

## **Coordinated Operations Agreement for Freeport Regional Water Authority Intake Facilities and Sacramento Regional County Sanitation District**

This Coordinated Operations Agreement (“Agreement”), dated for purposes of identification 12/13/06 (“Agreement Date”) is made by and between the Freeport Regional Water Authority (“FRWA”), a joint powers authority formed under a Joint Powers Agreement between the Sacramento County Water Agency (“SCWA”) and the East Bay Municipal Utility District (“EBMUD”), and the Sacramento Regional County Sanitation District (“SRCSD”).

### **RECITALS**

- A. FRWA is a joint powers authority that has been established to implement, construct, and operate the Freeport Regional Water Project (“FRWP”), including construction of a new raw water diversion facility on the Sacramento River (“FRWA Intake”).
- B. The member agencies of FRWA are EBMUD and SCWA (herein collectively referred to as “Member Agencies”).
- C. SRCSD owns and operates the Sacramento Regional Wastewater Treatment Plant (“SRWTP”).
- D. SRCSD, FRWA, and SCWA are signatory to Principles of Agreement (“POA”), dated January 29, 2004, to define concepts for a coordinated operational strategy.
- E. SRCSD, EBMUD, SCWA and FRWA are all engaged in essential public utility functions.
- F. The FRWA Intake is a municipal and industrial raw water supply intake.
- G. SRWTP receives and treats wastewater from the urbanized portions of Sacramento County and, in the future from the eastern portion of Yolo County, and discharges treated effluent into the Sacramento River, 1.34 miles downstream of the FRWA Intake.
- H. The Sacramento River is occasionally subject to reverse flows in the vicinity of the SRWTP discharge and FRWA intake locations.
- I. The discharge from SRWTP can include contaminants that, if not sufficiently diluted, are undesirable in a municipal and industrial raw water supply.
- J. Studies conducted by SRCSD and FRWA have determined that when river flows reverse, as measured at the Freeport Bridge, the potential exists for diluted effluent from SRWTP to be conveyed to the vicinity of the FRWA Intake depending on the magnitude of the reverse flow event.

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- K. In the POA, FRWA and SRCSD agreed to the fundamental goal to ensure that public funds are used in the most cost effective manner to ensure: adequate separation of treated wastewater effluent and raw drinking water supplies; reliable and efficient operation of the SRCSD's SRWTP and the FRWA facilities; and minimization of operational impacts on both facilities.
- L. SRCSD desires to cooperate with FRWA in protecting the quality of the public raw water supply to be diverted through the FRWA Intake.
- M. FRWA desires to coordinate the operations of the FRWA Intake with SRCSD's operations to prevent the diversion of diluted effluent from SRWTP into the FRWA Intake.
- N. In compliance with SRCSD'S current NPDES Permit Order No. 5-00-188, SRCSD currently suspends discharge of its treated effluent to the Sacramento River and redirects the effluent to storage basins when the river flow rate falls below 14 times the effluent flow rate. Discharge to the river resumes when the river flow rate again increases to 14 times the effluent flow rate.
- O. SRCSD owns, operates, and maintains a short range acoustic Doppler velocity meter ("ADVM") and a long rang ADVM mounted to the Freeport Bridge for purposes of measuring river velocity ("SRCSD Flowmeter"). A signal is transferred from the SRCSD Flowmeter to a datalogger at the Outfall Building. The datalogger is programmed to provide a rolling five-minute average every minute. These one-minute data at the Outfall Building are converted to analog data and transferred to SRWTP through a 4-20 milliamp converter. The river flow is calculated by a program using the velocity, stage and river profile. The information is also used to detect reverse flow events. The United States Geological Service ("USGS"), California Department of Water Resources ("DWR") and SRCSD all use the river velocity and stage data. USGS is specialized in calibration and the SRCSD will work with the USGS on this aspect. USGS, California DWR and SRCSD jointly fund the maintenance aspect.
- P. SRCSD currently uses the short range ADVM as their primary data source and the long range ADVM for back up purposes. Currently data transmission from the ADVMS is transmitted back to the datalogger at the Outfall Building by radio signal. Once an upgrade project is complete the short range ADVM will have the capability to transmit data via hardwire and radio. The long range ADVM will only transmit data via radio.
- Q. Both FRWA and its Member Agencies have reviewed USGS Scientific Investigations Report 2004-5172, and are aware of the configuration, calibration and operation of the SRCSD Flowmeter.

