1997	~271,018 tons of impacted soils were removed in preparation for property redevelopment under the review and final approval of the RWQCB.
Various	1983 - Present	The equivalent of ~5,282,128 gallons of hydrocarbons have been recovered by removing impacted soil , implementing soil vapor extraction (SVE), and removing mobile LNAPL.

The RWQCB recently requested additional delineation to determine the extent of groundwater contamination and the off-site presence of LNAPL.

FISCAL IMPACT

None.

STAFF RECOMMENDATION

For information.