

**BACWA EXECUTIVE BOARD MEETING**  
**Thursday, April 25 2011, 11:30 a.m. – 3:30 p.m.**

**HANDOUTS**

Handout Packet is available on the BACWA website ([www.BACWA.org](http://www.BACWA.org)).

<b><u>Pages</u></b>	<b><u>Handout Title</u></b>	<b><u>Agenda Item #</u></b>
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3 – 6	Meeting Minutes from BACWA Executive Board Meeting of March 24, 2011, File 14,503	2
7 – 12	January 2011 Treasurer's Report	3
13 – 18	February 2011 Treasurer's Report	4
19 – 21	Board Action Request – Authorize contribution to sponsor the State of the Estuary Conference; \$20,000; File 12,403	5
22 – 32	Board Action Request – Approve BACWA Fiscal Year 2011 – 2012 Budget and Workplan	6
33 – 47	AIR Spring 2011 Newsletter	
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53	Prop 50 Grant Disbursement Summary, April 2011	
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## Executive Board Meeting

Monday, April 25, 2011

11:30 a.m. – 3:30 p.m.

HDR Offices

2121 N California Blvd # 475, Walnut Creek, CA

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### **ROLL CALL AND INTRODUCTIONS (11:30 a.m. – 11:35 a.m.)**

### **PUBLIC COMMENT (11:35 a.m. – 11:40 a.m.)**

### **CHAIR & EXECUTIVE DIRECTOR AUTHORIZED ACTIONS (11:40 a.m. – 11:45 a.m.)**

1. Chair & Executive Director Authorized Actions
  - a. Executive Director authorization for a new task authorization under existing agreement with RMC/Oakley Water Strategies for Sanitary Sewer System Waste Discharge Requirements comment assistance; \$4,520; File 12,162.

### **CONSENT CALENDAR (11:45 a.m. – 11:50 a.m.)**

2. Minutes from March 24, 2011 Executive Board Meeting.
3. January 2011 Treasurer's Report.
4. February 2011 Treasurer's Report.
5. State of the Estuary Conference Sponsorship; \$20,000; File 12,400.

### **OTHER BUSINESS (11:50 a.m. – 3:30 p.m.)**

6. Approval of Fiscal Year 2011 - 2012 Budget and Workplan.
7. HDR Nutrient Strategy Presentation & Discussion.

### **NEXT REGULAR MEETING**

The next regular meeting is scheduled for **May 25, 2011**, 9:00 a.m. to 2:00 p.m. at the EBMUD Orinda Facility, 500 San Pablo Dam Road, Orinda, CA.

### **ADJOURNMENT (3:30 p.m.)**



# Executive Board Meeting Minutes

Thursday, March 24, 2011, 9:00 a.m. – 1:00 p.m.  
EBMUD, 2020 Wake Ave, Oakland, CA

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## ROLL CALL AND INTRODUCTIONS

Executive Board Representatives: Tommy Moala, Vice Chair (San Francisco Public Utilities Commission); Ed McCormick (East Bay Municipal Utility District); Jim Kelly (Central Contra Costa Sanitary District); Mike Connor (East Bay Dischargers Authority); Kirsten Struve (City of San Jose).

Other Attendees: Laura Pagano (San Francisco Public Utilities Commission); Cheryl Munoz (San Francisco Public Utilities Commission); Margaret Orr (Central Contra Costa Sanitary District); Bhupinder Dhaliwal (Central Contra Costa Sanitary District); Jim Ervin (City of San Jose); Sharon Newton (City of San Jose); Andy Morrison (Union Sanitary District); Tom Hall (Sunnyvale/Eisenberg Olivieri Associates, Inc.); Eric Hansen (South Bay Water Recycling/City of San Jose); Monica Oakley (RMC Environmental); Denise Connors (Larry Walker Associates); Jackie Kepke (CH2M Hill); Amy Chastain (BACWA); Alexandra Gunnell (BACWA).

## PUBLIC COMMENT

There were no public comments.

## REPORTS

**Committee Reports, agenda item 1**, were included in the meeting handout packet attendees were invited to elaborate on their reports or field questions.

The Executive Director (ED) fielded questions about the most recent Permits Committee meeting. PCB permit risk reduction requirements will be discussed at the upcoming BAPPG meeting, and efforts will be coordinated with Permits Committee. Additional information was provided in the meeting handout packet in the PCB TMDL Implementation Memorandum from the BACWA Executive Director to BACWA Executive Board, March 16, 2011. It was suggested that the memo should be sent to BACWA members via e-mail, and that BACWA should construct a position statement.

It was noted that comments on the revised statewide Wastewater Discharge Requirements for Sanitary Sewer Systems (WDR) are due on April 29, 2011.

For **agenda item 2**, the **Proposition 50 Grant Disbursements Status Report** was included in the meeting handout packet.

For **agenda item 3**, the **Executive Director's Report**, was included in the meeting handout packet, and the ED noted that at the PCB Permit adoption hearing it appeared that the State Water Board had taken BACWA comments into account.

Executive Board (Board) members were invited to share any items of interest under **agenda item 4, Executive Board Reports**, including information about meetings that were attended by BACWA representatives this month.

- a. **Summit Partners Meeting (2/28/2011)**
- b. **Aquatic Science Center Meeting (3/3/2011)**
- c. **Regional Water Board Meeting (3/9/2011).**
- d. **RMP Technical Review Committee Meeting (3/23/2011)**
- e. **Other**
  - At the CASA meeting in DC held on 3/14 – 16, financial constraints appeared to be a common concern.
  - The City of San Jose did not receive the USEPA San Francisco Bay Area Water Quality Improvement Fund grant for the Regional Education and Behavior Change Campaign project that BACWA agreed to cosponsor during the January 27, 2011 Executive Board meeting.
  - Principal agencies are still working to address e-SMR transition concerns. CCCSD may contract with Johnson Lam for support.

The following **Chair and Executive Director Authorized Actions** were listed under agenda **item 5**.

- a. Executive Director authorization to utilize RMC As Needed Technical Support Contract for Enterococcus Basin Plan Amendment Comments; \$2,000; File 12,162.
- b. Chair authorization to utilize LWA As Needed Technical Support Contract for Assistance with PCB Permit Adoption Hearing and Preparation of PCB Sampling and Analysis Plan; \$17,500; File 12,163.
- c. Executive Director authorization for Chinook Book baywise.org advertisement; \$2,400; File 12,387.
- d. Executive Director authorization to utilize Downey Brand As Needed Support for PCBs-related matters; \$5,000; File 12,166.
- e. Executive Director authorization for website support from Adammer; \$1,500; File 12,380

It was noted that the contracting policy may need to be updated to clarify approval procedures for the use of As Needed contracts.

## **CONSENT CALENDAR**

*Consent calendar **agenda items 6 and 9** were approved in a motion made by Tommy Moala and seconded by Ed McCormick. The motion carried unanimously.*

- 6. Minutes from February 24, 2011 BACWA Executive Board Meeting.
- 9. Authorize contract with EPC Consultants, Inc., to assist the Recycled Water Committee

with administrative and technical support, in an amount not to exceed \$24,000 (FY 10-12).

**Item 7, the January 2011 Treasurer's Report**, was removed from the consent calendar and will be included for approval next month.

**Item 8, a contribution to WateReuse for Irrigation Guide in the amount of \$40,000**, was approved in a motion made by Mike Connor. Kirsten Struve seconded, and the motion carried unanimously.

Eric Hansen from South Bay Water Recycling reviewed the information provided in the handout packet and fielded questions from meeting attendees. The guide will be published in PDF format and may be distributed at workshops. Financial contributors include: Santa Clara Valley Water District, Stanford University; San Jose State University, Redwood City; City of San Jose, City of Santa Clara, and Google. WateReuse will manage the contract with the publisher and details about the content of the guide will be discussed at the April 5<sup>th</sup> kickoff meeting. It was recommended that if additional funding is required for distribution that support should be requested from potable water agencies.

#### **BOARD DISCUSSION ITEMS**

**Jackie Kepke gave an overview of the Strass Workshop, agenda item 10**, held March 4<sup>th</sup> at PGE headquarters. Additional information was provided in the handout the packet. It was noted that the differences in daily discharge requirements and regulatory compliance issues between the United States and Europe are significant, and would need to be included as in the contents of a white paper should one be developed in the future. The California Wastewater Climate Change Group (CWCCG) is moving forward to develop two page fact sheet regarding energy generation opportunities that may lay some foundation for white paper development. San Jose, the ED and CH2M Hill will continue to work together and come back to the Board with recommendations for next steps.

CWEA is hosting an energy workshop in May and BACWA is a co-sponsor. The ED has been communicating with them regarding these types of collaborations will continue to explore opportunities, especially with the San Francisco Bay section. It was also suggested that BACWA may want to reach out to non-governmental agencies (NGOs) as this work continues..

**For agenda item 11, Guidelines for the Arleen Navarret Leadership Award** were approved in a motion made by Tommy Moala and seconded by Jim Kelly. The motion carried unanimously.

It was requested that the recipient provide report back to board on use of awarded funds.

**For agenda item 12, the 2010 Mercury Watershed Permit Group Report** was distributed to the Board and reviewed by Monica Oakley. The report was approved in a motion made by Ed McCormick and seconded by Jim Kelly. The motion carried unanimously.

The report will be submitted to Regional Water Quality Control Board (RWQCB) before the deadline of April 1, 2011, and the ED will provide testimony at the April RWQCB meeting. It will also be posted on the BACWA website and a link will be included in the monthly e-newsletter. A suggestion was made to distribute the report to NGOs and other environmental groups. BAPPG and the ED have a draft Op-ed regarding the success of dental amalgam programs which will be circulated to

the Board before release. CCCSD will send data on the cost per pound of addressing Hg at the source to the ED.

For **agenda item 13, National Dental Amalgam Effluent Guidelines Rulemaking** the ED requested invited attendees to pose any questions or concerns about Tim Potter assisting BACWA with drafting comments. A draft of the comments will be circulated for Board review prior to submission and development of the comments will be coordinated with BAPPG and Tri-TAC.

Under **agenda item 14, SFEI request for support for Nutrient Strategy Development**, *Jim Kelly made a motion to for approval. It was seconded by Ed McCormick and passed unanimously.*

For **agenda item 15, Test of Significant Toxicity (TST)**, Bhupinder Dhaliwal of CCCSD provided a presentation, led a discussion, and fielded questions. A copy of the presentation will be distributed to meeting attendees. CCCSD offered to have the expert consultant that they have hired to speak to the Permits Committee and BACWA board. The ED will contact NACWA to obtain a consultant recommendation. A workgroup led by CCCSD, consisting of the ED, Margaret Orr, Bhupinder Dhaliwal, Jim Ervin, Nirmela Arsem of EBMUD, Tom Hall and Monica Oakley will work together to draft talking points. The ED will schedule a meeting with the State Water Resources Control Board (SWRCB), and meeting representatives from BACWA will be determined by the workgroup.

The ED will also schedule joint BACWA/RWQCB meeting.

**Agenda item 16, the PCB Permit Implementation Plan**, was discussed under earlier agenda items. A draft proposal for sampling analysis and reporting protocols is being circulated through EBMUD and then will be shared with the RWQCB.

Under **agenda item 17, Fiscal Year 2011 – 2012 BACWA Revenue & Expense Budget Discussion**, the EB reviewed the revised draft budget and requested that any feedback should be directed to her in preparation for approval at April Board meeting. Concern was raised about the amount budgeted for nutrients, and a suggestion was made to add funding for WET/TST efforts. The workplan will likely divide WQAS technical support budget items into regulatory issues and future concerns. Ed McCormick will try to reserve a room at EBMUD's Orinda facility on May 26, 2011 for a Board meeting to update the BACWA strategic plan. Kirsten Struve and Mike Connor will work with the ED on an initial draft of the revised strategic plan.

The next regular meeting is scheduled for **Monday, April 25, 2011, 11:30 a.m. to 3:30 p.m.** tentatively at HDR Walnut Creek location. Board will send any recommendations for alternate meeting locations to the ED.

The meeting adjourned at 1:00 p.m.



## Bay Area Clean Water Agencies

A Joint Powers Public Agency

Leading the Way to Protect our Bay

April 7, 2011

MEMO TO: Bay Area Clean Water Agencies Executive Board  
MEMO FROM: Gary Breau, Director of Finance, East Bay Municipal Utilities District  
SUBJECT: Seven Month Treasurer's Report

As required by section eight of the Joint Powers Agreement establishing the Bay Area Clean Water Agencies (BACWA) and California Government Code Sections 6500 et seq., attached is the BACWA Treasurer's Report for the period covering **July 1, 2010 through January 31, 2011** (first seven months of the Fiscal Year 2010-2011). This report covers expenditures, cash receipts, and cash transfers for the following BACWA funds:

- Bay Area Clean Water Agencies (BACWA),
- BACWA Training Fund (Trng Fnd),
- Air Issues and Regulation Group (AIR),
- Bay Area Pollution Prevention Group (BAPPG),
- BACWA Legal Reserve Fund (Legal Rsrv),
- Water Quality Attainment Strategy (WQA CBC),
- BACWA Operating Reserve Fund (BACWAOpRes),
- Regional Water Recycling (RWR),
- BACWA Reserve (Reserve),
- Water/Wastewater Operator Training (WOT),
- WQA Emergency Reserve Fund (WQA Emerg),
- WQA Tech Action Fund (TechAction),
- CBC Operating Reserve Fund (CBC OpRsrv), and
- Prop50 Bay Area Integrated Regional Water Mgmt (PRP50)

## Fund Balances as of month end 1/31/11

DESCRIPTION	BEGINNING FUND BALANCE 7/1/10	TOTAL RECEIPTS	TOTAL DISBURSEMENTS	ENDING FUND BALANCE 1/31/11	OUTSTANDING ENCUMBRANCES	UNOBLIGATED FUND BALANCE 1/31/11
BACWA	334,476	688,077	256,751	765,802	320,381	445,421
TRNG FND	250,000	1,081	-	251,081	-	251,081
AIR	2,592	84,980	18,922	68,650	71,871	(3,221)
BAPPG	49,131	80,268	30,522	98,877	74,824	24,053
LEGAL RSRV	300,000	1,298	-	301,298	-	301,298
WQA CBC	64,897	451,296	182,003	334,191	86,801	247,390
BACWAOPRES	153,500	663	2,562	151,601	-	151,601
RWR	16,516	71	-	16,588	-	16,588
RESERVE	120,000	-	-	120,000	-	120,000
WOT	55,288	146,330	58,500	143,117	-	143,117
WQA EMERG	400,000	1,730	-	401,730	-	401,730
TECHACTION	250,000	1,081	-	251,081	-	251,081
CBC OPRSRV	162,000	701	-	162,701	-	162,701
PRP50	18,148	506,148	328,812	195,484	70,083	125,401
	2,176,549	1,963,724	878,072	3,262,201	623,960	2,638,241



## BACWA Revenue Report for January 2011

DEPARTMENT	REVENUE TYPE	AMENDED BUDGET	CURRENT PERIOD			YEAR TO DATE				UNOBLIGATED
			DIRECT	INVOICED	JVS	DIRECT	INVOICED	JVS	ACTUAL	
Bay Area Clean Water Agencies	Administrative & General	-	-	-	(3,242)	-	-	-	-	-
Bay Area Clean Water Agencies	BDO Member Contributions	450,000	-	-	-	-	450,000	-	450,000	-
Bay Area Clean Water Agencies	BDO Other Receipts	-	-	73,158	(578,666)	-	73,158	(73,158)	-	-
Bay Area Clean Water Agencies	BDO Fund Transfers	-	-	-	73,158	-	-	73,158	73,158	(73,158)
Bay Area Clean Water Agencies	BDO Interest Income	15,000	-	-	1,587	-	-	2,919	2,919	12,081
Bay Area Clean Water Agencies	BDO Assoc.&Affiliate Contr	159,000	-	-	-	-	162,000	-	162,000	(3,000)
<b>BACWA TOTAL</b>		<b>624,000</b>	-	<b>73,158</b>	<b>(507,163)</b>	-	<b>685,158</b>	<b>2,919</b>	<b>688,077</b>	<b>(64,077)</b>
BACWA Training Fund	Administrative & General	-	-	-	(364)	-	-	-	-	-
BACWA Training Fund	BDO Interest Income	-	-	-	1,081	-	-	1,081	1,081	(1,081)
<b>TRNG FND TOTAL</b>		<b>-</b>	-	-	<b>717</b>	-	-	<b>1,081</b>	<b>1,081</b>	<b>(1,081)</b>
AIR-Air Issues&Regulation Grp	Administrative & General	-	-	-	(57)	-	-	-	-	-
AIR-Air Issues&Regulation Grp	BDO Member Contributions	83,400	-	-	-	-	84,828	-	84,828	(1,428)
AIR-Air Issues&Regulation Grp	BDO Interest Income	-	-	-	152	-	-	152	152	(152)
<b>AIR TOTAL</b>		<b>83,400</b>	-	-	<b>95</b>	-	<b>84,828</b>	<b>152</b>	<b>84,980</b>	<b>(1,580)</b>
BAPPG-BayAreaPollutnPreventGrp	Administrative & General	-	-	-	(84)	-	-	-	-	-
BAPPG-BayAreaPollutnPreventGrp	BDO Member Contributions	80,505	-	-	-	-	30,005	-	30,005	50,500
BAPPG-BayAreaPollutnPreventGrp	BDO Other Receipts	50,000	-	-	50,000	-	-	50,000	50,000	-
BAPPG-BayAreaPollutnPreventGrp	BDO Fund Transfers	-	-	50,000	(50,000)	-	50,000	(50,000)	-	-
BAPPG-BayAreaPollutnPreventGrp	BDO Interest Income	3,079	-	-	263	-	-	263	263	2,816
<b>BAPPG TOTAL</b>		<b>133,584</b>	-	<b>50,000</b>	<b>179</b>	-	<b>80,005</b>	<b>263</b>	<b>80,268</b>	<b>53,316</b>
BACWA Legal Reserve Fnd	Administrative & General	-	-	-	(437)	-	-	-	-	-
BACWA Legal Reserve Fnd	BDO Interest Income	-	-	-	1,298	-	-	1,298	1,298	(1,298)
<b>LEGAL RSRV TOTAL</b>		<b>-</b>	-	-	<b>861</b>	-	-	<b>1,298</b>	<b>1,298</b>	<b>(1,298)</b>
WQA-WtrQualityAttainmntStratgy	Administrative & General	-	-	-	(352)	-	-	-	-	-
WQA-WtrQualityAttainmntStratgy	BDO Member Contributions	450,000	-	-	-	-	450,500	-	450,500	(500)
WQA-WtrQualityAttainmntStratgy	BDO Other Receipts	-	-	4,000	(4,000)	-	4,000	(4,000)	-	-
WQA-WtrQualityAttainmntStratgy	BDO Interest Income	8,000	-	-	796	-	-	796	796	7,204
<b>WQA CBC TOTAL</b>		<b>458,000</b>	-	<b>4,000</b>	<b>(3,555)</b>	-	<b>454,500</b>	<b>(3,204)</b>	<b>451,296</b>	<b>6,704</b>
BACWA OperatingRsrve Fnd	Administrative & General	-	-	-	(224)	-	-	-	-	-
BACWA OperatingRsrve Fnd	BDO Interest Income	-	-	-	663	-	-	663	663	(663)
<b>BACWAOPRES TOTAL</b>		<b>-</b>	-	-	<b>439</b>	-	-	<b>663</b>	<b>663</b>	<b>(663)</b>