NOW, THEREFORE, in consideration of the foregoing recitals and of the mutual covenants contained herein, the parties hereto agree to the following:

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ARTICLE 1  
COORDINATED OPERATIONS**1.1 General Operations.**

- 1.1.1 The parties have conducted extensive computer simulation of reverse flows and the carriage of diluted effluent and have determined that tracking the location of the diluted effluent in the river and ceasing diversions at the FRWA Intake whenever diluted effluent is in the vicinity of the FRWA Intake is a practical and effective way to ensure adequate separation of treated wastewater effluent and raw drinking water supplies.
- 1.1.2 The parties hereto have agreed that the best means to ensure adequate separation of treated wastewater effluent and raw drinking water supplies is the establishment of appropriate operating procedures to substantially eliminate diversion of diluted effluent at the FRWA Intake.
- 1.1.3 FRWA will construct, operate, and maintain a communication connection between SRCSD and the FRWA Intake, enabling FRWA to monitor river velocity and detect reverse flows. FRWA intends to receive the data after the river velocity and flow rate data is computed. The method FRWA uses to obtain the data (i.e. spread spectrum radio) will not interfere with SRCSD operations.
- 1.1.4 Reverse flows and the location of diluted effluent will be tracked by FRWA. FRWA will calculate the product of river velocity at the SRCSD Flowmeter and time, resulting in an estimate of the advective distance traveled by the diluted effluent. This product will be updated every five minutes, until it has been determined that the diluted effluent is no longer in the vicinity of the FRWA Intake. The calculation of advective distance will begin when river velocity first becomes negative, indicating the start of a reverse flow event. FRWA's operating rule is detailed in the report, Results of Longitudinal Dispersion Model of "Worst Case" Reverse Flow Events, dated 8-18-06, prepared by Flow Science Incorporated for FRWA and SRCSD.
- 1.1.5 In the event that the advective distance calculated by FRWA reaches 0.9 miles upstream of the SRWTP effluent diffuser, FRWA will cease diverting at the FRWA Intake irrespective of the SRCSD effluent discharge rate.
- 1.1.6 After the FRWA Intake ceases diverting and the river resumes flowing in the downstream direction, FRWA may resume diverting at the FRWA Intake when the advective distance of the diluted effluent is 0.7 miles or less upstream of the SRWTP effluent diffuser irrespective of the SRCSD effluent discharge rate.
- 1.1.7 SRCSD will facilitate the provision of data from the SRCSD Flowmeter by allowing FRWA to install a spread-spectrum radio, antenna, and associated equipment at the SRWTP providing that FRWA can design and operate their equipment without disrupting current SRCSD operations or future operations outlined in SRWTP Communications Study and associated Business Case

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Evaluation, which indicated that SRWTP will move forward with land lines. A separate agreement that outlines the details of information on the data transfer from SRCSD to FRWA will need to be developed in the future.

- 1.1.8 SRCSD and FRWA will share their respective forecasts of reverse flow events.
- 1.1.9 FRWA shall pay the same share of the cost of routine operations and maintenance of the flow meter (Recitals O) as is paid by SRCSD. Currently SRCSD is in a multiyear agreement with the United States Geological Service and the California Department of Water Resources. The agreement will need to be amended to add FRWA as a party and to identify its cost-sharing obligation as set forth above.

