



AIR ISSUES & REGULATIONS COMMITTEE

A Committee of the Bay Area Clean Water Agencies

Winter Committee Meeting

January 26, 2011

10:00 am – 1:00 pm

Introductions & Opening

Upcoming Workshops

BACWA-PG&E Workshop

February-March 2011

DRAFT AGENDA

- **8:00- 8:30 Introduction PGE and BACWA**
 - *Why this Workshop?*
 - *Why a BACWA /PG&E Partnership Can Move Us Ahead?*
- **8:30-10:30 Session I. Demand Management**
 - *Electric Rate Structure and Terms-*
 - *Energy Efficiency (PG&E & Quest)*
 - *Demand Response (PG&E and BACWA Member)*
- **10:30-12:30 Session II. ENERGY GENERATION USING POTWs LAND – SOLAR/WIND**
 - *Definitions & Matrix of options for either power sales or onsite use*
 - *Interconnection process -- GIS to participate*
 - *Life after the California Solar Initiative/Self-Gen Incentive Program/Net Energy Metering*
- **LUNCH**
- **2:00-4:00 Session III. ENERGY FROM BIOGAS AND SELF-GENERATION**
 - *Biogas Self-generation options*
 - *Self-generation financial options*
 - *Biomethane options*
 - *Biosolids-to-Gas*
- **4:00-4:30 NEXT STEPS**
 - *Reco's from each section & audience on fruitful Action Plan*



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Strauss WERF Study Workshop

- Date: March 4th, 2011

Agenda Highlights:

- Overview of WERF Optimization Challenge
- What can the Bay Area learn from Strass and other high performing facilities
 - Focusing on the right metrics
 - Organizational & Technical issues
 - Energy Efficiency, Demand Response Programs, and Funding Mechanisms – presented by PG&E

Details still pending.

Location expected to be San Francisco.



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Grant Opportunity

EPA Community-Based Environmental Grants

- *Community Action for a Renewed Environment (CARE) program*
 - help communities address local health and pollution issues
- \$2 million available in 2011
- Level I awards: \$75,000 to \$100,000
 - community-based partnerships to develop local environmental priorities
- Level II awards: \$150,000 to \$300,000 each to support communities that have:
 - established broad-based partnerships
 - identified the priority toxic risks in their communities, &
 - are prepared to measure results, implement risk-reduction activities & become self-sustaining



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EPA Community-Based Environmental Grants

Examples of 2010 CARE grants:

- addressing air pollution, greenhouse gas emissions, water pollution, and poor waste management in Kansas City, KS
- tackling drinking water and stormwater pollution, solid waste, and toxics issues in Cordova, Alaska
- addressing air & water pollution sources, municipal solid waste collection and chemical releases in Ashland, KY
- targeting pest & solid waste issues in New York, NY
- tackling air pollution & land use issues in Detroit



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Brian Bateman
Director of Engineering

*Bay Area
Air Quality Management District*

BAAQMD

- Federal and State regulations to be enforced by BAAQMD, e.g.,
 - EPA Tailoring Rule - An overview of this rule and the requirements
 - AB-32 regs
 - Other potential regs
- The updated BAAQMD CEQA guidelines, including
 - the thresholds of significance for CO₂
 - maximum daily emissions for ROG, NO_x, PM-10, PM-2.5, & dust
 - PM-2.5 receptor concentrations in Non Attainment Zone thresholds
 - other new guidelines
- Tier 0 Portable Diesel engines
 - Overview on this rule
 - What is the phase-out schedule for these engines? Our research finds it to be vague.
- The proposed BAAQMD composting rule
 - Is this a priority for BAAQMD?
 - In 2009, Robert Cave indicated BAAQMD is waiting on results of the San Joaquin AQMD compost study. Any updates?
 - We understand compost operations would be the primary focus. Would the rule set new standards for biosolids land application, biosolids as alt daily cover, or storage of both feedstock and finished product at compost facilities?
- Reg 9/Rule 8 and the challenge of wastewater treatment cogeneration operators meeting the new thresholds for both CO and NO_x
- Any new anticipated rules or fees for air toxics, GHG, etc?
- How might budget cuts & reorganizations at State level impact local permitting & enforcement?
- Other topics



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AIR Business Items

Newsletter – Need Authors!

Authors needed for the
Spring 2011 BACWA AIR Newsletter!