## BACWA Revenue Report for January 2011

DEPARTMENT	REVENUE TYPE	AMENDED BUDGET	CURRENT PERIOD			YEAR TO DATE				UNOBLIGATED
			DIRECT	INVOICED	JVS	DIRECT	INVOICED	JVS	ACTUAL	
Regional Water Recycling	BDO Interest Income	-	-	-	71	-	-	71	71	(71)
<b>RWR TOTAL</b>		-	-	-	<b>71</b>	-	-	<b>71</b>	<b>71</b>	<b>(71)</b>
WOT - Wtr/Wwtr Operat Training	Administrative & General	-	-	-	(132)	-	-	-	-	-
WOT - Wtr/Wwtr Operat Training	BDO Member Contributions	-	-	35,500	4,000	-	142,000	4,000	146,000	(146,000)
WOT - Wtr/Wwtr Operat Training	BDO Interest Income	-	-	-	330	-	-	330	330	(330)
<b>WOT TOTAL</b>		-	-	<b>35,500</b>	<b>4,197</b>	-	<b>142,000</b>	<b>4,330</b>	<b>146,330</b>	<b>(146,330)</b>
WQA Emergency Resrve Fnd	Administrative & General	-	-	-	(583)	-	-	-	-	-
WQA Emergency Resrve Fnd	BDO Interest Income	-	-	-	1,730	-	-	1,730	1,730	(1,730)
<b>WQA EMERG TOTAL</b>		-	-	-	<b>1,147</b>	-	-	<b>1,730</b>	<b>1,730</b>	<b>(1,730)</b>
WQA Tech Action Fund	Administrative & General	-	-	-	(364)	-	-	-	-	-
WQA Tech Action Fund	BDO Interest Income	-	-	-	1,081	-	-	1,081	1,081	(1,081)
<b>TECHACTION TOTAL</b>		-	-	-	<b>717</b>	-	-	<b>1,081</b>	<b>1,081</b>	<b>(1,081)</b>
CBC Operating Resrve Fnd	Administrative & General	-	-	-	(236)	-	-	-	-	-
CBC Operating Resrve Fnd	BDO Interest Income	-	-	-	701	-	-	701	701	(701)
<b>CBC OPRSRV TOTAL</b>		-	-	-	<b>465</b>	-	-	<b>701</b>	<b>701</b>	<b>(701)</b>
Prop50BayAreaIntegRegnlWtrMgmt	Administrative & General	-	-	-	(26)	-	-	-	-	-
Prop50BayAreaIntegRegnlWtrMgmt	BDO Interest Income	-	-	-	640	-	-	640	640	(640)
Prop50BayAreaIntegRegnlWtrMgmt	BDO Administrative Expense	-	-	-	12,482	-	-	12,482	12,482	(12,482)
Prop50BayAreaIntegRegnlWtrMgmt	Contra Costa Regional Intertie	-	-	-	181,397	-	-	181,397	181,397	(181,397)
Prop50BayAreaIntegRegnlWtrMgmt	Redwood City RWP	-	-	-	-	-	-	-	-	-
Prop50BayAreaIntegRegnlWtrMgmt	Alameda Creek Phase 2 Fish	-	-	-	311,629	-	-	311,629	311,629	(311,629)
<b>PRP50 TOTAL</b>		-	-	-	<b>506,122</b>	-	-	<b>506,148</b>	<b>506,148</b>	<b>(506,148)</b>

## BACWA Expense Report for January 2011

DEPARTMENT	EXPENSE TYPE	AMENDED BUDGET	CURRENT PERIOD				YEAR TO DATE				OBLIGATED	UNOBLIGATED
			ENC	PV	DA	JV	ENC	PV	DA	JV		
Bay Area Clean Water Agencies	BC-Collections System	25,000	-	-	-	-	17,216	7,784	-	-	25,000	1
Bay Area Clean Water Agencies	BC-Permit Committee	25,000	-	-	-	-	20,716	4,284	-	-	25,000	-
Bay Area Clean Water Agencies	BC-Water Recycling Committee	11,000	-	-	-	-	-	-	-	-	-	11,000
Bay Area Clean Water Agencies	BC-Biosolids Committee	10,000	-	-	-	-	-	-	-	-	-	10,000
Bay Area Clean Water Agencies	BC-InfoShare Groups	25,000	(3,386)	3,386	-	-	17,526	7,474	-	-	25,000	-
Bay Area Clean Water Agencies	BC-Laboratory Committee	7,000	-	-	-	-	-	-	3,029	-	3,029	3,971
Bay Area Clean Water Agencies	BC-Miscellaneous Committee Sup	10,000	-	-	-	-	-	-	2,931	-	2,931	7,069
Bay Area Clean Water Agencies	TS-Media Relations Support	25,000	(3,038)	3,038	-	-	16,259	8,741	-	-	25,000	-
Bay Area Clean Water Agencies	TS-Consultant Support	100,000	6,590	2,910	-	-	67,782	11,718	-	-	79,500	20,500
Bay Area Clean Water Agencies	LS-Regulatory Support	20,000	(1,317)	1,317	-	-	8,299	1,701	3,878	-	13,878	6,122
Bay Area Clean Water Agencies	LS-Executive Board Support	10,000	-	-	-	-	5,000	-	-	-	5,000	5,000
Bay Area Clean Water Agencies	CAS-CWAA	10,000	-	-	-	-	-	-	10,000	-	10,000	-
Bay Area Clean Water Agencies	CAS-PSSEP	20,000	-	-	-	-	-	-	-	-	-	20,000
Bay Area Clean Water Agencies	CAS-CPSC	5,000	-	-	-	-	-	-	5,000	-	5,000	-
Bay Area Clean Water Agencies	CAS-PSI	500	-	-	-	-	-	-	500	-	500	-
Bay Area Clean Water Agencies	CAR-BACWA Annual Report	20,000	-	-	-	-	-	8,000	1,633	-	9,633	10,367
Bay Area Clean Water Agencies	CAR-BACWA Website Development/	70,000	(2,655)	2,655	-	-	11,489	14,261	1,325	-	27,075	42,925
Bay Area Clean Water Agencies	AS-BACWA Admin Expense	8,000	-	-	-	-	-	-	803	-	803	7,197
Bay Area Clean Water Agencies	CAR-Other Communications	15,000	-	-	-	-	13,590	4,410	194	-	18,194	(3,194)
Bay Area Clean Water Agencies	SP-BAPPG Contribution	50,000	-	-	50,000	-	-	-	50,000	-	50,000	-
Bay Area Clean Water Agencies	GBS-Contingency	15,000	-	-	-	-	-	-	-	-	-	15,000
Bay Area Clean Water Agencies	GBS- Meeting Support	10,000	-	-	-	-	717	283	4,874	-	5,874	4,126
Bay Area Clean Water Agencies	AS-Executive Director	130,000	(10,833)	10,833	-	-	65,000	65,000	-	-	130,000	-
Bay Area Clean Water Agencies	AS-Assistant Executive Directo	70,000	(9,225)	9,225	-	-	33,010	35,190	-	-	68,200	1,800
Bay Area Clean Water Agencies	AS-EBMUD Administrative Servic	44,000	-	-	-	-	43,777	-	-	-	43,777	223
Bay Area Clean Water Agencies	AS-Insurance	5,000	-	-	-	-	-	-	3,740	-	3,740	1,260
Bay Area Clean Water Agencies	WQA-CE-Technical Support	-	-	-	-	-	-	-	-	-	-	-
Bay Area Clean Water Agencies	BDO Contract Expenses	-	-	-	-	-	-	-	-	-	-	-
<b>BACWA TOTAL</b>		<b>740,500</b>	<b>(23,864)</b>	<b>33,364</b>	<b>50,000</b>	<b>-</b>	<b>320,381</b>	<b>168,845</b>	<b>87,906</b>	<b>-</b>	<b>577,132</b>	<b>163,368</b>
AIR-Air Issues&Regulation Grp	BDO Administrative Expense	4,038	-	-	4,038	-	-	-	4,038	-	4,038	-
AIR-Air Issues&Regulation Grp	BDO Contract Expenses	86,755	-	-	-	-	71,871	14,884	-	-	86,755	0
<b>AIR TOTAL</b>		<b>90,793</b>	<b>-</b>	<b>-</b>	<b>4,038</b>	<b>-</b>	<b>71,871</b>	<b>14,884</b>	<b>4,038</b>	<b>-</b>	<b>90,793</b>	<b>0</b>
BAPPG-BayAreaPollutnPreventGrp	BAPPG-CE-Fog	21,800	3,038	(3,038)	-	-	14,800	-	2,318	-	17,118	4,682
BAPPG-BayAreaPollutnPreventGrp	BAPPG-CE-Mercury	9,500	-	-	-	-	3,564	3,376	-	-	6,940	2,560
BAPPG-BayAreaPollutnPreventGrp	BAPPG-CE-Pesticides	16,000	5,000	1,000	-	-	5,000	1,000	10,000	-	16,000	-
BAPPG-BayAreaPollutnPreventGrp	BAPPG-CE-Copper	4,000	-	-	-	-	2,050	2,010	-	-	4,060	(60)
BAPPG-BayAreaPollutnPreventGrp	BAPPG-CE-Pharmaceutical	4,999	4,999	-	-	-	4,999	-	-	-	4,999	-
BAPPG-BayAreaPollutnPreventGrp	BAPPG-CE-General P2	46,500	4,999	-	-	-	43,611	1,388	1,420	-	46,419	81
BAPPG-BayAreaPollutnPreventGrp	BAPPG-CE-Emerging Issues	5,000	-	-	-	-	-	-	-	-	-	5,000
BAPPG-BayAreaPollutnPreventGrp	BAPPG-CE-Other	8,396	(280)	280	-	-	800	3,200	-	-	4,000	4,396
BAPPG-BayAreaPollutnPreventGrp	BDO Administrative Expense	5,810	-	-	5,810	-	-	-	5,810	-	5,810	-
<b>BAPPG TOTAL</b>		<b>122,005</b>	<b>17,756</b>	<b>(1,758)</b>	<b>5,810</b>	<b>-</b>	<b>74,824</b>	<b>10,974</b>	<b>19,548</b>	<b>-</b>	<b>105,346</b>	<b>16,659</b>

## BACWA Expense Report for January 2011

DEPARTMENT	EXPENSE TYPE	AMENDED BUDGET	CURRENT PERIOD				YEAR TO DATE				OBLIGATED	UNOBLIGATED
			ENC	PV	DA	JV	ENC	PV	DA	JV		
WQA-WtrQualityAttainmntStratgy	WQA-CE-Technical Support	191,728	19,166	4,635	-	-	54,696	55,830	-	-	110,526	81,202
WQA-WtrQualityAttainmntStratgy	WQA-CE-Collaborations & Sponso	50,000	-	-	-	-	-	-	50,000	-	50,000	-
WQA-WtrQualityAttainmntStratgy	WQA-CE-Trainings	7,190	-	-	-	-	-	-	-	-	-	7,190
WQA-WtrQualityAttainmntStratgy	WQA-CE-Commun. & Reporting	65,000	-	-	-	-	20,000	-	-	-	20,000	45,000
WQA-WtrQualityAttainmntStratgy	WQA-CE-Program Mgmt	39,000	-	-	-	-	-	-	-	-	-	39,000
WQA-WtrQualityAttainmntStratgy	WQA-CE-Other	103,430	-	-	-	-	12,105	6,825	8,538	-	27,468	75,962
WQA-WtrQualityAttainmntStratgy	BDO Administrative Expense	21,810	-	-	60,810	-	-	-	60,810	-	60,810	(39,000)
<b>WQA CBC TOTAL</b>		<b>478,158</b>	<b>19,166</b>	<b>4,635</b>	<b>60,810</b>	<b>-</b>	<b>86,801</b>	<b>62,655</b>	<b>119,348</b>	<b>-</b>	<b>268,804</b>	<b>209,354</b>
BACWA OperatingRsrv Fnd	BDO Contract Expenses	-	-	-	-	-	-	-	2,562	-	2,562	(2,562)
<b>BACWA OPRES TOTAL</b>		<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2,562</b>	<b>-</b>	<b>2,562</b>	<b>(2,562)</b>
WOT - Wtr/Wwtr Operat Training	BDO Administrative Expense	2,500	-	-	2,500	-	-	-	2,500	-	2,500	-
WOT - Wtr/Wwtr Operat Training	BDO Contract Expenses	81,000	-	-	-	-	-	-	56,000	-	56,000	25,000
<b>WOT TOTAL</b>		<b>83,500</b>	<b>-</b>	<b>-</b>	<b>2,500</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>58,500</b>	<b>-</b>	<b>58,500</b>	<b>25,000</b>
Prop50BayAreaIntegRegnlWtrMgmt	Reloc HYD 11595 Edgewater OAK	-	-	-	-	-	-	-	-	-	-	-
Prop50BayAreaIntegRegnlWtrMgmt	BDO Administrative Expense	8,000	(270)	270	-	-	266	1,734	167	-	2,167	5,833
Prop50BayAreaIntegRegnlWtrMgmt	BDO Contract Expenses	78,017	-	-	-	-	69,817	8,200	-	-	78,017	0
Prop50BayAreaIntegRegnlWtrMgmt	Contra Costa Regional Intertie	-	-	-	-	176,731	-	-	-	176,731	176,731	(176,731)
Prop50BayAreaIntegRegnlWtrMgmt	Redwood City RWP	-	-	-	-	99,556	-	-	-	99,556	99,556	(99,556)
Prop50BayAreaIntegRegnlWtrMgmt	N. Marin RWP	-	-	-	-	24,455	-	-	-	24,455	24,455	(24,455)
Prop50BayAreaIntegRegnlWtrMgmt	Agency Prefunding Admin Exp	-	-	-	-	17,968	-	-	-	17,968	17,968	(17,968)
<b>PRP50 TOTAL</b>		<b>86,017</b>	<b>(270)</b>	<b>270</b>	<b>-</b>	<b>318,711</b>	<b>70,083</b>	<b>9,934</b>	<b>167</b>	<b>318,711</b>	<b>398,895</b>	<b>(312,878)</b>

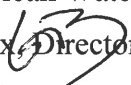


# Bay Area Clean Water Agencies

A Joint Powers Public Agency

Leading the Way to Protect our Bay

April 11, 2011

MEMO TO: Bay Area Clean Water Agencies Executive Board  
MEMO FROM: Gary Breaux,  Director of Finance, East Bay Municipal Utility District  
SUBJECT: Eight Month Treasurer's Report

As required by section eight of the Joint Powers Agreement establishing the Bay Area Clean Water Agencies (BACWA) and California Government Code Sections 6500 et seq., attached is the BACWA Treasurer's Report for the period covering **July 1, 2010 through February 28, 2011** (first eight months of the Fiscal Year 2010-2011). This report covers expenditures, cash receipts, and cash transfers for the following BACWA funds:

- Bay Area Clean Water Agencies (BACWA),
- BACWA Training Fund (Trng Fnd),
- Air Issues and Regulation Group (AIR),
- Bay Area Pollution Prevention Group (BAPPG),
- BACWA Legal Reserve Fund (Legal Rsrv),
- Water Quality Attainment Strategy (WQA CBC),
- BACWA Operating Reserve Fund (BACWAOpRes),
- Regional Water Recycling (RWR),
- BACWA Reserve (Reserve),
- Water/Wastewater Operator Training (WOT),
- WQA Emergency Reserve Fund (WQA Emerg),
- WQA Tech Action Fund (TechAction),
- CBC Operating Reserve Fund (CBC OpRsrv), and
- Prop50 Bay Area Integrated Regional Water Mgmt (PRP50)

## Fund Balances as of month end 2/28/11

DESCRIPTION	BEGINNING FUND BALANCE 7/1/10	TOTAL RECEIPTS	TOTAL DISBURSEMENTS	ENDING FUND BALANCE 2/28/11	OUTSTANDING ENCUMBRANCES	UNOBLIGATED FUND BALANCE 2/28/11
BACWA	334,476	688,077	309,556	712,996	273,103	439,894
TRNG FND	250,000	1,081	-	251,081	-	251,081
AIR	2,592	84,980	33,838	53,733	56,954	(3,221)
BAPPG	49,131	80,268	63,018	66,381	44,828	21,553
LEGAL RSRV	300,000	1,298	-	301,298	-	301,298
WQA CBC	64,897	451,296	194,476	321,718	77,454	244,264
BACWAOPRES	153,500	663	2,562	151,601	-	151,601
RWR	16,516	71	-	16,588	-	16,588
RESERVE	120,000	-	-	120,000	-	120,000
WOT	55,288	146,330	58,500	143,117	-	143,117
WQA EMERG	400,000	1,730	-	401,730	-	401,730
TECHACTION	250,000	1,081	-	251,081	-	251,081
CBC OPRSRV	162,000	701	-	162,701	-	162,701
PRP50	18,148	506,148	328,924	195,372	69,971	125,401
	2,176,549	1,963,724	990,875	3,149,398	522,310	2,627,088