## 1.2 Indemnification.

- 1.2.1 FRWA recognizes that the signal from the SRCSD Flowmeter, described in Recitals O and P, and the signal from SRCSD to FRWA, described in Article 1.1.3, including any back up signals, can malfunction, resulting in no information (velocity, flow, river stage, etc.) being transferred to SRCSD and eventually FRWA. These malfunctions are usually temporary in nature, but could last a longer period of time and may be out of the control of SRCSD. FRWA will indemnify and hold harmless SRCSD, its officers and employees, from and against any claims, costs, damages or other liability arising from FRWA's inability to receive this data, be the outage event within or not within the control of SRCSD.
- 1.2.2 FRWA fully understands that SRCSD is providing only raw data and/or information (described in Articles 1.1.4, 1.1.5 and 1.1.6) and will indemnify and hold harmless SRCSD, its officers and employees, from and against any claims, costs, damages or other liability arising from how FRWA uses and/or interprets the provided information to operate the FRWA Intake.
- 1.2.3 FRWA fully understands that there has not been a reverse flow event at the Freeport Bridge flow monitoring location since the USGS (with cooperation from SRWTP and California DWR) installed the ADVMs on the Freeport Bridge (USGS Scientific Investigation Report 2004-5172); therefore, no reverse flow data has been recovered with the ADVMs. USGS uses ADVMs elsewhere in the delta and is confident with the ability of the ADVMs to capture reverse flow data. FRWA is aware of the lack of reverse flow data at the Freeport Bridge location with these ADVMs and is making its own determination that the data being captured by the ADVMs (short range or long range) is accurate to the range needed for FRWA to successfully implement their operating rule. FRWA has had the opportunity to consult with USGS or other experts to make its decision to use the SRCSD Flowmeter for reverse flow data.

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ARTICLE 2  
SRCSD DISCHARGES

- 2.1 Acknowledgement of SRCSD Discharges.** FRWA acknowledges that it is fully informed of the existence, circumstances, and characteristics of wastewater discharge operated downstream of the FRWA Intake by SRCSD (“SRCSD Discharge”). FRWA further acknowledges each of the following circumstances regarding the SRCSD Discharge:
- 2.1.1 FRWA recognizes that future increases in the rate, volume and concentration of constituents of the SRCSD Discharge may occur for various reasons, including population growth in the Sacramento region, subject to the requirement that the SRCSD Discharge must be authorized under SRCSD’s regulatory permit.
  - 2.1.2 FRWA recognizes that the SRCSD Discharge authorized by SRCSD’s existing regulatory permit contain or may contain constituents that have not been sampled for or otherwise detected.
  - 2.1.3 FRWA recognizes that the concentrations and potential effects of some constituents of the SRCSD Discharge authorized by SRCSD’s existing regulatory permit are unknown.
  - 2.1.4 FRWA acknowledges that it has had a full opportunity to investigate and inquire into water quality conditions of the SRCSD Discharge authorized by SRCSD’s existing regulatory permit.
- 2.2 Comments to Regulatory Agencies.** It is the responsibility of state and federal agencies (primarily the Regional Water Quality Control Board) to protect the beneficial uses of the Sacramento River and Delta, including raw water subsequently diverted and treated for municipal use, through the establishment of water quality standards and waste discharge requirements/NPDES permits. In recognition of the fact that the FRWA is choosing to locate its diversion intake in proximity to the currently existing SRCSD Discharge, and in view of the disclosures and acknowledgement of existing and future circumstances relating to the SRCSD Discharges as set forth in Section 2.1 above, FRWA shall not advocate or otherwise seek the establishment or imposition on SRCSD of additional and/or more stringent conditions or requirements in SRCSD’s regulatory permit due to potential water quality impacts to the FRWP from the SRCSD Discharge that is made in compliance with SRCSD’s regulatory permit, including any such discharges that are made while SRCSD’s regulatory permit is in the process of being renewed so long as any such discharge is in compliance with the permit that is being renewed. The provisions of this section will not be construed so as to limit the right of FRWA: (i) to advocate with respect to, or otherwise comment upon, any proposal made by SRCSD that would allow for a SRCSD Discharge that is not authorized by SRCSD’s regulatory permits in effect at the time such proposal is made by SRCSD, with the exception of SRCSD’s request to expand it’s wastewater treatment capacity to accommodate future growth, regardless of when these higher discharge

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flows are realized and as described in Article 2.1.1; (ii) to make comments that are directed at a proposed SRCSD Discharge that are wholly unrelated to water quality impacts to the FRWP; or (iii) make comments on statewide water quality issues that are not directed specifically at SRCSD, its regulatory permits or a proposed SRCSD Discharge.