- Articles would be due at the end of February
- Newsletter released in March
- Email smerrill@ch2m.com if interested



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Potential Newsletter Topics

- Climate Change
 - Mandatory Reporting
 - Cap & Trade
- Renewable Energy
 - Foodwaste digestion
 - Solar
 - Fuel cells
- Energy Conservation
- Stationary Engines
- Fleets
- Permitting/Regulations
 - Title V/PSD
 - CEQA
 - BAAQMD



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BACWA AIR Budget Update

Total Budget for FY 10/11: \$80,791

- Spent July 1st - Jan. 21st: \$30,677
- % Spent to date: 38%



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Next AIR Committee Meeting

Wednesday – April 20, 2011, 10am – 1pm

Supplementary Slides
(IF TIME ALLOWS)

Key Issues

- California Cap and Trade
- State Mandatory Reporting
- Tailoring Rule
- BAAQMD Reg. 9, Rule 8
- SF BCDC Update
- Renewable Energy - Biogas Incentives



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Cap and Trade Program

Cap and Trade - Summary

- No wastewater agencies in California will be subject to the cap
- Biomass emissions, including those from combustion of digester and landfill gas, are excluded
 - This language was clarified per CWCCG's request.
 - Language also excludes methane and nitrous oxide emissions from wastewater treatment processes
- Threshold for inclusion in the cap is 25,000 metric tons/yr of *fossil fuel* based emissions (i.e. natural gas combustion)



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Cap and Trade – Summary

- The adopted resolution directed staff to “review the treatment of combined heat and power facilities in the cap-and-trade program to ensure that appropriate incentives are being provided for increased use of efficient combined heat and power”
- Timeline:
 - Amendments in the form of 15-day changes will be made in the first half of 2011
 - Program will begin in 2012



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Cap and Trade - Offsets

- Up to 8% of a covered facility's compliance obligation can be met by purchasing offsets from outside the cap
- CARB will kick off a process for adopting new offset protocols in Feb 2011
 - CARB staff still very interested in opportunities to create wastewater offset protocols



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Cap and Trade - Offsets

- Protocols Under Consideration by CWCCG:
 - Carbon sequestration resulting from land application of biosolids
 - Avoidance of fossil fuel use in the production of inorganic nitrogen fertilizer when replaced with biosolids as a soil amendment
 - Replacement of fossil fuel with digester gas for heating and energy generation
 - Connection of septic system communities to centralized sewer systems
 - Production of biomethane for pipeline injection
 - Capture of methane at systems currently venting to atmosphere (e.g. lagoons)
 - ***Last item is leading contender***
 - ***please let Jackie Kepke know if you're interested in working on this***



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Mandatory Reporting

California Mandatory Reporting Revisions

- At the same hearing as cap and trade, CARB also adopted amendments to the state Mandatory Reporting Regulation
 - Very little testimony or debate because focus was on Cap and Trade
- Intent was to harmonize with cap and trade and EPA Mandatory Reporting Rule
- The proposed changes kick in for reporting year 2011 (filed in 2012)
 - Current reporting requirements remain through the 2010 emissions report (filed in 2011)



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California Mandatory Reporting Revisions

Key changes:

- Reporting threshold lowered from 25,000 metric tons/year of CO₂ to 10,000 metric tons/year of carbon dioxide equivalents (CO₂e)
 - Includes both biomass and fossil fuel combustion emissions.
 - facilities with emissions between 10,000 and 25,000 metric tons/year will be able to file an abbreviated report and will not be required to undergo third-party verification



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California Mandatory Reporting Revisions

Key changes (con't):

- Cogeneration category (> 1 MW power and 2500 metric tons/yr of emissions) has been eliminated
 - Cogen facilities with emissions $> 10,000$ metric tons/year will report as electricity generation sources
 - Cogen facilities with emissions $< 10,000$ metric tons/year can drop out



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Tailoring Rule

Tailoring Rule

- USEPA rule published June 3 to bring GHGs into Clean Air Act permitting programs (Title V and Prevention of Significant Deterioration)
- **Implementation will occur in stages:**
 - **Step 1, Jan 2011:** Existing Title V sources will have to address GHGs in new permits and renewals
 - **Step 2, July 2011:**
 - (1) Modifications resulting in potential to emit GHGs \geq 75,000 tons/yr CO₂e subject to PSD review and Title V
 - (2) Sources that have potential to emit \geq 100,000 tons/yr will trigger Title V, regardless of non-GHG emissions
 - **Step 3, 2017:TBD**



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Tailoring Rule - Considerations