# BACWA Revenue Report for February 2011

DEPARTMENT	REVENUE TYPE	AMENDED BUDGET	CURRENT PERIOD			YEAR TO DATE			UNOBLIGATED
			DIRECT	INVOICED	JVS	DIRECT	INVOICED	JVS	
Bay Area Clean Water Agencies	Administrative & General	-	-	-	-	-	-	-	-
Bay Area Clean Water Agencies	BDO Member Contributions	450,000	-	-	-	-	450,000	-	-
Bay Area Clean Water Agencies	BDO Other Receipts	-	-	-	-	-	73,158	(73,158)	-
Bay Area Clean Water Agencies	BDO Fund Transfers	-	-	-	-	-	73,158	73,158	(73,158)
Bay Area Clean Water Agencies	BDO Interest Income	15,000	-	-	-	-	2,919	2,919	12,081
Bay Area Clean Water Agencies	BDO Assoc & Affiliate Contr	159,000	-	-	-	-	162,000	-	(3,000)
<b>BACWA TOTAL</b>		<b>624,000</b>	-	-	-	-	<b>685,158</b>	<b>2,919</b>	<b>(64,077)</b>
BACWA Training Fund	Administrative & General	-	-	-	-	-	-	-	-
BACWA Training Fund	BDO Interest Income	-	-	-	-	-	-	1,081	(1,081)
<b>TRNG FND TOTAL</b>			-	-	-	-	-	<b>1,081</b>	<b>(1,081)</b>
AIR-Air Issues&Regulation Grp	Administrative & General	-	-	-	-	-	-	-	-
AIR-Air Issues&Regulation Grp	BDO Member Contributions	83,400	-	-	-	-	84,828	-	(1,428)
AIR-Air Issues&Regulation Grp	BDO Interest Income	-	-	-	-	-	-	152	(152)
<b>AIR TOTAL</b>		<b>83,400</b>	-	-	-	-	<b>84,828</b>	<b>152</b>	<b>(1,580)</b>
BAPPG-BayAreaPollutnPreventGrp	Administrative & General	-	-	-	-	-	-	-	-
BAPPG-BayAreaPollutnPreventGrp	BDO Member Contributions	80,505	-	-	-	-	30,005	-	50,500
BAPPG-BayAreaPollutnPreventGrp	BDO Other Receipts	50,000	-	-	-	-	-	50,000	-
BAPPG-BayAreaPollutnPreventGrp	BDO Fund Transfers	-	-	-	-	-	50,000	(50,000)	-
BAPPG-BayAreaPollutnPreventGrp	BDO Interest Income	3,079	-	-	-	-	-	263	2,816
<b>BAPPG TOTAL</b>		<b>133,584</b>	-	-	-	-	<b>80,005</b>	<b>263</b>	<b>53,316</b>
BACWA Legal Reserve Fnd	Administrative & General	-	-	-	-	-	-	-	-
BACWA Legal Reserve Fnd	BDO Interest Income	-	-	-	-	-	-	755	(755)
<b>LEGAL RSRV TOTAL</b>			-	-	-	-	-	<b>755</b>	<b>(755)</b>
WQA-WtrQualityAttainmntStragy	Administrative & General	-	-	-	-	-	-	-	-
WQA-WtrQualityAttainmntStragy	BDO Member Contributions	450,000	-	-	-	-	450,500	-	(500)
WQA-WtrQualityAttainmntStragy	BDO Other Receipts	-	-	-	-	-	4,000	(4,000)	-
WQA-WtrQualityAttainmntStragy	BDO Interest Income	8,000	-	-	-	-	-	749	7,251
<b>WQA CBC TOTAL</b>		<b>458,000</b>	-	-	-	-	<b>454,500</b>	<b>(3,251)</b>	<b>6,751</b>
BACWA OperatingRsrve Fnd	Administrative & General	-	-	-	-	-	-	-	-
BACWA OperatingRsrve Fnd	BDO Interest Income	-	-	-	-	-	-	663	(663)
<b>BACWA OPRES TOTAL</b>			-	-	-	-	-	<b>663</b>	<b>(663)</b>

## BACWA Revenue Report for February 2011

DEPARTMENT	REVENUE TYPE	AMENDED BUDGET	CURRENT PERIOD			YEAR TO DATE			UNOBLIGATED
			DIRECT	INVOICED	JVS	DIRECT	INVOICED	JVS	
Regional Water Recycling	BDO Interest Income	-	-	-	-	-	-	71	(71)
<b>RWR TOTAL</b>		-	-	-	-	-	-	71	(71)
WOT - Wtr/Wwtr Operat Training	Administrative & General	-	-	-	-	-	-	-	-
WOT - Wtr/Wwtr Operat Training	BDO Member Contributions	-	-	-	-	-	142,000	4,000	(146,000)
WOT - Wtr/Wwtr Operat Training	BDO Interest Income	-	-	-	-	-	-	330	(330)
<b>WOT TOTAL</b>		-	-	-	-	-	142,000	4,330	(146,330)
WQA Emergency Reserve Fnd	Administrative & General	-	-	-	-	-	-	-	-
WQA Emergency Reserve Fnd	BDO Interest Income	-	-	-	-	-	-	1,730	(1,730)
<b>WQA EMERG TOTAL</b>		-	-	-	-	-	-	1,730	(1,730)
WQA Tech Action Fund	Administrative & General	-	-	-	-	-	-	-	-
WQA Tech Action Fund	BDO Interest Income	-	-	-	-	-	-	1,081	(1,081)
<b>TECHACTION TOTAL</b>		-	-	-	-	-	-	1,081	(1,081)
CBC Operating Reserve Fnd	Administrative & General	-	-	-	-	-	-	-	-
CBC Operating Reserve Fnd	BDO Interest Income	-	-	-	-	-	-	701	(701)
<b>CBC OPRESRV TOTAL</b>		-	-	-	-	-	-	701	(701)
Prop50BayAreaIntegRegnlWtrMgmt	Administrative & General	-	-	-	-	-	-	-	-
Prop50BayAreaIntegRegnlWtrMgmt	BDO Interest Income	-	-	-	-	-	-	640	(640)
Prop50BayAreaIntegRegnlWtrMgmt	BDO Administrative Expense	-	-	-	-	-	-	12,482	(12,482)
Prop50BayAreaIntegRegnlWtrMgmt	Contra Costa Regional Intertie	-	-	-	-	-	-	181,397	(181,397)
Prop50BayAreaIntegRegnlWtrMgmt	Redwood City RWP	-	-	-	-	-	-	-	-
Prop50BayAreaIntegRegnlWtrMgmt	Alameda Creek Phase 2 Fish	-	-	-	-	-	-	311,629	(311,629)
<b>PRP50 TOTAL</b>		-	-	-	-	-	-	506,148	(506,148)



# BACWA Expense Report for February 2011

DEPARTMENT	EXPENSE TYPE	AMENDED BUDGET	CURRENT PERIOD			YEAR TO DATE			OBLIGATED	UNOBLIGATED
			ENC	PV	DA	PV	DA	JV		
Bay Area Clean Water Agencies	BC-Collections System	25,000	(7,715)	7,716	-	15,500	-	-	25,001	(1)
Bay Area Clean Water Agencies	BC-Permit Committee	25,000	(10,367)	10,369	-	14,633	-	-	25,002	(2)
Bay Area Clean Water Agencies	BC-Water Recycling Committee	11,000	-	-	-	-	-	-	-	11,000
Bay Area Clean Water Agencies	BC-Biosolids Committee	10,000	-	-	-	-	-	-	-	10,000
Bay Area Clean Water Agencies	BC-InfoShare Groups	25,000	-	-	-	7,474	-	-	25,000	-
Bay Area Clean Water Agencies	BC-Laboratory Committee	7,000	-	-	-	-	3,029	-	3,029	3,971
Bay Area Clean Water Agencies	BC-Miscellaneous Committee Sup	10,000	-	-	-	-	2,931	-	2,931	7,069
Bay Area Clean Water Agencies	TS-Media Relations Support	25,000	(3,600)	3,600	-	12,341	-	-	25,000	-
Bay Area Clean Water Agencies	TS-Consultant Support	100,000	(9,339)	9,339	-	21,057	-	-	79,500	20,500
Bay Area Clean Water Agencies	LS-Regulatory Support	20,000	(130)	130	-	1,831	3,878	-	13,878	6,122
Bay Area Clean Water Agencies	LS-Executive Board Support	10,000	-	-	-	5,000	-	-	5,000	5,000
Bay Area Clean Water Agencies	CAS-CWAA	10,000	-	-	-	-	10,000	-	10,000	-
Bay Area Clean Water Agencies	CAS-PSSEP	20,000	-	-	-	-	-	-	-	20,000
Bay Area Clean Water Agencies	CAS-CPSC	5,000	-	-	-	-	5,000	-	5,000	-
Bay Area Clean Water Agencies	CAS-PSI	500	-	-	-	-	500	-	500	-
Bay Area Clean Water Agencies	CAR-BACWA Annual Report	20,000	-	-	-	-	-	-	-	10,367
Bay Area Clean Water Agencies	CAR-BACWA Website Development/	70,000	(403)	403	46	8,000	1,633	-	9,633	42,879
Bay Area Clean Water Agencies	AS-BACWA Admin Expense	8,000	-	-	1,147	14,684	1,371	-	27,121	6,051
Bay Area Clean Water Agencies	CAR-Other Communications	15,000	-	-	-	-	1,949	-	1,949	(3,194)
Bay Area Clean Water Agencies	SP-BAPPG Contribution	50,000	-	-	-	4,410	194	-	18,194	-
Bay Area Clean Water Agencies	GBS-Contingency	15,000	-	-	2,320	-	50,000	-	50,000	-
Bay Area Clean Water Agencies	GBS- Meeting Support	10,000	(143)	143	2,010	426	2,320	-	2,320	12,680
Bay Area Clean Water Agencies	AS-Executive Director	130,000	(10,833)	10,833	-	75,833	6,884	-	7,884	2,116
Bay Area Clean Water Agencies	AS-Assistant Executive Directo	70,000	(4,748)	4,748	-	39,938	-	-	130,000	1,800
Bay Area Clean Water Agencies	AS-EBMUD Administrative Serv	44,000	-	-	-	43,777	-	-	43,777	223
Bay Area Clean Water Agencies	AS-Insurance	5,000	-	-	-	-	3,740	-	3,740	1,260
Bay Area Clean Water Agencies	WQA-CE-Technical Support	-	-	-	-	-	-	-	-	-
Bay Area Clean Water Agencies	BDO Contract Expenses	-	-	-	-	-	-	-	-	-
BACWA TOTAL		740,500	(47,279)	47,283	5,523	216,127	93,429	-	582,659	157,841
AIR-Air Issues&Regulation Grp	BDO Administrative Expense	4,038	-	-	-	-	4,038	-	4,038	-
AIR-Air Issues&Regulation Grp	BDO Contract Expenses	86,755	(14,917)	14,917	-	29,800	-	-	86,755	0
AIR TOTAL		90,793	(14,917)	14,917	-	29,800	4,038	-	90,793	0
BAPPG-BayAreaPollutnPreventGrp	BAPPG-CE-Fog	21,800	(14,787)	14,787	-	13	2,318	-	17,118	4,682
BAPPG-BayAreaPollutnPreventGrp	BAPPG-CE-Mercury	9,500	1,300	1,200	-	4,864	4,576	-	9,440	60
BAPPG-BayAreaPollutnPreventGrp	BAPPG-CE-Pesticides	16,000	(1,160)	1,160	-	3,840	2,160	-	16,000	-
BAPPG-BayAreaPollutnPreventGrp	BAPPG-CE-Copper	4,000	-	-	-	2,050	2,010	-	4,060	(60)
BAPPG-BayAreaPollutnPreventGrp	BAPPG-CE-Pharmaceutical	4,999	(1,799)	1,799	-	3,200	1,799	-	4,999	-
BAPPG-BayAreaPollutnPreventGrp	BAPPG-CE-General P2	46,500	(13,310)	13,310	-	30,301	14,698	-	46,419	81
BAPPG-BayAreaPollutnPreventGrp	BAPPG-CE-Emerging Issues	5,000	-	-	-	-	-	-	-	5,000
BAPPG-BayAreaPollutnPreventGrp	BAPPG-CE-Other	8,396	(240)	240	-	560	3,440	-	4,000	4,396
BAPPG-BayAreaPollutnPreventGrp	BDO Administrative Expense	5,810	-	-	-	-	5,810	-	5,810	-
BAPPG TOTAL		122,005	(29,996)	32,496	-	44,828	43,470	-	107,846	14,159

# BACWA Expense Report for February 2011

DEPARTMENT	EXPENSE TYPE	AMENDED BUDGET	CURRENT PERIOD			YEAR TO DATE			OBLIGATED	UNOBLIGATED
			ENC	PV	DA	ENC	PV	DA		
WQA-WtrQualityAtainmntStralg	WQA-CE-Technical Support	191,728	(4,553)	3,715	-	50,143	59,545	-	109,687	82,041
WQA-WtrQualityAtainmntStralg	WQA-CE-Collaborations & Sponso	50,000	-	-	-	-	-	50,000	50,000	-
WQA-WtrQualityAtainmntStralg	WQA-CE-Trainings	7,190	-	-	-	-	-	-	-	7,190
WQA-WtrQualityAtainmntStralg	WQA-CE-Commun. & Reporting	65,000	(1,629)	1,629	-	18,371	1,629	-	20,000	45,000
WQA-WtrQualityAtainmntStralg	WQA-CE-Program Mgmt	39,000	-	-	-	-	-	-	-	39,000
WQA-WtrQualityAtainmntStralg	WQA-CE-Other	103,430	(3,165)	2,130	5,000	8,940	8,955	13,538	31,433	71,997
WQA-WtrQualityAtainmntStralg	BDO Administrative Expense	21,810	-	-	-	-	-	60,810	60,810	(39,000)
WQA CBC TOTAL		478,158	(9,347)	7,473	5,000	77,454	70,128	124,348	271,930	206,228
BACWA OperatingRsve Fnd	BDO Contract Expenses	-	-	-	-	-	-	2,562	2,562	(2,562)
BACWA OPRES TOTAL		-	-	-	-	-	-	2,562	2,562	(2,562)
WOT - WtrWwtr Operat Training	BDO Administrative Expense	2,500	-	-	-	-	-	2,500	2,500	-
WOT - WtrWwtr Operat Training	BDO Contract Expenses	81,000	-	-	-	-	-	56,000	56,000	25,000
WOT TOTAL		83,500	-	-	-	-	-	58,500	58,500	25,000
Prop50BayArealntegRegnlWtrMgmt	Reloc HYD 11595 Edgewater OAK	-	-	-	-	-	-	-	-	-
Prop50BayArealntegRegnlWtrMgmt	BDO Administrative Expense	8,000	(112)	112	-	154	1,846	167	2,167	5,833
Prop50BayArealntegRegnlWtrMgmt	BDO Contract Expenses	78,017	-	-	-	69,817	8,200	-	78,017	0
Prop50BayArealntegRegnlWtrMgmt	Contra Costa Regional Intertie	-	-	-	-	-	-	-	176,731	(176,731)
Prop50BayArealntegRegnlWtrMgmt	Redwood City RWP	-	-	-	-	-	-	-	99,556	(99,556)
Prop50BayArealntegRegnlWtrMgmt	N. Marin RWP	-	-	-	-	-	-	-	24,455	(24,455)
Prop50BayArealntegRegnlWtrMgmt	Agency Prefunding Admin Exp	-	-	-	-	-	-	-	17,968	(17,968)
PRP50 TOTAL		86,017	(112)	112	-	69,971	10,046	167	318,711	(312,878)



## BACWA EXECUTIVE BOARD ACTION REQUEST

AGENDA NO.: 5

FILE NO.: 12,403

MEETING DATE: April 25, 2011

**TITLE: Biennial State of the Estuary Conference Sponsorship**

☒ MOTION \_\_\_\_\_ ☐ RESOLUTION \_\_\_\_\_

**RECOMMENDED ACTION**

Approve a request from the San Francisco Estuary Partnership to sponsor the 10<sup>th</sup> Biennial State of the Estuary Conference; not to exceed \$20,000, FY 2010-2011.

**SUMMARY**

As a member of the San Francisco Estuary Partnership (SFEP) and Interagency Coordinating Committee for the Comprehensive Conservation and Management Plan, BACWA has regularly sponsored the SFEP-organized State of the Estuary Conference, which will be held on September 20<sup>th</sup> and 21<sup>st</sup> of this year.

The level of sponsorship proposed is the same as it was for the previous conference and was included in the approved workplan and budget for this fiscal year.

**FISCAL IMPACT**

This project was included in the Fiscal Year 2010-2011 budget and workplan and sufficient funds are available.

**ALTERNATIVES**

No alternatives were considered.

Submitted: \_\_\_\_\_

Executive Director Approval: /s/ Amy Chastain



February 7, 2011

Amy Chastain  
Bay Area Clean Water Agencies  
PO Box 24055, MS702  
Oakland, CA 94623

Dear Amy:

As a previous supporter of the Partnership's biennial State of the Estuary conferences, you'll be interested to know that the next conference will be September 20-21 at the Oakland Marriott. To celebrate the 10<sup>th</sup> anniversary of this important conference, we've added an opening gala at the Aquarium of the Bay the evening of September 19<sup>th</sup> in San Francisco.

As always, the conference brings scientists, resource managers, elected officials, and community members to meet and assess the health of the Estuary. The 2009 conference featured Lisa Jackson, EPA administrator, and keynotes from the late Stephen Schneider, the Nobel Peace Prize winner for his work on the United Nation's Intergovernmental Panel on Climate Change. We also heard from Michael Grunwald, Time Magazine reporter and author of *The Swamp*, about the battles to save the Everglades.

This year's conference will be equally ambitious and exciting. The results of our 2011 *State of the Estuary Report* will be released, and among many other key topics, experts on the issue will address the Delta's many challenges and its prospects for recovery within the current fiscal and political environment. In view of the state's difficult economic times, we are committed to putting on another terrific conference while reducing registration fees from years past. This is why I am writing to you now.

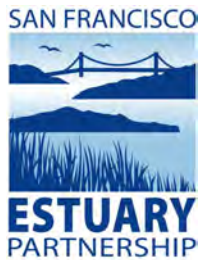
We are very grateful for BACWA's support of the 2009 conference at the **\$20,000.00** level and I am asking you to make that commitment once again. Sponsors at this level will be acknowledged in conference materials, and receive 15 complimentary passes and exhibitor table space – and you'll be making a significant contribution to lower conference fees for all.

We know that you recognize the value of this conference. Please contact me at 510-622-8137 or [jakelly@waterboards.ca.gov](mailto:jakelly@waterboards.ca.gov) with questions. Thank you for considering our request.

Sincerely,

A handwritten signature in blue ink that reads "Judy A. Kelly".