ARTICLE 3  
GENERAL CONDITIONS

- 3.1** Except for damages or loss resulting from willful misconduct, gross negligence or breach of a fiduciary obligation in connection with this Agreement, no party to this Agreement shall be liable to any other party for any loss or damage in connection with this Agreement. Each party shall be responsible for the consequences of its own willful misconduct, gross negligence and/or breach of a fiduciary duty in connection with this Agreement, and in connection with any work undertaken in accordance with this Agreement, and shall indemnify, defend and hold harmless the other party from the consequences thereof to the extent allowed by law.
- 3.2** Any notice, demand, request, consent, or approval that either party hereto may or is required to give the other pursuant to this Agreement shall be in writing and shall be either personally delivered or sent by mail, addressed as follows:

TO AUTHORITY

Eric F. Mische, Program Manager  
Freeport Regional Water Authority  
2710 Gateway Oaks Drive, Suite  
#320-South  
Sacramento, CA 95833

TO SRCSD

Mary K. Snyder, District Engineer  
Sacramento Regional County Sanitation District  
10545 Armstrong Avenue  
Mather, CA 95655

Such personal delivery or mailing in such manner shall constitute a good, sufficient and lawful notice and service thereof in all such cases. Either party may change the address to which subsequent notice and/or other communications can be sent by giving written notice designating a change of address to the other party, which shall be effective upon receipt.

- 3.3** This Agreement represents the entire understanding of the parties as to those matters contained herein. No prior oral or written understanding shall be of any force or effect with respect to those matters covered hereunder. This Agreement may only be modified by amendment in writing signed by each party.
- 3.4** This Agreement is to be binding on the successors and assigns of the parties hereto. The services called for herein are deemed unique and neither party shall assign, transfer or otherwise substitute its interest in this Agreement or any of its obligations hereunder without the prior written consent of the other.

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- 3.5 Should any part of this Agreement be declared by a final decision by a court or tribunal of competent jurisdiction to be unconstitutional, invalid or beyond the authority of either party to enter into or carry out, such decision shall not affect the validity of the remainder of this Agreement, which shall continue in full force and effect, provided that the remainder of this Agreement can be interpreted to give effect to the intentions of the parties.
- 3.6 This Agreement may be executed in counterparts, each of which shall be deemed to be an original, but which together shall constitute a single document.
- 3.7 This Agreement and all matters relating to it shall be governed by the laws of the State of California.
- 3.8 Any party's waiver of the performance of any covenant, condition, obligation, representation, warranty or promise in this Agreement shall not invalidate this Agreement or be deemed a waiver of any other covenant, condition, obligation, representation, warranty or promise. Any party's waiver of the time for performing any act or condition hereunder does not constitute a waiver of the act or condition itself.
- 3.9 This Agreement shall be deemed to have been prepared equally by both of the parties, and the Agreement and its individual provisions shall not be construed or interpreted more favorably for one party on the basis that the other party prepared it.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed as of the Agreement Date.

**SACRAMENTO REGIONAL COUNTY**  
**SANITATION DISTRICT**, a sanitation district  
Organized under the laws of the State of California

By: Mary Snyder Date: 12-13-06  
Mary Snyder, District Engineer

Reso SR. 2306 Agenda 12-13-06 Jan # 26

REVIEWED BY COUNSEL

John H. Dodds Date: 11.29.06  
John H. Dodds

**FREEPORT REGIONAL WATER AUTHORITY**

By:  Date: 11/15/06  
Eric Mische, Program Manager

**REVIEWED BY COUNSEL**

 Date: 11/15/06  
John F. Whisenhunt

**RESOLUTION NO. FWA-0161**

**RESOLUTION AUTHORIZING THE FREEPORT REGIONAL WATER AUTHORITY PROGRAM MANAGER TO EXECUTE A FIRST AMENDED COORDINATED OPERATIONS AGREEMENT FOR FREEPORT REGIONAL WATER AUTHORITY INTAKE FACILITIES AND SACRAMENTO REGIONAL COUNTY SANITATION DISTRICT**

WHEREAS, the Sacramento River in the vicinity of the Intake Facilities is occasionally subject to reverse flows: and

WHEREAS, the Sacramento Regional County Sanitation District discharges treated wastewater downstream of the Intake Facilities; and

WHEREAS, treated wastewater can contain elements undesirable in a municipal and industrial water supply; and

WHEREAS, FRWA and SRCSD staff have developed a Coordinated Operations Agreement to prevent the diversion of treated wastewater at the Intake Facilities during reverse flows.