- **Implications and Concerns**
 - No distinction between anthropogenic and biogenic sources
 - Definition of Best Available Control Technologies (BACT) for GHGs still evolving
 - Could be interpreted as covering wastewater process units
- **Important Considerations**
 - Applicability is determined based on Potential to Emit (PTE), not actual emissions.
 - PTE is based on your equipment running at full capacity 24/7
 - Tailoring Rule works in short tons, whereas other GHG regulations are based on metric tons



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Tailoring Rule – PSD and Title V Permitting Guidance

- EPA issued guidance on PSD and Title V permitting for greenhouse gases in November
- States that EPA plans to determine by May 2011 whether a supplemental rule is needed to deal with biogenic emissions



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Tailoring Rule – PSD and Title V Permitting Guidance

- CWCCG submitted comments on the Guidance expressing the following concerns:
 - BACT analysis should be limited to the equipment being permitted – not offsite emissions
 - Biogenic emissions should be excluded from applicability determinations and permit limits
 - The Guidance should be clear that avoidance of public health impacts takes priority over GHG reductions
 - Collaboration between permittee and permitting authority is important but must be managed reasonably
 - In addition to the Guidance, protocols are needed for establishing potential to emit for GHGs



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Tailoring Rule – Biogenic Emissions

- EPA published a Call for Information on approaches to accounting for greenhouse gas emissions from bioenergy and biogenic sources in July 2010
 - EPA received 7000 comments
 - On January 12, EPA announced that it will defer PSD permitting of biogenic emissions and biomass sources for 3 years
 - “EPA received information supporting the conclusion that certain biomass such as waste materials whose inevitable decomposition will result in greenhouse gas emissions anyway -have only very limited climate impacts when combusted as fuel.”
 - Over the next 3 years, EPA will review the science and technical issues associated with biogenic sources



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Tailoring Rule – Air District Implementation

- BAAQMD issued letters to 3 wastewater agencies suggesting that they may be subject to Title V for GHGs
- Meeting was held with BAAQMD staff on December 20 - key messages were:
 - BAAQMD surveyed their database of combustion sources in order to determine who might trigger Title V requirements on GHGs. ***They did not look at emissions from non-combustion sources (e.g. process units).***
 - GHG emissions were based on standard emissions factors associated with the fuel combusted
 - BAAQMD would like to administratively change existing permits to reflect operating conditions that would limit PTE below the 100,000 ton/yr threshold



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Tailoring Rule – Air District Implementation

- For those facilities that already operate under Title V, GHGs will need to be included in the permit application
- Because there are no applicable requirements, there should not be any new conditions in the Title V permit related to GHGs (except perhaps mandatory reporting)
- If a Title V facility were to apply for a permit for a new source, BACT for GHGs would be applied and associated conditions would be captured in the Title V permit
 - EPA will be issuing guidance on how permitting agencies can conclude that combustion of biomass fuel *is* BACT



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SF BCDC Update

San Francisco Bay Conservation & Development Commission – Regional Strategy for Sea Level Rise

- Dec 16, 2010, the Commission:
 - discussed some optional approaches for revising the staff's proposed Bay Plan climate change policies
 - provided the staff with suggestions for dealing with policies on risk assessment, a regional adaptation strategy and the evaluation of permit applications for proposed development in low-lying areas
- Additionally, BCDC is in the midst of delivering presentations and collecting feedback at a series of meetings in each of the nine Bay Area counties
- For details, contact Joe LaClair (415/352-3656 joel@bcdc.ca.gov)



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Renewable Energy

Renewable Energy - Biogas Incentives

- Pacific Gas and Electric Company (PG&E) would like to assess the availability and pricing of Renewables Portfolio Standard (RPS) eligible biogas for sale to PG&E.
- You are invited to participate in PG&E's Request for Information ("RFI") for RPS-eligible biogas for sale to PG&E.
- For specific details on this particular RFI, go to:

<http://www.pge.com/rfo/biogas/>



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Renewable Energy - Biogas Incentives

- CWCCG Letter was submitted to the California Public Utilities Commission (CPUC) on December 17 that requested the following:
 - Approve Southern California Gas Company (SoCalGas®)'s *Request for Authorization to Offer Biogas Conditioning Services and Bioenergy Production Facilities Services on a Non-Tariffed Basis*
 - Provide economic incentives for additional onsite power generation, similar to the California Solar Initiative
 - Adopt an interim renewable energy feed-in tariff
- *Commissioner Simon responded saying he is very interested in initiating a dialogue with CWCCG*



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