Judy Kelly, Director



February 7, 2011

Invoice Request #110002  
SFEP Tax ID# 94-2832478

To: Amy Chastain  
Bay Area Clean Water Agencies  
PO Box 24055, MS702  
Oakland, CA 94623

Sponsorship Amount: \$20,000.00

For: Sponsorship of the 2011 State of the San Francisco Estuary Conference to be held  
September 20-21 at the Oakland Marriott City Center Hotel.

Please make check payable to SFEP/ABAG and mail to:

San Francisco Estuary Partnership  
1515 Clay Street, Suite 1400  
Oakland, CA 94612  
Attn: State of the Estuary Conference

Thank you for your support of the conference.



## BACWA EXECUTIVE BOARD ACTION REQUEST

AGENDA NO.: 6

FILE NO.: 12,404

MEETING DATE: April 25, 2011

**TITLE: Fiscal Year 2011 – 2012 Budget & Workplan**

☒ MOTION \_\_\_\_\_ ☐ RESOLUTION \_\_\_\_\_

### RECOMMENDED ACTION

Approve the budget and workplan for the fiscal year covering July 1, 2011 through June 30, 2012.

### SUMMARY

The Joint Powers Agreement establishing BACWA requires approval of a budget and workplan for the coming fiscal year's activities no later than June of the preceding fiscal year. In practice, the budget and workplan must be approved at least sixty days in advance of the start of the fiscal year to allow time for BACWA's Treasurer to enter the budget into the accounting systems. This budget can be amended by the Executive Board at any time in the future.

The attached budget is based on the assumption that revenues for the coming year will be the same as those for the Fiscal Year 2010 – 2011, to which the Executive Board agreed at the February 24, 2011 regular Board meeting.

### FISCAL IMPACT

### ALTERNATIVES

BACWA's contracting policy does not apply to this situation, therefore no alternatives were considered.

### ATTACHMENTS

1. Budget & workplan.

Submitted: \_\_\_\_\_

Executive Director Approval: /s/ Amy Chastain



## WORKPLAN

FISCAL YEAR 2011 – 2012

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## INTRODUCTION

The Bay Area Clean Water Agencies (BACWA) is a joint public powers agency created by a 1984 Joint Powers Agreement (JPA) between the Central Contra Costa Sanitary District (CCCSD), the East Bay Dischargers Association (EBDA), the East Bay Municipal Utility District (EBMUD), the City of San Francisco, and the City of San Jose (collectively, “the Principal Agencies”). The JPA requires approval of an annual budget and workplan divided into three parts: overhead (Part A), general benefit programs (Part B), and special benefit programs (Part C).

The JPA requires that revenues for each fiscal year be equivalent to anticipated expenditures. Expenditures for Management & Administration and General Benefit Programs are funded by all BACWA members, because these programs are carried out on behalf of all member agencies. BACWA currently has two General Benefit Programs: the core BACWA program to support member agencies and the Clean Bay Collaborative. Expenditures for Special Benefit Programs are funded by those agencies that elect to fund those programs. BACWA currently has four Special Benefit Programs: the Air Information and Resources Committee, the Bay Area Pollution Prevention Committee, Water Operator Training, and Proposition 50 Administration.

The purpose of this document is to fulfill the requirements of the JPA for the 2011 – 2012 Fiscal Year (2011 FY). This workplan and budget specify the purpose of each of BACWA’s programs during the 2011 FY, the methods by which they will be carried out, the products that will be developed, and the persons responsible for implementation. The schedule for implementation of these programs is July 1, 2010 through June 30, 2011.



## MANAGEMENT AND ADMINISTRATION (PART A)

BACWA has administrative and management expenses that are necessary for the agency to carry out its non-program related core functions (JPA, Section 9). They include expenses related to financial management, insurance, and organizational support. Administration of BACWA is carried out by an Executive Director and Assistant Executive Director selected by the Executive Board. Treasurer services are provided by EBMUD who manages BACWA's finances and performs an annual audit. The objective of these expenditures is to ensure effective, efficient, and transparent management of BACWA.

MANAGEMENT & ADMINISTRATION (PART A)		
Deliverables/Outcomes	Manager	FY 11 Budget
Monthly Executive Board meetings.	ED, AED	\$40,650 (30% Exec. Dir.)
Monthly Treasurer's Report, annual financial audit.	ED, AED, Treasurer	\$70,000 (100% AED)
Compliance with legal requirements applicable to org.	ED, AED	\$40,000 (EBMUD Finan.)
Effective management of organizational risk.	ED, AED	\$15,000 (Admin. Exp.)
		\$5,000 (Insurance)
		\$2,000 (Legal)
		\$1,800 (Mtg Support)
	<b>TOTAL</b>	<b>\$174,450</b>

## GENERAL BENEFIT PROGRAMS (PART B)

### BACWA MEMBER AGENCY PROGRAM (PART B.1.)

There are two general benefit programs: the core BACWA Member Agency program and the technically –focused Clean Bay Collaborative (CBC) program. The **BACWA program** is focused on serving member agencies. The primary objective of the BACWA program is to assist member agencies by providing them with helpful information on regulations and about the Bay Area community, forums for participating in policy discussions and collaborating on mutually beneficial projects, and opportunities to engage with the larger Bay Area environmental community. Program expenses include support for committee facilitation and special projects; member workshops and trainings; membership in state and national organizations that disseminate information to members; and communication expenses such as the website, newsletters, the annual report, and the annual meeting.

<b>BACWA MEMBER AGENCY PROGRAM EXPENSES (\$449,550)</b>		
<b>Deliverables/Outcomes</b>	<b>Manager</b>	<b>FY 11 Budget</b>
<b>Collection Systems Committee</b> <ul style="list-style-type: none"> <li>Meeting support (\$12k)</li> <li>Regulatory support (\$13k)</li> </ul>	Comm. Chair, Consultant	\$25,000
<b>Permits Committee</b> <ul style="list-style-type: none"> <li>Meeting support (\$12k)</li> <li>Regulatory support (\$13k)</li> </ul>	Comm. Chair, Consultant	\$25,000
<b>Water Recycling Committee</b> <ul style="list-style-type: none"> <li>Meeting &amp; project support</li> </ul>	Comm. Chair, Consultant	\$19,000
<b>Biosolids Committee</b>	Comm. Chair	\$5,000
<b>Laboratory Committee</b> <ul style="list-style-type: none"> <li>Conference Attendance (\$5k)</li> <li>Training (\$2k)</li> </ul>	Comm. Chair	\$7,000
<b>Infoshare Groups</b> <ul style="list-style-type: none"> <li>Meeting support (\$21k)</li> <li>Project support (\$4k)</li> </ul>	Consultant	\$25,000
Committee-sponsored <b>Workshops and Trainings &amp; Misc..</b>	Comm. Chair, ED, Consultants	\$61,000
<b>BAPPG Project Support</b>	ED	\$50,000
<b>Member Communications</b> <ul style="list-style-type: none"> <li>Website (\$35,000)</li> <li>Annual report (\$15,000)</li> <li>Annual meeting (\$15,200)</li> <li>Other (\$5,000)</li> </ul>	ED, AED, consultant	\$70,200
<b>Committee Legal Support</b>	ED, legal counsel	\$6,000
<b>Non-regulatory/technical collaborations &amp; sponsorships</b> <ul style="list-style-type: none"> <li>CWAA (\$10,000)</li> <li>Product Stewardship (\$5,500)</li> <li>State of the Estuary (0)</li> <li>Other (\$10,000)</li> </ul>	ED	\$25,500
<b>Program-related management.</b>	ED	\$94,850 (60% ED)

Contingency	NA	\$36,000
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## CLEAN BAY COLLABORATIVE PROGRAM (PART B.2.)

The purpose of the **CBC program** is to respond to current regulatory requirements and to develop scientific, technical and industry information to inform future regulations and policies affecting Bay Area POTWs and the environment. Program expenses include the costs of special studies and reports requested by regulatory agencies, policy strategy development and implementation, and collaborations with statewide organizations to do the same.

CLEAN BAY COLLABORATIVE (\$451,600)		
Deliverables/Outcomes	Manager	FY 11 Budget
<b>Nutrients.</b> Improve the region's understanding of the potential impacts of Bay nutrient enrichment and regulatory impacts on POTWs. <ul style="list-style-type: none"> <li>Strategy development &amp; implementation</li> </ul>	ED, Consultant	\$100,000
<b>Energy.</b> Ensure wastewater agencies interests, perspectives, and experiences are considered in the development of energy-related policies and regulations. <ul style="list-style-type: none"> <li>Energy communication forum.</li> <li>Summary of current and planned projects.</li> <li>Statewide Climate Change Group Participation.</li> </ul>	ED	\$85,000
<b>Mercury.</b> Continue to gather and report technical information on the success of Bay Area POTWs in reducing mercury in effluent. <ul style="list-style-type: none"> <li>2011 Annual Mass Report</li> <li>Dental program report.</li> <li>Recommendations for improving current watershed permit upon reissuance.</li> </ul>	ED, Consultant, BAPPG	\$40,000
<b>Wastewater as a Resource.</b> Identify and undertake efforts to further regional opportunities for using/viewing wastewater as a resource. <ul style="list-style-type: none"> <li>Strategy development.</li> <li>As-requested research and sponsorship opportunities.</li> </ul>	Consultant	\$38,000
<b>Selenium.</b> Ensure that water quality criteria and TMDL incorporate the best technical information about impacts and POTW loading. <ul style="list-style-type: none"> <li>Speciation study.</li> <li>WQC review and response.</li> <li>TMDL Report review and response.</li> </ul>	ED	\$35,000 (incl. \$15k in-kind from EBMUD)
<b>Chemicals of Concern.</b> Provide technical assistance to managers, regulators and the public about the impacts of chemicals on POTWs and the ecosystem. <ul style="list-style-type: none"> <li>Regulatory tracking and response.</li> <li>Fact sheets.</li> </ul>	ED, Consultant	\$25,000
<b>Infrastructure.</b> Generate data to better characterize infrastructure needs in the Bay Area. <ul style="list-style-type: none"> <li>Rate database.</li> <li>Summary of CIPs</li> </ul>	ED, Consultant	\$23,600

<b>PCBs.</b> Review data to ensure feasibility of performance-based limits in permit. <ul style="list-style-type: none"> <li>Reporting protocols; Data compilation and analysis.</li> </ul>	ED, EBMUD	\$15,000 (in-kind EBMUD support)
<b>Unplanned Issues/ Contingency (20%)</b>		\$90,000

## SPECIAL BENEFITS PROGRAMS (PART C)

BACWA has four active special benefit programs: the Bay Area Pollution Prevention Group (BAPPG), the Air Committee, Proposition 50 Administration, and Water Operator Training (WOT). Member dues for BAPPG, the Air Committee, and WOT are optional and are established by the entities that manage those programs: the BAPPG and Air Committee chairs, and the Central Contra Costa Sanitary District in conjunction with Solano Community College. Proposition 50 costs are paid for by the agencies that receive Proposition 50 grants from the Department of Water Resources.

### BAY AREA POLLUTION PREVENTION GROUP (PART C.1.)

BAY AREA POLLUTION PREVENTION GROUP (\$80,114)		
Deliverables/Outcomes	Manager	FY 11 Budget
<b>Mercury</b> <ul style="list-style-type: none"> <li>Dental hygienist training and outreach (\$7,000)</li> <li>Demolition contractor &amp; HVAC outreach (\$1,500).</li> <li>Seniors and mercury thermometer outreach (\$0).</li> </ul>	Comm. Rep, Consultant	\$8,500
<b>Fats, Oils, Grease</b> <ul style="list-style-type: none"> <li>Regional holiday outreach (\$3,000).</li> <li>Spanish holiday outreach (\$10,000).</li> <li>Asian holiday outreach (\$4,800).</li> <li>General FOG outreach (\$3,000).</li> </ul>	Comm. Rep, Consultant	\$20,800
<b>Pharmaceuticals</b> <ul style="list-style-type: none"> <li>Hospice Outreach (\$4,999).</li> <li>Disposal campaign (\$2,500).</li> <li>Poison Control partnerships (\$0)</li> <li>Hospital pilot (\$0)</li> </ul>	Comm. Rep, Consultant	\$7,499
<b>Copper</b> <ul style="list-style-type: none"> <li>Consultant Evaluation of Copper Algaecides and Pool Supplies Fact Sheet (\$5,000).</li> <li>Outreach to Bay Area Plumbing Apprenticeship Program (\$4,000)</li> </ul>	Comm. Rep, Consultant	\$9,000
<b>Dioxins</b> <ul style="list-style-type: none"> <li>Partnership with Air District</li> </ul>	Comm. Rep, Consultant	\$2,000
<b>Pesticides</b> <ul style="list-style-type: none"> <li>"Our Water Our World" Program (\$10,000).</li> <li>Support EcoWise Certified Program (\$0).</li> </ul>	Comm. Rep, Consultant	\$10,000
<b>Sanitary Sewer Overflows</b> <ul style="list-style-type: none"> <li>Outreach to LTC and/or Hospice Care Providers and Day Care Facilities</li> </ul>	Comm. Rep, Consultant	\$3,000
<b>PCBs</b> <ul style="list-style-type: none"> <li>PCBs in caulk factsheet.</li> </ul>	Comm. Rep, Consultant	\$0
<b>Misc.</b> <ul style="list-style-type: none"> <li>Agency Coordination of P2 Week (\$1,500).</li> <li>Maintenance of BAPPG website (\$6,000).</li> <li>Water Cycle Game (\$0).</li> </ul>	Comm. Rep, Consultant	\$15,500

<ul style="list-style-type: none"> <li>Unplanned issues (\$8,000).</li> </ul>		
<b>Administration</b>	AED	\$3,815
	<b>Total</b>	

## AIR RESOURCES & INFORMATION GROUP (PART C.2.)

AIR INFORMATION & RESOURCE GROUP		
Deliverables/Outcomes	Manager	FY 11 Budget
Provide member agencies with assistance regarding air quality related issues, research and regulations as they affect the operation and maintenance of Bay Area POTWs.	Consultant	To be determined by member interest.

## WATER OPERATOR TRAINING (PART C.3.)

WATER OPERATOR TRAINING		
Deliverables/Outcomes	Manager	FY 11 Budget
Encourage development of a skilled workforce by offering classes.	CCCSD, Solano Community College, AED	To be determined by member interest.

## PROPOSITION 50 ADMINISTRATION (PART C.4.)

PROPOSITION 50 ADMINISTRATIVE SUPPORT		
Deliverables/Outcomes	Manager	FY 11 Budget
Continue administration of Proposition 50 to fund projects that benefit the environment and BACWA members by ensuring timely generation of invoices and progress reports to DWR, and distribution of grant funds to participating agencies.	EBMUD, Consultant, AED, ED	To be determined by DWR schedule.

## REVENUE AND EXPENSE ACCOUNT SUMMARY

### BAY AREA CLEAN WATER AGENCIES

<b>REVENUE</b>	<b>\$624,000</b>	
Principals	450,000	
Associates	97,500	
Affiliates	61,500	
Interest	5,000	
Special Prog. Costs	10,000	AIR, BAPPG, WOT indirect costs
<b>EXPENSES</b>	<b>\$624,000</b>	
<b>Committees</b>	<b>147,000</b>	
Collections System	25,000	
Permit Committee	25,000	
Water Recycling	19,000	
Biosolids	5,000	
InfoShare Groups	25,000	
Laboratory	7,000	
Misc. Support	61,000	Includes trainings, workshops, etc.
<b>Legal Support</b>	<b>8,000</b>	
Regulatory	6,000	
Org. Support	2,000	
<b>Collaborations/Sponsorships</b>	<b>25,500</b>	
CWAA	10,000	
CPSC	5,000	
PSI	500	
State of the Estuary	0	Biennial conference
Other	10,000	Unanticipated non-tech, non-rsch sponsorships
<b>Communications</b>	<b>55,000</b>	
Annual Report	15,000	
Website Dev. & Maint.	35,000	
Newsletter/Other	5,000	
<b>Special Programs</b>	<b>50,000</b>	
<b>Meeting Support</b>	<b>53,000</b>	
Meeting Expenses	17,000	Annual and manager's meetings
Contingency	36,000	
<b>General Support</b>	<b>265,500</b>	
Executive Director	135,500	
Ass't Executive Director	70,000	
Accounting	40,000	
Administrative Expenses	15,000	
Insurance	5,000	

## WQAS/CBC Budget

<b>REVENUE</b>	<b>\$451,600</b>	
Principals	300,000	30k EBMUD in-kind
Assoc. & Affiliates	150,000	
Interest	1,600	
<b>EXPENSES</b>	<b>\$451,600</b>	
<b>Technical Assistance</b>	<b>361,600</b>	
Energy	85,000	
Nutrients	100,000	
PCBs	15,000	
Selenium	35,000	
Infrastructure	23,600	
WW as a Resource	38,000	
CECs	25,000	
Mercury	40,000	
<b>Contingency/Unplanned Issues</b>	<b>90,000</b>	20%





## AIR ISSUES & REGULATIONS COMMITTEE

A Committee of the Bay Area Clean Water Agencies

Spring  
2011

April 2011

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## CARB Makes Changes to the California Greenhouse Gas Mandatory Reporting Program

By: Jacqueline Kepke/CH2M HILL, Republished from the CASA 2010 Annual Report in January 2011

CARB adopted a Mandatory Reporting Regulation for Greenhouse Gases in 2007, which took effect in January 2009. A number of wastewater agencies are currently reporting their stationary combustion-related emissions under this program and have recently completed their first cycle of 3<sup>rd</sup> party verification of their reports. Emissions from wastewater process units are not reported under this program – only those from large combustion sources. Unlike cap and trade, biomass-related emissions such as those from combustion of digester gas are not excluded. They are reported, but they are logged separately from fossil fuel related emissions.

In order to align with the Federal Mandatory Reporting Regulation adopted by USEPA last year, and to support the cap and trade program, CARB is amending its mandatory reporting program. The changes with the greatest potential impacts (good and bad) to wastewater agencies are as follows:

- CARB is lowering the reporting threshold for stationary combustion from 25,000 mton/year (mton/yr) of CO<sub>2</sub> to 10,000 mton/yr of carbon dioxide equivalents (CO<sub>2</sub>e), including both biomass and fossil fuel combustion emissions.
- Those facilities with emissions between 10,000 and 25,000 mton/yr will be able to file an abbreviated report and will not be required to undergo 3<sup>rd</sup> party verification.
- Under the current regulation, agencies that operate cogeneration units that generate more than 1 MW of power and emit more than 2,500 mton/yr CO<sub>2</sub> have to report. Under these changes, CARB is proposing to do away with the cogen

category. Therefore, if an agency currently reports because they have a cogen facility that is >1 MW and emits >2,500 mton/yr CO<sub>2</sub>, they will no longer have to report if their combustion emissions are less than 10,000 mton/yr CO<sub>2</sub>e. If emissions are greater than 10,000, they will report as a stationary combustion source (see above).