**NOW, THEREFORE, BE IT RESOLVED AND ORDERED** that the Program Manager for the Freeport Regional Water Authority is hereby authorized and directed to execute *First Amended Coordinated Operations Agreement for Freeport Regional Water Authority Intake Facilities and Sacramento Regional County Sanitation District*, in the form attached, on behalf of the FREEPORT REGIONAL WATER AUTHORITY, a joint powers authority, with the *Sacramento Regional County Sanitation District*, and to do and perform everything necessary to carry out the purpose of this Resolution.

**ON A MOTION** by Director Foulkes, and seconded by Director Yee, the foregoing resolution was passed and adopted by the Board of Directors of the Freeport Regional Water Authority, State of California, this 14<sup>th</sup> day of January, 2010 by the following vote, to wit:

AYES: Directors, Coleman, Foulkes, Yee, Nottoli

NOES: Directors, none

ABSENT: Directors, none

ABSTAIN: Directors none

in accordance with Section 25103 of the Government Code of the State of California a copy of the document has been delivered to the Chairman on 01-14-10

By Gweryne Dewlenig  
Deputy Clerk, Board of Directors

Don Nottoli  
Chair of the Board of Directors of the Freeport Regional Water Authority



Sandra Burnett  
Secretary of the Board of Directors

**FILED**  
BOARD OF DIRECTORS

JAN 14 2010  
By Sandra Burnett  
Clerk of the Board

**FIRST AMENDED COORDINATED OPERATIONS AGREEMENT FOR  
FREEPORT REGIONAL WATER AUTHORITY INTAKE FACILITIES AND  
SACRAMENTO REGIONAL COUNTY SANITATION DISTRICT**

**THIS FIRST AMENDED COORDINATED OPERATIONS AGREEMENT FOR  
FREEPORT REGIONAL WATER AUTHORITY INTAKE FACILITIES AND  
SACRAMENTO REGIONAL SANITATION DISTRICT** ("First Amended Agreement") is entered into this \_\_\_ day of \_\_\_\_\_ 2010, by and between the Freeport Regional Water Authority ("FRWA"), a joint powers authority formed under a Joint Powers Agreement between the Sacramento County Water Agency and the East Bay Municipal Utility District, and the Sacramento County Regional Sanitation District ("SRCSD").

**WITNESSETH:**

**WHEREAS**, FRWA and SRCSD entered into a Coordinated Operations Agreement for coordinating the operation of their facilities during reverse flow events in the Sacramento River ("Agreement") on November 6, 2006; and

**WHEREAS**, the parties desire to clarify the number of parties to the Joint Funding Agreement with the United States Geological Service (USGS), California Department of Water Resources (DWR) and SRCSD for the cost of routine maintenance of the flow meter at the Freeport Bridge.

**NOW, THEREFORE, IT IS MUTUALLY AGREED** as follows:

**Section 1.** Section 1.1, Paragraph 1.1.9 of the Agreement is hereby amended as follows:

"FRWA shall pay the same share of cost of routine maintenance of the flow meter (Recitals O) as is paid by SRCSD in its current and any future agreement with the United State Geological Service and the California Department of Water Resources."

**Section 2.** The Agreement, as amended, shall in all other respects remain in full force and effect.

**IN WITNESS WHEREOF**, the parties hereto have caused this First Amended Agreement to be duly executed as of the day and year first written above.

SACRAMENTO COUNTY REGIONAL  
SANITATION DISTRICT

Date: \_\_\_\_\_, 2010

By: \_\_\_\_\_  
Mary Snyder, District Engineer

FREEPORT REGIONAL WATER AUTHORITY

Date: \_\_\_\_\_, 2010

By: \_\_\_\_\_  
Eric F. Mische, Program Manager

Approved As To Form:

Approved As To Form:

\_\_\_\_\_  
John F. Whisenhunt, General Counsel

\_\_\_\_\_  
Lisa Travis, County Counsel