- The proposed changes kick in for reporting year 2011 (filed in 2012). Current reporting requirements remain through the 2010 emissions report (filed in 2011).

### Will your POTW Fall within the new CARB General Stationary Combustion Threshold for GHGs in 2011?

By: Jim Sandoval/CH2M HILL

The new 2012 California guidelines for Mandatory Reporting of GHGs eliminate the cogeneration reporting category of 1 MW of power generation and emitting more than 2,500 mton CO<sub>2</sub>/yr and they lower the General Stationary Combustion (GSC) reporting threshold from 25,000 mton/yr of CO<sub>2</sub> to 10,000 mton/yr CO<sub>2</sub>e. Those wastewater treatment plants that are currently non-GSC (i.e., < 25,000 mton/yr CO<sub>2</sub>) should consider estimating their facility's combustion emissions for cogeneration systems, flares, boilers, etc. to confirm whether or not the facility meets the new reporting threshold. If your facility does need it, then you will need to do an abbreviated report using CARB's web-based reporting tool. If it does not, then document and file the estimation in case CARB or the BAAQMD asks for proof at a later date.

## City of San Jose Fuel Cell Project

By: Bob Mouderrres/City of San Jose

The San Jose/Santa Clara Water Pollution Control Plant (Plant) relies on self generation of power to provide reliable supply of electricity to run its critical equipment. The generation systems are 30 to 53 years old and are in need of replacement. City staff has pursued an option of obtaining a turn-key biogas fuel cell co-generation system through a 20 year termed Power Purchase Agreement (PPA) using newer, renewable fuel cell technology that uses the Plant's digester gas. Under this PPA, UTS Bio Energy LLC (UTS) will design, build, own, operate and maintain a 1.4 MW fuel cell, and the Plant will purchase all power generated by the fuel cell at the agreed-upon price. The Plant's capital investment is estimated at \$1,500,000. City staff looked at other more traditional generation systems such as Internal Combustion Engine generators (ICE) and concluded that even though fuel cell has higher initial cost, it has significant environmental benefits. The planned completion date of the project is January 20, 2012. This recommendation accomplishes many of the Plant's and the City's goals:

- Reliable power generation to replace aging engine generators
- Greater regulatory certainty by elimination of air permit requirements for this system
- Environmental stewardship through lower green house gas emissions
- Advances the goal of Plant energy self sufficiency by 2022
- Comparable costs to anticipated future PG&E rates
- Additional energy source of hot water as a by-product of the system
- Reduces monthly peak demand from PG&E

[See Page 2 for continued article]

## BACWA Air Committee Roundtable with Brian Bateman of BAAQMD, January 26, 2011

By: Jim Sandoval/ CH2M HILL

On January 26<sup>th</sup> the BACWA AIR Committee met with Brian Bateman, Engineering Director of the Bay Area Air Quality Management District (BAAQMD). The purpose of the meeting with Brian was to get an overview of proposed or existing BAAQMD regulations that may impact your facilities. Overall the dialogue with him was good and the greatest value was in sitting down with him for two hours and breaking the ice for continued future dialogue with the BAAQMD. The key topics discussed included

- EPA Tailoring Rule
- BAAQMD's role in implementing AB-32 Regulations
- NSPS for Sewage Sludge Incinerators
- Newly updated BAAQMD CEQA guidelines
- CARB Tier 0 Portable Diesel Engines
- State Fleet Requirements
- Proposed BAAQMD Composting Rule
- BAAQMD Reg 9/Rule 8 NO<sub>x</sub> and CO from Stationary ICE
- New Anticipated BAAQMD Rules or Fees
- Impact of Budget Cuts on Local Permitting and Enforcement

For details on the topics discussed, AIR committee members can see the meeting summary in the BACWA AIR web page and nonmembers may request a copy from Jim Sandoval at [jim.sandoval@ch2m.com](mailto:jim.sandoval@ch2m.com).

## City of San Jose Fuel Cell Project (con't from pg.1)

By: Bob Mouderris/City of San Jose

The Plant uses an average of 7.6 MW of electricity for its daily operations, with peak loads reaching 11 MW on occasion. On average, 5.2 MW is produced on-site using engine generators fueled by a blend of natural gas purchased from PG&E, landfill gas purchased from Newby Island Landfill, and digester gas produced on-site as part of the wastewater treatment process. The remaining 2.4 MW of electricity is purchased from PG&E. Although current Plant generation capacity is 10.5 MW, generation frequently falls short of demand due to the unavailability of generators being down for maintenance and other operability factors. Even though the plant can purchase all of its electricity needs from PG&E, the ability to generate electricity in-house is critical for reliable plant operations in the event of a PG&E power failure caused by an earthquake, bird strike, or other blackout. Lack of reliable in-house electrical generation during PG&E power failures can have disastrous consequences with significant damage to critical equipment and facilities, and potential discharge of untreated sewage into the bay. The Plant needs to maintain a minimum of 8 MW of very reliable on-site generation to meet current critical power demands. This minimum power requirement is expected to increase over the next 20 years as the Plant is modernized through implementation of the Plant Master Plan. The need to replace aging engine generators is critical. Coupled with the need to replace aging generators, is the need for increased efficiency and environmental sustainability.

Fuel cells convert natural gas or biogas to electricity electrochemically like a battery. But unlike a battery which eventually goes dead as the chemicals in the battery are depleted, the fuel cell is continuously fed new chemicals so it can produce electricity for up to 5 years before the cell needs to be rebuilt. Fuel cells require very clean fuel to prevent early failure, so the biogas from the Plant must first be cleaned and conditioned through a gas cleaning system to remove most of the contaminants. The gas is then delivered to the fuel cell along with oxygen where the gas is converted to electricity, hot water and a residual gas stream of mainly CO<sub>2</sub>. The heat from the fuel cell is recovered and used in Plant operations.

Staff has evaluated the cost benefits and applicability associated with these renewable technologies and identified fuel cell electrical generation as a cost effective technology that would yield the greatest resource and environmental benefit to the Plant. Fuel cells have one of the highest financial incentives because they use renewable biogas as fuel. They are highly efficient, and have very low air emissions compared to more traditional generation systems like an ICE or turbine generator. Fuel cells generate approximately 20% less greenhouse gases compared to an ICE, and near zero air pollutant emissions.

Although higher in initial cost, the fuel cell PPA provides the following advantages over ICE:

- Results in almost zero regulated air pollutants with simple-to-comply air permit
- Results in 20% less GHG compared to ICE, which is the equivalent of taking 192 Medium-sized cars off the road or planting 26,000 trees
- Provides new, but developed technology for the Plant to learn from with minimum risk in technology adoption
- Provides a higher efficiency generator (45% vs. ICE 37%) that uses less fuel to operate
- Provides a slightly more stable generator than an ICE (fuel cell won't fall off-line during a power outage like ICE or turbines can)
- Quieter than ICE

[See Page 13 for continued article]

## EPA Proposed to Defer Permitting of Biogenic Emissions under the Tailoring Rule

By: Jacqueline Kepke/CH2M HILL, Republished from the CASA 2010 Annual Report

On March 24, 2011, EPA published in the Federal Register a Proposed Rule on Deferral for CO<sub>2</sub> Emissions from Bioenergy and Other Biogenic Sources under the Prevention of Significant Deterioration (PSD) and Title V Programs. Under the Tailoring Rule, a rule adopted by EPA last year, sources with greenhouse gas (GHG) emissions exceeding certain thresholds are subject to PSD and Title V permitting under the Clean Air Act. Because the Tailoring Rule did not differentiate between anthropogenic emissions (e.g. GHGs from fossil fuel combustion) and biogenic emissions (e.g. GHGs from combustion of biomass fuels such as landfill or digester gas), the Tailoring Rule had the potential to bring California wastewater facilities into the Clean Air Act permitting programs that hadn't been previously.

Consistent with announcements made by EPA Administrator Jackson in January, EPA issued this new rulemaking to defer these permitting requirements for biogenic sources of CO<sub>2</sub> including wastewater treatment plants. This is a very positive development for the wastewater community and is consistent with comments that CASA and the California Wastewater Climate Change Group (CWCCG) submitted in response to the original Tailoring Rule as well as to a Call for Information issued by EPA, and to guidance issued by EPA last year on Tailoring Rule implementation. If this deferral rule is adopted as proposed, it is expected that no new wastewater plants will be pulled into PSD or Title V, at least for the next three years. Facilities already operating under Title V permits may need to address GHGs in the next permit renewal cycle, but no substantive changes to those permits are expected. Over the next three years, EPA will be engaging with stakeholders on how to handle biogenic emissions long term. CWCCG will continue to engage in these discussions.

The proposed rule is available at <http://www.gpo.gov/fdsys/pkg/FR-2011-03-21/html/2011-6438.htm>. CASA provided input to oral comments made by the National Association of Clean Water Agencies (NACWA) at the April 5 hearing in Washington, D.C., and will be submitting written comments on the proposed rule by the May 5, 2011 deadline. It should be noted that the Tailoring Rule overall is extremely controversial, and lawsuits have been filed by both environmental and industry advocates. In addition, several bills are making their way through Congress that would prevent EPA from implementing the rule. CASA and CWCCG will continue to track these developments.

## BCDC Bay Plan Amendment on Climate Change

By: Jacqueline Kepke/CH2M HILL & Jim Sandoval/CH2M HILL

The Bay Conservation and Development Commission (BCDC) proposed amendments to the Bay Plan to address adaptation to climate change. In particular, the amendments restrict development in inundation zones resulting from sea level rise. Bay Area WWTPs would be within the inundation zone, so new projects would need to be justified in accordance with the Plan. The Bay Planning Coalition, Bay Area Council, and Building Industry Association have raised strong opposition to the amendments as they are very prescriptive and limit local government control over land use decisions. Changes to the amendment language have been proposed by a team of land use lawyers representing local government agencies.

Public meetings were held in the nine Bay Area counties in 2010. The process and consequently follow-on meetings have been delayed. BCDC is planning to develop a new revised recommendation for publication in May 2011. They plan to hold a new round of public meetings during the 30-day comment period of the revision between late April and early June. On behalf of BACWA AIR, CH2M HILL will continue to watch the Commission's website and meeting notices for updates on the amendments and the meetings.

For more information, visit [http://www.bcdc.ca.gov/proposed\\_bay\\_plan/bp\\_amend\\_1-08.shtml](http://www.bcdc.ca.gov/proposed_bay_plan/bp_amend_1-08.shtml).

## Sea Level Rise in California, Oregon, and Washington

By: Tim Smith, Sustainable Water Resources Coordinator and  
Geurt van de Kerk, Sustainable Society Foundation [geurt.vandekerkerk@ssfindex.com](mailto:geurt.vandekerkerk@ssfindex.com)

A new project announced by the National Academy of Sciences will address sea level rise on the West Coast of the U.S. This project relates to the general problem of global change, which has important implications for water resources that go far beyond sea level changes. Thinking about the project description given below, it is not hard to see impacts on precipitation, surface and ground water at least for this region, and potentially for the entire world. With the present high level of interest in this subject, most federal agencies that have related missions include global change in their appropriation requests, in some form.

A committee will provide an evaluation of sea level rise for California, Oregon, and Washington for the years 2030, 2050 and 2100. The evaluation will cover both global and local sea level rise. In particular, the committee will evaluate each of the major contributors to global sea level rise (e.g., ocean thermal expansion, melting of glaciers and ice sheets) and combine the contributions to provide values or a range of values of global sea level rise. The committee will also characterize and, where possible, provide specific values for the regional and local contributions to sea level rise (e.g., atmospheric changes influencing ocean winds, ENSO [El Nino-Southern Oscillation] effects on ocean surface height, coastal upwelling and currents, storminess, coastal land motion caused by tectonics, sediment loading, or aquifer withdrawal). Different types of coastal settings will be examined, taking into account factors such as landform (e.g., estuaries, wetlands, beaches, lagoons, cliffs), geologic substrate (e.g., unconsolidated sediments, bedrock), and rates of geologic deformation. For inputs that can be quantified, the study will also provide related uncertainties.

For more information, visit the following websites:

Project Information, <http://www8.nationalacademies.org/cp/projectview.aspx?key=49290>

Government Web Site, <http://acwi.gov/swrr/>,

Archive Web Site, <http://sites.google.com/site/sustainablewaterresources/>.

## California Cap and Trade Program Faces Advances and Setbacks

By: Jacqueline Kepke/CH2M HILL, Republished from the CASA 2010 Annual Report

The California Air Resources Board (CARB) adopted the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms, otherwise known as “cap and trade” at its December 16, 2010 meeting. Cap and trade is a market-based regulatory framework in which regulated entities can trade “allowances” for their CO<sub>2</sub> emissions. Adoption of this regulation is part of the state’s implementation of AB 32 - The Global Warming Solutions Act of 2006. The cap and trade program is scheduled to begin implementation in 2012.

While there is no specific exemption for wastewater agencies, CASA and its California Wastewater Climate Change Group (CWCCG) partners successfully worked with CARB staff to ensure that no wastewater agencies in California trigger into the cap. Wastewater agencies will not have a compliance obligation because emissions from combustion of biomass do not count toward the emissions threshold. This means that emissions associated with burning landfill or digester gas are excluded, and there are currently no wastewater agencies in California that emit more than the 25,000 metric tons/year threshold based on fossil fuel combustion alone.

CARB is continuing to move forward toward 2012 implementation. They plan to hold a series of workshops on various topics, including carbon offsets. A schedule of workshops and other regulatory activities occurring throughout 2011 is listed below and more details can be found at <http://www.arb.ca.gov/cc/capandtrade/capandtrade.htm>. CARB staff plan to present an update on activities along with proposed amendments to the regulation at the July Board meeting.

At the same time as staff is moving forward, however, a California court has ordered CARB to revise its environmental review of cap and trade. In a decision issued March 18, 2011, Superior Court Judge Ernest Goldsmith ruled that CARB hadn’t conducted an adequate environmental review before it approved the Scoping Plan, which established its intent to adopt a cap and trade program. The decision came in *Association of Irrigated Residents v. California Air Resources Board*, a lawsuit brought by Communities For A Better Environment, California Communities Against Toxics, Society For Positive Action and other groups, who claimed that CARB did not adequately explain why it chose a cap and trade program over a carbon tax or straight “command and control” regulation of greenhouse gases.

The ruling essentially puts on hold any implementation of the Scoping Plan until CARB has satisfied the requirements of CEQA and CARB’s certified environmental review program. Absent any stay of the decision, action to finalize the cap and trade program will be deferred until after the revised environmental document for the Scoping Plan is certified. It is likely that CARB also will have to defer other rulemaking actions implementing the Scoping Plan, including revisions to the low-carbon fuel standard and consideration of other offset protocols for the cap and trade program.

### CARB’s Cap-and-Trade Program Activities for 2011

The following schedule provides an overview of the workshops and activities CARB is proposing to complete in order to take Cap and Trade forward into implementation.

#### Spring:

- Offset protocols workshop
- Compliance workshop planned topics: compliance cycle, penalties
- Electricity workshop planned topics: reporting requirements for electricity deliverers, voluntary renewable energy, and long-term electricity contracts
- Allocation workshop
- Program management workshop planned topics: holding and purchase limits, corporate association reporting requirements, auction design, market oversight, and penalties

#### Late Spring:

- First regulation change notice package (“15-day changes”) released for public comment

#### Early Summer:

- WCI Linkage workshop

#### Mid-Summer:

- Second regulation change notice package (“15-day changes”) released for public comment

#### Fall:

- Cap-and-trade regulation finalized
- Compliance workshop planned topics: registration process, compliance cycle, tracking system training

#### December:

- Cap-and-trade regulation goes into effect



## California Energy Policy Opportunities for POTWs

By: Jacqueline Kepke/CH2M HILL, Adapted from CASA 2010 Annual Report and CASA January 2011 Newsletter

Many BACWA members are aggressively developing renewable energy projects to be part of the climate change solution – from expanding digester gas production by adding FOG or food waste, to developing biosolids-to-energy facilities, to installing solar panels and wind energy generation. In order to support these efforts, CWCCG is working to influence California's energy policies to maximize revenue opportunities and incentives for renewable energy generated by POTWs, including the following:

### Renewables Portfolio Standard (RPS) Eligibility

The Renewables Portfolio Standard is an existing regulatory program that requires investor-owned power utilities to meet renewable energy targets. The California Energy Commission (CEC), through their *Overall Program Guidebook* and *Renewables Portfolio Standard Eligibility Guidebook*, determines what types of renewable energy count toward the targets. Under these guidebooks, biosolids, digester gas, and landfill gas are all considered eligible renewable energy resources.

### Renewable Electricity Standard

In Executive Order S-21-09, Governor Schwarzenegger directed CARB to adopt a regulation requiring the state's energy utilities to meet a 33 percent renewable energy target by 2020. This builds on the existing 20 percent renewable requirement in the RPS. In the Renewable Electricity Standard (RES) regulation, CARB maintained the same eligible resources or fuels currently allowed under the existing Renewable Portfolio Standard (RPS). As described above, this is a good thing for the wastewater community, as eligible resources currently include biosolids, digester gas, and landfill gas. The regulation was adopted in September 2010. Wastewater agencies are not directly subject to this regulation, which targets energy utilities, but they are eligible to sell renewable energy credits (RECs) under the program for renewable energy generated at their facilities.

### California Public Utilities Commission Decisions on Tradable RECs

The California Public Utilities Commission (CPUC) administers the RPS, and in that capacity, they determine how RECs can be generated and traded for RPS compliance. Currently, RECs are coupled with the electricity itself and must be sold to a load serving entity (essentially an energy utility) along with the energy. In a series of recent decisions, CPUC has proposed to allow tradable RECs. If RECs were tradable, wastewater agencies may be able to sell RECs for energy generated and used onsite that is not sold to the grid. Additionally, RECs could be sold to third parties in addition to energy utilities. REC trading is a very controversial topic, as it influences how out-of-state renewable energy can be used to satisfy California requirements. CWCCG has become a party to these decisions and will continue to advocate for a tradable REC market as a way to incentivize development of renewable energy at water and wastewater agencies.

### Economic Incentives for Biogas Production and Use

CWCCG encouraged CPUC to consider a funding program or other framework for economically incentivizing biogas production and use. The success of the California Solar Initiative provides a model for expanding uptake of distributed renewable energy technology. These types of incentives nudge projects toward an economic tipping point, making them economically feasible while technology continues to improve and costs naturally go down. Many wastewater agencies, particularly in the South Coast Air Basin, are under increasing pressure to cease use of the internal combustion engines they have relied on for years to produce onsite renewable power using biogas. These agencies are looking for alternatives, including putting the biomethane into natural gas pipelines; however the cost of biogas conditioning equipment can tip the economic balance away from these projects. SoCalGas is seeking permission from the CPUC to construct, operate, and own biogas conditioning facilities, and the Southern California Association of POTWs (SCAP) and CWCCG are both supporting this concept. Discussions on biogas are also ongoing in Northern California with PG&E.

### Feed-In-Tariffs

The current rates at which third-party power generators can sell renewable power to the grid are not high enough to incentivize projects such as co-digestion for increased energy production. On October 21, 2010, the Federal Energy Regulatory Commission (FERC) issued an order that enables the CPUC to establish multi-tiered tariffs, allowing the state to take into account the cost of different energy producing technologies. The order further states that the new rates need to be commensurate with the avoided costs that utilities receive for comparable energy developed under the state's Renewable Portfolio Standard (i.e., up to \$0.16 to \$0.20 per kilowatt-hour (kWh) instead of the current \$0.08 per kWh). This ruling has the potential to greatly enhance the economic benefits that owners of small-scale renewable energy and combined-heat and power (CHP) facilities such as wastewater treatment agencies receive under California's Feed-In Tariff (FIT) programs, thereby incentivizing new project development. CPUC is about to undertake proceedings to update FIT programs. CWCCG is participating in these proceedings on behalf of BACWA members and is advocating that CPUC establish an appropriate interim FIT consistent with FERC's order.

## Anaerobic Digestion of Fats, Oil, and Grease (FOG)

By: Manisha Berde/ San Francisco Public Utilities Commission's Wastewater Enterprise

Fats, Oil, and Grease (FOG) used in restaurants and food service establishments can cause problems in the sewer system and can be the reason for clogging of the sewer lines. FOG going down the drain can be diverted from the sewer system by using grease traps to collect it and the trap waste can be used to produce renewable energy. Many utilities in United States have piloted as well as implemented on a full-scale basis anaerobic digestion of brown grease with primary and activated sludge and have demonstrated higher methane gas production compared to municipal sludge alone.

The anaerobic digestion of FOG has many benefits such as production of methane gas that can be used to run the treatment plant and offset operational costs, and reduce maintenance cost associated with sewer blockages.

The San Francisco Public Utilities Commission's Wastewater Enterprise (SFPUC – WWE) has conducted a pilot study at the Southeast Plant (SEP) on anaerobic digestion of FOG (brown grease) with primary and activated sludge to assess biogas production. The study also involved assessing the performance and toxicity effects on anaerobic digesters when introduced with byproducts of biodiesel production such as biobunker, methanol, and glycerin.

The pilot study involved simulation of anaerobic digesters on a smaller scale. Two 30 gallon digesters were used for the study – one as control and the other for testing. These digesters were equipped with heating systems to maintain the sludge temperature at mesophilic range (35 °C) and a recirculation system to keep the solids in suspension and to maintain the desired temperature. The test digester sequentially received brown grease, glycerin, methanol, and biobunker mixed with combined primary and activated sludge, whereas the control digester received only combined primary and activated sludge. The testing of brown grease and byproducts (glycerin, methanol, and biobunker) were done separately. The digesters were tested for their performance by monitoring volatile solids reduction, total solids reduction, alkalinity, volatile fatty acids, pH, ammonia, and COD removal. The gas formed in both digesters was measured using gas meters.

The results obtained from this study are quite encouraging. An increase in gas production was observed from anaerobic digestion of brown grease and no major negative effects were observed on digester performance when introduced with biobunker, glycerin, or methanol.

## From the Frying Pan to Fuel: SFPUC's Renewable Energy Program (II)

By: Karri Ving and Nohemy Revilla/San Francisco Public Utilities Commission

In BACWA's Winter 2010, Newsletter, the SFPUC reported on the components, challenges and successes of one of its most highly visible Renewable Energy programs: "SFGreasecycle". This article provides a status update and additional information about the program.

In November of 2007, the SFPUC launched "SFGreasecycle" as a free used fryer oil collection service to all San Francisco restaurants. The purpose of the program was to discourage businesses from pouring waste oil down the drain while also diverting this material towards renewable fuel (biodiesel) and renewable energy (methane). What initially started out as one City crew collecting from 30 restaurants has grown into four crews collecting from more than 1,000 restaurants donating over 300,000 gallons of oil per year. Crews hand collecting used oil and grease offer best management practices and information on grease capturing equipment and pollution prevention. Additionally, the SFGreasecycle program began educating residents on the impacts of pouring even small amounts of grease down the drain. The program now offers household drop-off locations across San Francisco, encouraging residents to donate their oil towards generating sustainable biofuels. About 10,000 pounds of used grease are dropped off each year from San Francisco residents.

The program has generated more than a half million dollars in annual revenue from waste cooking oil sales to biodiesel manufacturers (more than a quarter million dollars were generated in fiscal year 2009/2010). The cooking oil polishing plant, currently under construction, will remove wash water and food particles from collected oil, sending these contaminants to treatment plant digesters for increased methane generation while improving oil quality as a biodiesel feedstock. This plant is expected to be completed on late May, 2011. This plant will allow for a more suitable biodiesel feedstock to be sold at a higher price per gallon (as much as \$3.00/gallon).

To complement the SFGreasecycle program in tackling all forms of waste grease, the SFPUC's Pollution Prevention Program drafted and helped pass the 2011 FOG Control Ordinance requiring all grease generating restaurants to install and maintain grease capturing equipment. Further, the SFPUC will soon offer a 14.2% sewer rate reduction to all restaurants that install and maintain the latest grease removal technology, automatic grease removal devices.

[See Page13 for continued article]

## EPA's Energy Star Leaders Drive Greater Energy Efficiency

By: Stacy Kika, USEPA; Kika.stacy@epa.gov; 202-564-0906; 202-564-4355

Thousands of buildings across the country are saving energy while reducing harmful air pollutants and protecting the health of Americans with the U.S. Environmental Protection Agency's (EPA) Energy Star program. EPA recognized 74 leading Energy Star organizations for their achievements in energy efficiency across their entire building portfolios in 2010, 50 of which were recognized as first time Energy Star Leaders. Through their commitment to superior energy management, these organizations together have prevented the equivalent of more than 460,000 metric tons of carbon dioxide emissions annually and saved more than \$100 million a year.

To be an Energy Star Leader, an organization must meet one of two energy efficiency improvement milestones. The first milestone requires a 10 percent improvement in energy performance across the entire building portfolio, and subsequent recognition is given for each 10 percent improvement thereafter. The second milestone, known as "top performer," requires the buildings in an organization's portfolio, on average, to perform in the top 25 percent of similar buildings nationwide.

Two organizations have taken Energy Star Leaders to new heights, becoming the first to improve energy efficiency across their building portfolios by 40 and 50 percent. These organizations are Blue Mountain School District in Pennsylvania and DeKalb County Central Unified School District in Indiana, respectively.

The complete list of Energy Star Leaders includes more than 150 school districts, commercial real estate companies, healthcare systems, supermarket operators, hotel managers, and government organizations. These organizations represent more than 6,790 buildings covering nearly 540 million square feet across 36 states and the District of Columbia.

For a list of Energy Star Leaders (as of December 31, 2010) and more information on how your wastewater treatment plant may become an Energy Star Leader, visit:

[http://www.energystar.gov/2010\\_Leaders\\_list.pdf](http://www.energystar.gov/2010_Leaders_list.pdf)

<http://www.energystar.gov/leaders>

## EPA Provides Information on Innovative and Emerging Energy Conservation Measures to Help Wastewater Utilities Reduce Energy Consumption

By: SCAP Energy Management Committee: Chair Andre Schmidt and Vice Chair Chris Berch

As part of U.S. Environmental Protection Agency's (EPA) commitment to expanding cost saving, energy conservation, and efficiency programs, it has released a new technical document to assist municipal utility owners and operators in finding information on cost-effective energy management and energy conservation measures and technologies to reduce total energy usage at their wastewater treatment facilities. The document, "Evaluation of Energy Conservation Measures for Wastewater Treatment Facilities," presents technical and cost information about energy management and energy conservation measures and technologies.

Technical and cost data were developed from literature sources and provided by manufacturers and operating facilities. The document provides preliminary information on innovative and emerging energy conservation measures and technologies that have the potential for substantial energy savings. In addition, the document includes nine in-depth facility studies that further examine application and cost information for various full-scale, operational energy conservation measures and technologies.

For more information and to view a copy of the document, go to: <http://water.epa.gov/scitech/wastetech/publications.cfm>.

## What's new in WERF's Optimization Research

By: Divya Bhargava/CH2M HILL

Water Environment Research Foundation (WERF) recently released several new reports on energy efficiency and recovery. Highlights from the recent research are as follows:

- *Energy Efficiency in the Water Industry: A Compendium of Best Practices and Case Studies - Global Report* (OWSO9C09). This report provides 150 case studies – both national and international – to help utilities better manage energy efficiency and recovery in water and wastewater systems. This report supplements WERF report *Energy Efficiency in Wastewater Treatment in North America* (OWSO4R07e), which offers North American best practices for energy-efficient operation of wastewater assets as part the Global Water Research Coalition's compendium project.
- *Evaluation of Combined Heat and Power (CHP) Technologies for Wastewater Treatment Facilities* (EPA-832-R-10-006). WERF researchers from Brown and Caldwell investigated several technologies for producing heat and power from biogas – internal combustion engines, gas turbines, micro turbines, and fuel cells – to provide detailed process descriptions, performance data and cost information. Their findings were prepared under an assistance agreement awarded by U.S. Environmental Agency and WERF for the ongoing project *Methane Evolution from Wastewater Treatment and Conveyance* (U2R08). For more information, please visit: <http://water.epa.gov/scitech/wastetech/publications.cfm>.

## BAAQMD Reg. 9, Rule 8: Stationary Internal Combustion Engine Limits in 2012

By: Sarah Merrill/ CH2M HILL

Starting January 1, 2012, smaller stationary combustion engines, with an output of 50 brake horsepower (bhp) or greater, will start being regulated. In addition, no specific fuel type will be exempted. Previous to 2012, engines fired exclusively by liquid fuels are exempt. Emergency standby engines will remain exempt. Below are the changes to the regulation coming into effect:

### Spark-Ignited, Fossil Fuel\*

	Effective January 1, 2012
Rich Burn Engines, NO <sub>x</sub>	25 ppmv
Lean Burn Engines, NO <sub>x</sub>	65 ppmv
CO	2000 ppmv (remains unchanged)

### Compression-Ignited, Effective January 12, 2012\*

	NO <sub>x</sub> (ppmvd)	CO (ppmvd)
51 - 175 bhp	180	440
Greater than 175 bhp	110	310

\*All emissions levels as corrected to 15% oxygen, dry basis

### Spark-Ignited, Waste-Derived Fuels or Combination of Fuels\*

	Effective January 1, 2012
Rich Burn Engines, NO <sub>x</sub>	70 ppmv
Lean Burn Engines, NO <sub>x</sub>	70 ppmv
CO	2000 ppmv (remains unchanged)

### Low Use Limited Exemption

	Effective January 1, 2012
Engines ≤ 1000 bhp	All engines that operate less than 100 hours in a 12-month period
Engines > 1000 bhp	All engines that operate less than 100 hours in a 12-month period

### Emergency Standby Engines for Essential Public Services

- May operate for emergency use for an unlimited number of hours
- Effective January 1, 2012, reliability-related activities may not exceed 100 hours per calendar year or limitations contained in permit, whichever is lower.

Delayed Compliance until 2016, is an option for some qualifying engines if they are reported. See the following website for further details: <http://www.baaqmd.gov/~media/Files/Planning%20and%20Research/Rules%20and%20Regs/reg%2009/rq0908.ashx>.

## BAAQMD Regulation 9, Rule 7: Compliance Extensions: NO<sub>x</sub> and CO from Boilers, Steam Generators & Process Heaters

By: Sarah Merrill/CH2M HILL

Regulation 9, Rule 7 currently requires manufacturers to pre-certify new, natural-gas fired devices rated between 2 – 10 million BTU per hour (MM BTU/hr) for sale in the Bay Area. However, by January 2011, no manufacturer had certified to the standards and therefore no manufacturer-certified devices were available locally. Businesses were not able to comply with this rule and BAAQMD has proposed extensions for the relevant rule deadlines.

Proposed deadlines are the following:

1. NO<sub>x</sub> and CO emission limits compliance date for new & existing devices rated > 2 – 5 MM BTU/hr: January 1, 2013 (extended 2 years)
2. NO<sub>x</sub> and CO emission limits compliance date for new & existing devices rated > 5 - 10 MM BTU/hr: January 1, 2013 (extended 1 year)
3. Stack temperature limits compliance date for new & existing devices: January 1, 2013 (extended 2 years)
4. Certification deadline for all new devices sold or installed: January 1, 2012

These proposed changes are slated to be reviewed and accepted by BAAQMD in May 2011.

For more information on the proposed changes or on the rule itself, please visit the following visit websites:

<http://www.baaqmd.gov/~media/Files/Compliance%20and%20Enforcement/Advisories/Combustion%20Equipment/Boiler%20Adv%20for%20Manufacturer.ashx>.

<http://www.baaqmd.gov/Divisions/Planning-and-Research/Rule-Development/Rule-Workshops.aspx>.



## Waukesha Engine Emissions Control Schema

By: Ken Kaufman/ South Bayside System Authority

South Bayside System Authority (SBSA) is currently using the Waukesha VHP 1200 hp 12 cylinder engine designed to burn digester gas in a lean burn state. SBSA has found that NO and NO<sub>2</sub> emissions can be reduced by keeping the cylinder temperatures below 1100 °F. If temperatures rise above 1100 °F, then nitrogen combines easily with oxygen and produces more NO<sub>x</sub>.

Fuel control is an up-draft normally aspirated, non-turbo charged, carburetor. This engine is used to drive a 650KW 3-phase 480V generator. The emission controls uses an Allen-Bradley SLC 500 programmable logic controller (PLC), two air driven valves, throttle position sensor (TPS), 12 air injectors, and a device to monitor the percent oxygen in the engine exhaust. To control the cylinder temperatures air injectors have been installed onto the intake manifold which allows cool air to enter directly into each cylinder without going through the carburetor. The air injector tube outlets are about an inch away from the intake valves. There are two banks of air injectors, six on the left and six on the right. Each bank manifold (not the intake manifold) has an air valve attached to the end of the manifold to control the amount of air going through the air injectors and into the cylinders. No air pump is required for this. The vacuum of the engine sucks the air through the air valves, through the injectors and into the cylinders.

### What SBSA has observed:

- Engine running
- Hand operated shutoff valves to the air injectors are closed – emission's controller OFF
- Engine with a 100KW load
- ECOM-PLUS 5 gas analyzer hooked up to the engine

During this time the carburetors were adjusted so the engine exhaust has about 4% excess oxygen, a lean burn requirement. The temperature is about 1050 ° F on average and NO<sub>x</sub> about 190 ppm. The role of the carburetor is to maintain the correct air and fuel mixture ratio. The percent oxygen should remain the same (4%) through the range of the carburetor performance, however, it does not. As load on the generator is increased, the throttle increases and more air and fuel are allowed to pass through the carburetor, thus creating more energy and heat. Cylinder temperatures go up and cause the oxygen to combine with nitrogen. SBSA found that you can never stop this process, only reduce its effects. When keeping the cylinder temperature down below 1100° F the production of NO<sub>x</sub> drops off quickly for this engine.

So by just allowing a little cool air directly into the cylinders, lower cylinder temperatures can be maintained thus reducing NO<sub>x</sub> emissions. But if you allow too much air into the engine, the engine will start to run rough. Too much air short circuits the carburetor, allowing it to be "bypassed" and throwing the air/fuel mixture off.

### Emission Control Schema

There are several ways to control the air going into the air injectors. One way would be to monitor each cylinder temperature and allow a PLC to modulate an air valve for each injector. This sounds good but would be too costly and a nightmare to maintain. SBSA found out if the engine's percent oxygen level could be monitored there would be a way to control the air valves, allowing just the right amount of air to maintain lower cylinder temperatures. Knowing that there is excess oxygen indicates complete burn but knowing how much excess oxygen can indicate how much cool air is being injected into the cylinders. With that information, you can control the production of NO<sub>x</sub> and still get good performance from the engine.

There are two engine condition signals that are sent to the emission PLC, TPS and percent oxygen. One output leaves the emission PLC to control the two air valves for the injectors. Other outputs are collected and sent to A Supervisory Control and Data Acquisition (SCADA) system. The first input is the TPS and is attached to the throttle body actuator to monitor the amount of throttle being applied to the engine. The second input going to the PLC is the exhaust gas percent oxygen signal. TPS and percent oxygen signals are wired to the PLC analog input card. The PLC program divides the TPS signal into 12 steps and each step has a starting and ending TPS value. As the throttle advances the TPS values increase and the PLC looks at that value and finds what step the throttle is in. Within that step the PLC knows what the percent oxygen levels should be at that throttle position. The percent oxygen level for each step is preprogrammed by the mechanic while emission calibration is being performed, to be discussed later. The PLC compares the required percent oxygen level with actual exhaust gas percent oxygen and subtracts the two values. If the resultant value is zero then the PLC will take no action. If the value is positive, then too much air is being injected into the engine and the PLC will start to reduce the air valves. If the resultant value is negative then more injector air is needed.

[See Page 14 for continued article]

## Assessing Ozone Reactivity Emissions from a Biofilter at a Compost Facility Using the SCAQMD Modified USEPA Flux Chamber Technology and the UC Davis Mobile Ozone Chamber Assay Technology

Summary of white paper by Peter Green, Ph.D., Isabel Faria, Ph.D., Mike Kleenman, Ph.D., Zackary Kay, Randy French, Tom Card, and CE Schmidt, Ph.D.

Researchers recently conducted a site assessment at the City of Santa Rosa biosolids compost facility to evaluate the air emissions from the facility's biofilter using both the traditional regulatory-approved flux chamber assessment technology, and also with the UC Davis Mobile Ozone Chamber Assay (MOChA) for assessing ozone formation potential (OFP). The test objectives were to:

- Assess the air emissions of total non-methane non-ethane organic compounds (TNMNEOC) from a biofilter at a compost site for the purpose of providing engineering evaluation data regarding biofilter media performance
- Conduct the engineering evaluation using regulatory approved methods that satisfy South Coast Air Quality Management District (SCAQMD) Rule 1133 requirement for the area source assessment on area sources found at compost sites
- Report the TNMNEOC air emissions and ozone formation potential from biofilter establishing a link between conventional ozone precursors and ozone formation potential (OFP)
- Begin to generate a data base where hydrocarbon emission factors for area sources are also described by OFP



By matching short-term OFP in the field (assessed with a mobile ozone chamber) to a photo-chemically reactive hydrocarbon compound assessment, the significance of area source emissions relative to regional air pollution concerns can be better understood.

In summary, the assessment yielded the following conclusions:

- SCAQMD modified USEPA/Method 25.3 TNMNEOC hybrid approach offers hydrocarbon and ozone formation potential assessment
- Volatile organic compound (VOC) speciation with incremental reactivity analysis supports the OFP assay
- 'Hybrid' assessments can provide a link between traditional VOC assessment and ozone formation potential as an assessment approach
- Continued research is needed to establish ozone formation potential assessment technologies and promote changes to future clean air inventories and emissions controls

The study was conducted by Peter Green, Ph.D., Isabel Faria, Ph.D., and Mike Kleenman, Ph.D., of U.C. Davis, Zackary Kay and Randy French of the City of Santa Rosa, Tom Card, M.S., of Environmental Management Consulting, and environmental consultant CE Schmidt, Ph.D. A white paper for this study may be downloaded by BACWA AIR Committee members at <http://bacwa.org/Committees/AirIssuesRegulations.aspx>. Non-committee members may obtain a copy from Zackary Kay at [ZKay@ci.santa-rosa.ca.us](mailto:ZKay@ci.santa-rosa.ca.us).

## Updated BAAQMD CEQA Guidelines

Source: <http://www.baaqmd.gov>

At the December 15, 2010 Board Meeting, the District's Board of Directors revised the effective date for the risk and hazards thresholds for new receptors from January 1, 2011 to May 1, 2011. These additional months will provide more time for lead agencies and others to become fully prepared to implement the risk and hazards thresholds. Staff will continue to expand and refine the screening tables and technical support tools to assist implementation of the CEQA Guidelines. All other CEQA thresholds of significance adopted by the Board of Directors on June 2, 2010 remain effective as of June 2, 2010.

For more information, visit:

<http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES/Updated-CEQA-Guidelines.aspx>

## Final Compliance Deadlines for the Fleet Rule for Public Agencies and Utilities

Adapted from ARB Notification

The final compliance deadline for most of the remaining diesel vehicles subject to the California Air Resources Board (CARB) Fleet Rule for Public Agencies and Utilities is December 31, 2011. All cities, counties, special districts, State of California public agencies and privately-owned utilities that provide services for water, natural gas and electricity that operate diesel vehicles greater than 14,000 pounds gross vehicle weight rating (GVWR) are subject to the Fleet Rule for Public Agencies and Utilities.

The regulation requires fleets to apply best available control technology (BACT) to a percentage of the fleet based on an implementation schedule. To meet BACT requirements vehicles must be retrofitted with the highest level particulate matter (PM) exhaust filter, be repowered with an engine that is originally equipped with a PM filter, be designated low use or the vehicle must be retired.

All Group 3 vehicles (2003-2006 model year engines) must have met BACT by December 31, 2010, all 2002 and older model year engines must meet BACT by December 31, 2011 and any 2007 model year or newer engine certified above 0.01 g/bhp-hr for PM must meet BACT by December 31, 2012.

For more information about the regulation, go to: [www.arb.ca.gov/msprog/publicfleets/publicfleets.htm](http://www.arb.ca.gov/msprog/publicfleets/publicfleets.htm)

## CARB In-Use, Off-Road Diesel Regulation: Deadlines Extended

By: Sarah Merrill/CH2M HILL

The CARB In-Use, Off-Road Diesel Regulation went through a series of reviews and proposed changes in 2010. In December 2010, the following changes were accepted:

- Four year extension for all fleets:
  - January 1, 2014, for large fleets (over 5,000 hp)
  - January 1, 2017, for medium fleets (2,501-5,000 hp)
  - January 1, 2019, for small fleets (2,500 hp or less)
- Reduction & simplification in the annual requirements for fleets and fleet average structure. Fleets now have only one fleet average target to meet based on their NO<sub>x</sub> emissions; if they cannot meet the fleet average target, they are required to reduce their total fleet horsepower by 5-10% (reduced from 28 -30%)
- Exhaust retrofits no longer mandatory
- Increase of low use threshold to 200 hours per year (previously 100 hours)

Overall, CARB staff estimates that these amendments reduce the compliance costs by more than 95% during the first five years and more than 70% during the entire span of the regulation.

Note that other requirements from this regulation are still in effect and unchanged by these amendments such as reporting, labeling, and idling time limits. However, large fleets are currently exempt from reporting and compliance certification for 2011. Please be aware that these are enforceable and non-compliance could result in fines.

For more information:

[http://www.arb.ca.gov/msprog/ordiesel/documents/post\\_2010\\_hearing\\_fact\\_sheet.pdf](http://www.arb.ca.gov/msprog/ordiesel/documents/post_2010_hearing_fact_sheet.pdf)

<http://www.arb.ca.gov/msprog/ordiesel/ordiesel.htm>

## California Emissions Estimator Model™

By: Jacqueline Kepke and Jim Sandoval/CH2M HILL

SCAQMD has recently released a new tool-- **California Emissions Estimator Model™** (CalEEMod). It is a statewide emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operations from a variety of land use projects. The model quantifies direct emissions from construction and operation (including vehicle use), as well as indirect emissions, such as GHG emissions from energy production, solid waste handling, vegetation planting and/or removal, and water conveyance. The model incorporates Pavley standards and Low Carbon Fuel standards into the mobile source emission factors. Further, the model identifies mitigation measures to reduce criteria pollutant and GHG emissions along with calculating the benefits achieved from measures chosen by the user. The GHG mitigation measures were recently developed and adopted by the California Air Pollution Control Officers Association (CAPCOA).

The model was developed in collaboration with the air districts of California, so we can expect its use to spread statewide. Default data (e.g., emission factors, trip lengths, meteorology, source inventory, etc.) have been provided by the various California air districts to account for local requirements and conditions. The model is free of charge and will be periodically updated when modifications are warranted.

The model is an accurate and comprehensive tool for quantifying air quality impacts from land use projects throughout California. The model can be used for a variety of situations where an air quality analysis is necessary or desirable such as California Environmental Quality Act (CEQA) documents, National Environmental Protection Act (NEPA) documents, pre-project planning, compliance with local air quality rules and regulations, etc.

Details on the wastewater treatment plant component can be found in Appendix A of the User's Guide, specifically pages 32-37. For additional information, go to <http://www.caleemod.com/>

## Urban Greening Grant Program

[http://sgc.ca.gov/urban\\_greening\\_grants.html](http://sgc.ca.gov/urban_greening_grants.html).

On behalf of the Strategic Growth Council (SGC), the California Natural Resources Agency will be administering the second of three rounds of a competitive grant program for urban greening and plans and projects. Guidelines for plans are available at [http://resources.ca.gov/bond/2011\\_Urban\\_Greening\\_Planning\\_Guidelines\\_Round\\_2.Final.pdf](http://resources.ca.gov/bond/2011_Urban_Greening_Planning_Guidelines_Round_2.Final.pdf), and guidelines for projects at [http://resources.ca.gov/bond/February\\_2011\\_Urban\\_Greening\\_Project\\_Guidelines\\_Round\\_2.Final.pdf](http://resources.ca.gov/bond/February_2011_Urban_Greening_Project_Guidelines_Round_2.Final.pdf).

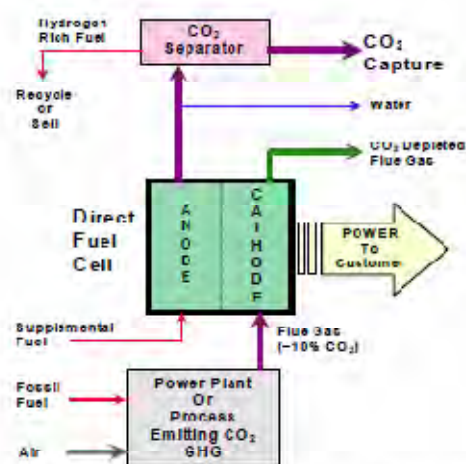
Grants will fund plans and projects that reduce greenhouse gas emissions and provide multiple benefits including, but not limited to, decreasing air and water pollution, reducing the consumption of natural resources and energy, increasing the reliability of local water supplies, or increasing adaptability to climate change.

Regional grant workshops took place in March. The solicitation for Urban Greening Plan grant applications will be issued the beginning of April with an approximate 45 day submittal timeframe. Awards are anticipated to be announced late 2011 and are contingent upon inclusion in and enactment of the State budget and available cash.

All entities applying for Urban Greening Project grants will be required to submit a concept proposal form in order to receive an invitation to submit a full application. This form is currently available on-line. The solicitation for applications for the project Grant Program is expected to be issued the beginning of April with an approximate 45 day submittal timeframe. Awards are anticipated to be announced early 2012 and are contingent upon inclusion in and enactment of the State budget and available cash.

## City of San Jose Fuel Cell Project (cont. from pg. 2)

- Provides greater regulatory certainty (the ICE estimate contains some costs for future, more stringent air regulation changes, but may not cover all the costs which are hard to predict. The fuel cell is not expected to require any modification to meet emissions standards through the life of the project)
- Provides the Plant with a more environmentally friendly and diverse generation portfolio
- Places almost all risk onto PPA provider. City pays for power, not for the operating and maintenance cost
- Frees up City capital to be used for other critical projects
- Begins replacing ICE sooner since the fuel cell will be on line by January 2012, as compared to ICE, which will take 2-4 years to install and become operational
- Property taxes generated to local schools, cities and districts
- Provides insurance for the fuel cell and the Plant in the event of any property damage or personal injury to others as a result of system operation



**Figure 1. Direct Fuel Cell-based CO<sub>2</sub> Separation and Power System Concept:**  
The system can be used with a variety of CO<sub>2</sub>-containing greenhouse gases (GHG)

## From the Frying Pan to Fuel: SFPUC's Renewable Energy Program (II) (cont. from pg. 6)

The 2011 FOG Ordinance went into effect on April 1, 2011. With the FOG Ordinance in place, food establishments will have to comply by installing the proper grease capturing device based on their cooking equipment and plumbing fixtures, which equate to an establishment's "FOG discharge risk." For example, Category 4 FOG Dischargers are those establishments that only re-heat prepared foods, and therefore do not require any capturing equipment. Category 1 FOG Discharges are those that have a high FOG discharge risk and do not have approved grease capturing equipment in place. Category 1 FOG Discharges will be required to install a Grease Removal Device or a Gravity Grease Interceptor within 60 days after the Ordinance goes into effect, and can subsequently take advantage of a sewer rate reduction to offset installation costs.

With the Ordinance in place, food establishment cannot:

- Dispose of any type of FOG or food containing FOG directly into drains
- Install garbage grinders (existing garbage grinders will have to be removed)
- Discharge wastewater at a temperature higher than 140 °F
- Discharge dishwasher wastewater through grease capturing equipment
- Use biological additives in drains leading to grease capturing equipment



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## Waukesha Engine Emissions Control Schema (cont. from pg. 9)

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### Emission Calibration

By 2012, the air board is going to require this engine to be at or below 70ppm NO<sub>x</sub> and SBSA is maintaining those levels right now though the whole KW range.

Starting at 200KW, the mechanic takes note what step the throttle is in and looks at the ECOM-PLUS 5 gas analyzer to see how much NO<sub>x</sub> is being produced. If the NO<sub>x</sub> is 140ppm and the percent oxygen is a 4.3%, he will insert a new percent oxygen value into the PLC, maybe 4.9%, and wait a while for the changes to take effect. As the air valves open, more air is being injected into the engine, the cylinder temperature starts to drop, percent oxygen goes up to 4.9%, and now the NO<sub>x</sub> is at 80ppm. The mechanic will continue this process until the desired NO<sub>x</sub> level is met. Next the mechanic will increase the KW to get the TPS into the next step and again calibrate to maintain at or below 70ppm NO<sub>x</sub>. After going through all of the TPS steps the engine now is in compliance. At the 12<sup>th</sup> step, the engine is making the maximum KW possible.

What's great about this schema is if the BTU of the digester gas changes (and it will), the oxygen sensor will pick that up. If you have higher BTU, more oxygen is consumed resulting in higher cylinder temperatures. The emission's PLC will add a little more air to compensate for BTU change, thus not violating emissions limits.

## Important Dates

Next BACWA AIR Committee Meetings at the CH2M HILL Offices in Oakland:

- April 20<sup>th</sup>, 2011
- July 20<sup>th</sup>, 2011 (tentative)

Other important dates:

- Written comments on the proposed EPA rule to defer permitting of biogenic emissions under the Tailoring Rule: May 5<sup>th</sup>, 2011
- Final compliance deadline for diesel vehicles subject to CARB Fleet Rule for Public Agencies and Utilities: December 31, 2011.

## About Our Organization

### BAY AREA CLEAN WATER AGENCIES (BACWA)

BACWA agencies are the day to day urban water resource managers and the stewards of the San Francisco Bay estuary. As such, it is the goal of BACWA to ensure that local and regional decisions makers understand and use scientifically sound data to make management decisions that will result in improvements and enhancement of the Bay estuary.

It is the goal of BACWA that all resource managers and decision makers understand the watershed dynamics and embrace a regional approach to water quality issues recognizing that regional problems call for regional solutions.

### AIR ISSUES & REGULATIONS COMMITTEE (AIR)

The Air Issues and Regulations Committee (AIR) develops, analyzes and distributes scientific information regarding air pollution and climate change issues related to operation and maintenance of publicly owned treatment works.

## A BIG THANKS to our Contributing Authors

### BOB MOUDERRES (City of San Jose)

Bob authored an article about the San Jose/Santa Clara Water Pollution Control Plant biogas fuel cell co-generation system. Thank you Bob!

### ZACKARY KAY (City of Santa Rosa)

Zackary and his team co-authored a white paper about an interesting site assessment at the City of Santa Rosa biosolids compost facility to evaluate the air emissions from the facility's biofilter. Thank you Zackary!

### TIM SMITH & GEURT VAN DE KERK (SUSTAINABLE SOCIETY FOUNDATION)

Tim and Geurt contributed an article about the ongoing evaluation of sea level rise for California, Oregon, and Washington for the years 2030, 2050 and 2100. Thank you Tim and Geurt!

### MANISHA BERDE, KARRI VING & NOHEMY REVILLA (SFPUC)

Manisha, Karri, and Nohemy authored articles about SFPUC's progressive approach to FOG waste collection and digestion. Thanks to all of you!

### KEN KAUFMAN (SBSA)

Ken authored an article about SBSA's onsite engine emissions control schema to meet regulatory requirements. Thank you Ken!

### JACQUELINE KEPKE (CH2M HILL)

Jackie lent us articles she had written about CWCCG's recent news and other items that CWCCG has addressed. Thank you Jackie!

BACWA AIR also would like to thank Stacy Kika/USEPA, SCAP, Tim Smith and Geurt Van De Kerk for articles which have been republished in this newsletter.

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# **BAPPG Committee Report to BACWA Board**

Meeting Date: April 25, 2011  
Prepared By: Sharon Newton, City of San Jose  
BAPPG Committee Chair

## **Project Updates**

<b>Project</b>	<b>Update</b>	<b>Completion Date</b>
Spring Cleaning Campaign	<p>BAPPG's Spring Cleaning Campaign includes the re-launch of a new Baywise.org website, and media relations and advertising to drive users to the new website. The website launched on March 14, and continues to be promoted. The new website features an opt-in newsletter and an interactive "Eco-Home" house with tips and resources for protecting the Bay.</p> <p>O'Rorke and BAPPG developed a press release that was circulated to Bay Area media outlets that has resulted in an interview request from KIQI. Additional interview requests are anticipated.</p> <p>Project Leads: Jen Jackson (EBMUD), Karin North (Palo Alto), Melody LaBella (Central San).</p>	April 2011
Chinook Book Ads	<p>The Chinook Book is an annual green coupon book published in two editions: one for the South Bay and one for the East Bay. BAPPG will insert an ad to promote pharmaceutical collection opportunities. The coupons last a year, providing numerous opportunities for users to see our ad. The new books will be released in the fall, but ads are purchased and placed in the spring.</p> <p>Project Lead; Karin North (Palo Alto)</p>	Fall 2011
Mercury Op Ed	<p>BAPPG is assisting with development of an opinion-editorial that credits the Bay Area's successful dental amalgam program model in light of the EPA's announcement that national rules requiring such programs will be forthcoming. BAPPG will be monitoring the EPA rule development process closely in order to guard against additional requirements for Bay Area programs that will not make a difference. The draft op ed was distributed to BACWA Board members for review in March.</p> <p>Project Lead: Melody LaBella (Central San)</p>	Ongoing
PCBs	<p>Robert Schlupf of the Water Board attended the April 6 BAPPG Committee meeting to discuss the PCBs Amendment. He provided background on the TMDL implementation and the change to the permit requirements related to PCBs source identification and control. The revised language aligns with the Municipal Regional Stormwater Permit PCBs building demolition pilot project. Heather Ottaway indicated that she will discuss at a future BAPPG meeting how agencies will be required to report the PCBs information to the Water Board.</p>	April 2011

## **Next BAPPG Meeting**

June 1, 2011, 10am – 12 pm, 1515 Clay Street, Oakland, CA, Second Floor, Room TBD



# Collection Systems Committee Report to BACWA Board

April 18, 2011  
From: Andy Morrison, Committee Chair  
Prepared By: Monica Oakley

## Committee Request for Board Action:

None.

### Highlights of New Items Discussed and Action Items

#### **Changes to State-wide SSO WDR**

Proposed revisions to the state-wide sanitary sewer system (SSS) Waste Discharge Requirements (WDR) were released on March 24, 2011. The proposed SSS WDR changes include significant new requirements, some of which are as follows:

- Reporting of SSOs from private property would be required for municipal agencies.
- An NPDES permit is being contemplated and comments are solicited on this approach.
- Eventual replacement of the entire sewer system is expected to be in the SSMP. In addition, the age of the pipe must be a criterion for rehabilitation and replacement.
- It is expected that the SSMP will be placed on the agency's website, and if that doesn't happen, an electronic copy must be provided to the State Water Board so *they* can make it available to the public. In addition, significant contact information is required to be in the SSMP, which may be contrary to public agencies' procedures related to protection of employee privacy.
- All SSMPs would be required to include a very comprehensive staff and contractor assessment program.
- All SSMPs would be required to include "performance targets".
- All SSMPs would be required to include a new and very detailed "risk and threat analysis" for the entire sewer system including all appurtenances.

One good thing in the proposed changes is that the 2-hour reporting would occur to only one agency, the California Emergency Management Agency (CalEMA, formerly OES), not to three agencies.

All BACWA members are urged to comment on this significant regulatory development, and a comment letter template is being developed by BACWA for this purpose. Comments are due to the State Water Board by 12 noon on Friday, April 29, 2011. No State Water Board hearings have yet been scheduled.

#### **Easement Maintenance Issues**

Committee members shared more experiences with easement maintenance at the April 7 committee meeting. This information, in addition to the ideas shared at the March 3 meeting, have been compiled into a BACWA reference document titled, "Tips and Tricks for Easement Maintenance" which is also attached to this report. This document will also be placed on the BACWA website for easy access.

#### **Next BACWA Collection Systems Committee Meeting**

The next committee meeting is scheduled for Thursday, May 5, 2011 at the Boy Scouts facility in San Leandro.

Bay Area Clean Water Agencies  
Collection System Committee

## Tips and Tricks for Easement Maintenance

Version 2.0

From Committee Discussions on March 3 and April 7, 2011

### Successful Practices

- **Provide communication and education** for the public regarding specific issues related to easements, such as:
  - The need for control of dogs
  - The need for access to easements generally
  - Trees and buildings should not be placed over easements
  - Show homeowners what would happen to, say, upstream neighbors if they had a blockage that the agency did not have access to clean or fix.
  - Agency code should be consulted for ideas, and can also be reinforced

Communication tools can include letters mailed to residents, newsletters to residents, bill stuffers, fact sheets, or handouts. Information about this topic can also be provided at pollution prevention events that the agency may be participating in (such as Earth Day, etc.)

- Place **easements on a regular root control** schedule (whether or not root control chemicals are used).
- Set up a contract for **root control services** if resources are not available in-house.
- Train staff to **protect homeowners' property** (especially landscaping) when possible.
- Maintain a **routine easement cleaning list and schedule**.
- **CCTV the easements before cleaning**, because if the line is already clean, don't need to clean it. Let the camera do the work. There is less damage to the pipe, and it helps with crew morale also because it is more efficient.
- Include language in **easement legal documents** (not just the agency's code) **that protect access rights of agency** (including prevention of buildings on easements).
- **If encroachment is discovered** (for example a tree or building in an easement), but **before there is a problem**, the agency can create a **separate agreement with the property owner** that states what the agency will do in an emergency, and that it will not include restoration.
- **Check creeks after wet weather events** to make sure sewer pipe is not exposed from stream route changes.
- Have crews to **set up in the street**, before entering the easement (as much as possible).

- **Use degree of access to determine which lines to replace**, and use Capital Improvements Program (CIP) to fund reconfiguration of lines to improve accessibility.
- **Create Standard Operating Procedure (SOP) for access to private property.**

### Practical Innovations

- Create a **“hot spot” list** using a **GIS layer**.
- Have **standard specifications** so you never have a 90° bend in the future, which is difficult to clean. This could be a supplemental manhole specification.
- Perform **easement maintenance in the summer, use temporary employees** to conduct cleaning. Obtain recommendations from existing regular employees for potential temporary employee candidates. This can also be a way to gain experience with an individual who could become a full-time employee.
- **Identify blockages due to vandalism** during flow monitoring.
- Install **manhole covers which use a different tool** to open, to prevent vandalism.
- **Hire a contractor to for weed and rubbish abatement** in easements.
- Build a turning tool for 90° bends, direct rod.
- **Mark trees** in easements **with stakes** (usefulness of this approach may depend on depth of sewer under tree).
- Add a **green reflector in the street to show** that a **manhole** is located **in the backyard** of the adjacent property.
- **Put tips for each property**, or property owner, encountered **in the GIS**.
- Install **Smart Cover alarms** in easement manholes in remote areas.
- Use stakes or GPS to identify location of easements. **Stakes are especially good at night.**
- **Glue Astro turf to manhole cover in easements after conversation with homeowner**, so homeowner is less likely to build or plant something over it because it's considered unsightly.
- **Use old aerial photos to find manholes** where the surrounding vegetation or buildings have changed, to make it easier to find them.
- Put a **photograph of each manhole location** with a person standing next to it, as well as some of the surroundings (for perspective and as a landmark), **in the GIS** (and maybe attach to the work order).

### Additional Notes

- Easement maintenance is a priority because sanitary sewer overflows (SSOs) from these locations are less easily noticed.
- One agency mentioned they experienced resistance to root control chemicals with Eucalyptus trees.

# Recycled Water Committee

## Report to BACWA Board

April 18, 2011

Prepared By: Cheryl Muñoz  
Committee Chair

### Committee Requests for Board Action:

None.

### Business Discussed and Action Items:

Business	Discussion
<b>BAIRWMP Updates</b>	Updating the <u>BAIRWMP</u> – A BAIRWMP planning grant award (\$600,000) has been made to Marin Municipal Water District (MMWD). The BAIRWMP will need to be updated in two years. MMWD will begin the consultant procurement process with oversight by the Coordinating Committee. As part of the plan update, projects and descriptions will be updated.
<b>Legislation Updates</b>	<p><u>AB 134 (Dickenson) sponsored by Sac Regional</u> - This bill would authorize the Sacramento Regional County Sanitation District to file an application for a permit to appropriate a specified amount of water based on the volume of treated wastewater that the district discharges into the Sacramento River. The bill would also authorize the State Water Resources Control Board (SWRCB) to grant a permit to appropriate that treated wastewater upon terms and conditions determined by the SWRCB.</p> <p>The Bill generated much discussion among the Committee members in regards to Sac Regional's ability to purvey recycled water and the concern voiced by downstream agencies' about wastewater discharged by Sac Regional constituting "<i>return flows</i>" that downstream users may acquire a right to.</p>
<b>FY 10-11 Committee Projects</b>	<u>Recycled Water Landscape Guide</u> - Following BACWA Board approval of the recycled water irrigation guide project in April, the City of San Jose is seeking an additional \$10,000 in contribution from new sponsors.
<b>Other Items</b>	<p><u>Recycled Water Committee Administrative and Technical Assistance</u> – Following BACWA Board approval, it was announced that EPC Consultants, Inc. will be providing administrative/technical assistance for the committee that will allow the Committee to expand its work on recycled water issues of importance to the BACWA agencies.</p> <p><u>20 X 2020</u> – To meet the requirements of SBX7 7 (reducing per capita urban water use by 20 percent by 2020), DWR will convene a commercial, industrial, institutional task force to develop alternative BMPs. The CA WaterReuse Association Section will be involved and will form reuse committees for each of these areas.</p>
<b>Next RW Committee Meeting</b>	Wednesday, May 4, 2011 from 10:00 am to 12:00 pm EBMUD Headquarters, 4 <sup>th</sup> Floor Conference Room

Grant Disbursement Summary to Date (April 15, 2011)												
Bay Area Integrated Regional Water Management (IRWM) Prop 50 Grant												
Agr. No.	Implementing Agency	Project Title	DWR Proj. No.	Max. State Grant Funds by Project	Grant Funds Invoiced to date	Paid by DWR to date	DWR Retention	Admin <sup>2</sup> Funds Rec'd by BACWA	Funds paid out to date	Payable as of this date	Total Paid and Payable	
1	Contra Costa Water District	Regional Intertie (VFDs)	1	500,000.00	500,000.00	181,397.33	(50,000.00)		176,731.44	0.00	176,731.44	
		BACWA Admin	16	15,625.00	7,142.85	5,959.11	(662.12)	15,625.00				
2	East Bay Municipal Utility District	Reg. Conservation Outreach	2	250,000.00	250,000.00	250,000.00	0.00		1,889,049.85	2,340.41	1,891,390.26	
		California WaterStar Initiative -	3	525,000.00	0.00	0.00	0.00					
		New Business Guidebook Pilot	4	75,000.00	0.00	0.00	0.00					
		Richmond Adv Recycling	8	2,127,600.00	2,127,600.00	1,648,512.93	(183,168.10)					
		BACWA Admin	16	46,875.00	21,428.55	17,877.33	(1,986.37)	46,875.00				
3	City of Redwood City	Redwood City Recycled WP	5	972,800.00	972,800.00	972,800.00	0.00		978,759.11	0.00	978,759.11	
		BACWA Admin	16	15,625.00	7,142.85	5,959.11	(662.12)	15,625.00				
4	City of Palo Alto	Mt.View-Moffett Recycl WP	6	972,800.00	972,800.00	972,800.00	0.00		965,858.13	2,275.98	968,134.11	
		BACWA Admin	16	15,625.00	7,142.85	5,959.11	(662.12)	15,625.00				
5	Santa Clara Valley Water District (& San Jose)	Reg. Conservation Outreach	2	125,000.00	125,000.00	125,000.00	0.00		80,625.00	4,377.33	85,002.33	
		South Bay Adv Recycl WTP	7	2,934,600.00	0.00	0.00	0.00					
		BACWA Admin <sup>3</sup>	16	31,875.00	6,428.55	4,377.33	(486.37)	31,875.00				
SJ	City of San Jose	BACWA Admin for SCVWD <sup>3</sup>	16	15,000.00	15,000.00	13,500.00	(1,500.00)	15,000.00	7,000.00	6,500.00	13,500.00	
6	North Coast County WD (& SFPUC)	Pacifica Recycled Water Proj	9	744,400.00	0.00	0.00	0.00		0.00	1,459.11	1,459.11	
		BACWA Admin <sup>3</sup>	16	10,625.00	2,142.85	1,459.11	(162.12)	10,625.00				
SF	S.F. Public Utilities Comm	Reg. Conservation Outreach	2	297,550.00	297,550.00	297,550.00	0.00		242,045.00	20,918.22	262,963.22	
		BACWA Adm for Reg.Consrv	16	31,250.00	14,285.70	11,918.22	(1,324.25)	31,250.00				
		BACWA Admin for NCCWD <sup>3</sup>	16	5,000.00	5,000.00	4,500.00	(500.00)	5,000.00				
SOL	Solano Co. Water Agency	Reg. Conservation Outreach	2	50,000.00	50,000.00	50,000.00	0.00		45,000.00	0.00	45,000.00	
7	North Marin Water District	North Marin Recycled Water	10	244,550.00	244,550.00	244,550.00	(0.00)		241,750.47	0.00	241,750.47	
		BACWA Admin	16	9,375.00	4,285.71	3,575.47	(397.27)	9,375.00				
8	Zone 7 Water Agency	Reg. Conservation Outreach	2	60,000.00	60,000.00	60,000.00	0.00		720,000.00	5,959.11	725,959.11	
		Mocho GW Demin Project	11	740,000.00	740,000.00	740,000.00	0.00					
		BACWA Admin	16	15,625.00	7,142.85	5,959.11	(662.12)	15,625.00				
9	Marin Municipal Water District	Reg. Conservation Outreach	2	200,000.00	200,000.00	200,000.00	0.00		374,451.90	468.08	374,919.98	
		Direct Installation HET Prog	12	366,800.00	311,894.35	197,719.52	(21,968.84)					
		BACWA Admin	16	9,375.00	4,285.71	3,575.47	(397.27)	9,375.00				
10	Montara Water & Sanitary District	Groundwater Exploration Project	13	37,100.00	37,100.00	33,390.00	(3,710.00)		33,390.00	1,191.82	34,581.82	
		BACWA Admin	16	3,125.00	1,428.57	1,191.82	(132.42)	3,125.00				
11	Alameda County Water District	Reg. Conservation Outreach	2	60,000.00	60,000.00	60,000.00	0.00		589,334.11	0.00	589,334.11	
		Alameda Creek Phase 2 Fish	14	600,000.00	600,000.00	540,000.00	(60,000.00)					
		BACWA Admin	16	15,625.00	7,142.85	5,959.11	(662.12)	15,625.00				
12	Sonoma Valley County Sanit. Dist.	Sonoma-Napa Marsh RWP	15	366,800.00	269,332.62	0.00	0.00		0.00	3,575.47	3,575.47	
		BACWA Admin	16	9,375.00	4,285.71	3,575.47	(397.27)	9,375.00				
Grand Total					12,500,000.00	7,932,912.56	6,669,065.56	(329,440.91)	250,000.00	6,343,995.01	49,065.55	6,393,060.56

Notes: 1. BACWA Administration Costs invoiced, paid and retained to date:

114,285.59

95,345.78

(10,593.98)

3. Reimburse SFPUC and San Jose for Admin Costs until reimbursement = \$80k then pay SCVWD & NCCWD

2. Admin funding = \$152,250 in upfront funding plus grant check deductions.

4/15/2011

## Director's Report to the Board

March 19, 2011 – April 19, 2011

Prepared for the April 25, 2011 Executive Board meeting

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### A. ORGANIZATIONAL DEVELOPMENTS

- **Accounting.** The Treasurers Reports for January and February were finalized, approved by the Treasurer, and on the April Executive Board meeting for approval. There will continue to be a two month delay between the end of the month and finalization because of EBMUD schedules. Current financial information, however, is available weekly. Expenses and revenues, including for Proposition 50, are fully automated.
- **Budget Development.** The ED and AED incorporated feedback on budget priorities a workplan for the coming Fiscal Year. The workplan must be approved in May to allow time for the accounting codes to be set up and contracts for the coming year prepared. It can, however, be amended by the Board at a later date if necessary.
- **Strategic Planning.** The ED prepared suggested revisions to the BACWA strategic plan and distributed to the BACWA working group. The group will meet in May to review and plan the agenda for the May 26 strategic planning meeting in Orinda.
- **Communications.** The ED and AED worked with a consultant to update the website skin, and organize files stored online.

### B. REGULATORY AFFAIRS

- **Mercury.** The 2011 Annual Mass Emissions Report was submitted to, and accepted by, the Regional Water Board on April 1. The ED is coordinating with BAPPG to provide a summary of the report and the mercury-related outreach conducted by agencies at the May Regional Water Board meeting. Per approval by the BACWA Board, Tim Potter has organized a workgroup to develop comments on EPA's future rulemaking regarding mandatory dental amalgam programs.
- **PCB TMDL Implementation.** A draft Sampling, Analysis and Reporting Protocol was prepared and shared with a BACWA working group. A meeting has been scheduled with Regional Water Board staff on April 28 to review and discuss next steps. The question of how 1668c results will be reported is of primary concern (BACWA's preference is to allow for the upload of lab reports until the e-SMR transition is completed and deemed successful) and will be discussed at the May 6 meeting with Regional Water Board staff.

The permit was petitioned to the State Board and placed in abeyance (meaning no action will be taken on it). The ED is responding to a Regional Water Board request to identify which other petitions are still pending for which the issues have been resolved, and to request that those petitions be dismissed.

- **Selenium/ANPR.** The ED drafted comments on the Advanced Notice of Proposed Rulemaking regarding selenium and is working with Guy Moy, Lab Committee Chair, and CCCSD on the technical content for the comments.
- **Nutrients.** The Nutrient Numeric Endpoint Literature Review has not yet been released. The ED and HDR representatives met with CCCSD and the Federal and State Contractors Water Agency to discuss the Suisun Bay Monitoring Plan, which is currently underway. The ED worked with HDR to prepare for and schedule the May 25 "kick-off" meeting. Funds

authorized by the BACWA Board to support the RMP Nutrient Strategy and the Suisun Bay Monitoring Plan (pesticides/herbicides analysis) have been transferred.

- ***e-SMR Transition.*** The seven POTWs required to begin reporting to e-SMR as of April 30 appear to be managing the transition primarily in-house. The ED authorized a consultant, EOA, to attend e-SMR user group meetings on behalf of BACWA and report out on the discussions and planned changes.
- ***Sanitary Sewer Overflow Waste Discharge Requirements.*** The draft permit for sanitary sewer systems was released last month, with comments due April 29. As recommended by the Collection Systems Committee Chair, the ED authorized consultant support to coordinate with Tri-TAC in development of the comment letter and to prepare a template for BACWA member agencies to use in order to enable agencies to comment. The draft permit makes substantial changes to the current order, including prohibiting spills to all surface waters (as opposed to waters of the United States) and defining that to include discharges to storm drains that are not fully recovered. This topic will also be discussed at the May 6 meeting with Water Board staff.
- ***Whole Effluent Toxicity Policy.*** As requested at the March Executive Board meeting, the ED scheduled meetings between BACWA representatives and State Board members for April 18.
- ***Other.*** As an action item from the last RMP Steering Committee meeting, the ED participated in a discussion between SFEI and BASMAA regarding the possibility of funding water quality projects through supplemental environmental projects.

#### C. COLLABORATIONS

- ***Energy.*** BACWA will be co-sponsoring an energy efficiency seminar with the CWEA San Francisco Bay Section Professional Development Committee on May 19.

#### D. MEETINGS

April 20: AIR Committee Meeting  
April 25: BACWA Executive Board Meeting  
April 25: ANPR Comments Due  
May 5: Collection Systems Committee Meeting  
May 6: BACWA Board/Water Board Meeting  
May 10: Permits Committee Meeting  
May 11: Laboratory Committee Meeting  
May 11: BAMI Meeting  
May 12: RMP Contaminant Fate Workgroup & Sources, Loading and Pathways Workgroup Meetings.  
May 18: Biosolids Committee Meeting  
May 19: CWEA/BACWA Energy Workshop  
May 20: Numeric Nutrient Endpoint Stakeholder Advisory Group Meeting  
May 29: Comments on WDR for Sanitary Sewer Systems due  
May 31: RMP Exposure and Effects Workgroup Meeting