



**AIR ISSUES & REGULATIONS COMMITTEE**

*A Committee of the Bay Area Clean Water Agencies*

**Spring Committee Meeting**

**April 20, 2011**

**10:00 am – 1:00 pm**

# Introductions & Opening

# Agenda

- I. Local Regulatory News
- II. State Regulatory News
- III. National Regulatory News
- IV. Additional Items
- V. Closing



# Local Regulatory News

# BAAQMD Regulation 9, Rule 7 Rule Amendments

- Currently requires manufacturers to pre-certify all new natural gas-fired devices for sale in Bay Area
- Rule applies to NO<sub>x</sub> & CO from boilers, steam generators and process heaters
- Proposed amendments to extend compliance dates and expand compliance options
- Proposed changes to be reviewed and accepted by BAAQMD in May 2011
- Public hearing: May 4, 2011

For more info:

<http://www.baaqmd.gov>



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# BAAQMD Regulation 9, Rule 7

## Rule Amendments

- Proposed amendments (extend compliance dates):
  - 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 yrs.)
  - 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 yr.)
  - Stack temperature limits compliance date for new & existing devices: **January 1, 2013** (extended 2 yrs)
  - Certification deadline for all new devices sold or installed: **January 1, 2012**



## Local Regulatory News

# SF Bay Conservation & Development Commission (BCDC) Update

# SF BCDC – Regional Strategy for Sea Level Rise

- Proposed amendments to Bay Plan
- Restrict development in inundation zones resulting from sea level rise
- Joint counter effort by lead by Bay Area Council, Bay Planning Coalition, and Building Industry Association
- Public meetings held in 9 Bay Area counties in 2010
- BCDC is planning to develop new revised recommendation for publication in May 2011; new round of public meeting – TBD
- More from Jackie Kepke at the end of meeting

For more info:

<http://www.bcdc.ca.gov/>



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# National Academy of Sciences project: Sea Level Rise in CA, OR, and WA

New project announced to address sea level rise on the West Coast. A committee will:

- Provide an evaluation of sea level rise for California, Oregon, and Washington for the years 2030, 2050 and 2100 (both global & local sea rise level)
- Evaluate each of the major contributors to global sea level rise & and combine contributions to provide values of global sea level rise
- Characterize and, where possible, provide specific values for the regional and local contributions to sea level rise

For more info: <http://www8.nationalacademies.org/>



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# State Regulatory News

State Regulatory News

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
  - 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 - Challenges

- A California court has ordered CARB to revise its environmental review of C&T under CEQA
- This ruling puts on hold any implementation of the Scoping Plan
- Action to finalize the C&T program deferred until revised environmental document for the Scoping Plan is certified



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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 kicked 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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# CARB's Cap-and-Trade Program Activities for 2011

## Spring

Offset protocols workshop  
Compliance workshop  
Electricity workshop  
Allocation workshop  
Program management workshop

## Late Spring

First regulation change notice  
package released for public  
commenting

## Early Summer

WCI Linkage workshop

## Mid Summer

Second regulation change notice  
package released for public  
commenting

## Fall

C&T regulation finalized  
Compliance workshop

## December

C&T regulation goes into effect



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State Regulatory News

Mandatory Reporting

# California Mandatory Reporting Key Revisions

## Key changes:

- Reporting threshold lowered from 25,000 metric tons/year of CO<sub>2</sub> to 10,000 metric tons/year of carbon dioxide equivalents (CO<sub>2</sub>e)
  - Includes both biomass and fossil fuel combustion emissions.
  - Facilities with emissions between 10,000 and 25,000 metric tons/year file an abbreviated report and not required to undergo third-party verification
- Cogeneration category (> 1 MW power and 2500 metric tons/yr of emissions) has been eliminated



# California Mandatory Reporting Cogen Verification

- Conversation with Mr. Chris Holme, the GHG Mandatory Reporting Rule (MRR) verification specialist at the CA ARB
- Are cogen facilities that file abbreviated reports (i.e., <10 MW nameplate generation & <25,000 tons CO<sub>2</sub>/yr; like MRWPCA) required to re-verify year after "adverse" verification finding?
  - NO, cogen facilities in this category are only required to do triennial verification
- ARB may issue a letter recommending re-verification in 2011
- If your facility's 2011 General Stationary Combustion GHG emissions < 10,000 tons (per the updated rule effective in 2012), then do not have to prove it by entering fuel data into the ARB's MRR webtool

If you have any specific questions, contact  
Mr. Holme at 916-323-4865



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# Extension of Deadline for EPA GHG Mandatory Reporting

- GHG Reporting Program requires reporting from large emission sources across a range of industry sectors
- EPA issued a final rule that extends the deadline for reporting 2010 data to September 30, 2011
- New deadline for registering with the electronic GHG reporting tool (e-GGRT): August 1, 2011

For more info:

<http://www.epa.gov/climatechange/emissions>



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**State Regulatory News**

**Fleet Regulations**

# Fleet Rule for Public Agencies & Utilities

- All cities, counties, public agencies & utilities providing services that operate diesel vehicles >than 14,000 pounds gross vehicle weight rating (GVWR) subject to CARB Fleet Rule
- Final compliance deadlines for most of remaining diesel vehicles : December 31<sup>st</sup>, 2011
- Regulation requires fleets to apply BACT to a % of fleet based on implementation schedule:
  - All Group 3 vehicles (2003-2006 model year engines) by December 31, 2010
  - All 2002 and older model year engines by December 31, 2011
  - Any 2007 model year or newer engine certified above 0.01 g/bhp-hr for PM by December 31, 2012

For more info:

[www.arb.ca.gov/msprog/publicfleets/publicfleets.htm](http://www.arb.ca.gov/msprog/publicfleets/publicfleets.htm)



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# CARB In-Use, Off-Road Diesel Regulation

In 2007, CARB adopted regulation to reduce diesel PM & No<sub>x</sub> emissions from existing off-road diesel vehicles in CA

In December 2010, changes made to regulation:

- Deadlines extended: 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
- Making exhaust retrofits no longer mandatory
- Raising low use threshold to 200 hours per year (previously 100 hours)



**State Regulatory News**

**Misc. State News**



# California Emissions Estimator Model™

- SCAQMD recently released new tool-- **California Emissions Estimator Model™** (CalEEMod)
  - A statewide emissions computer model
  - Provides a uniform platform to quantify potential criteria pollutant and GHG emissions
- Developed in collaboration with the air districts of California
- An accurate and comprehensive tool for quantifying air quality impacts from land use projects throughout California
- Free of charge & will be periodically updated

For more info: <http://www.caleemod.com/>



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# California Emissions Estimator Model™: Features

- Quantifies direct as well as indirect emissions (e.g., GHG emissions from energy production, solid waste handling, water conveyance, etc.)
- Incorporates Pavley standards and Low Carbon Fuel standards into the mobile source emission factors
- Identifies mitigation measures to reduce criteria pollutant and GHG emissions
- Calculates benefits achieved from measures chosen by the user



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# National Regulatory News

National Regulatory News

Tailoring Rule

# Deferral of Biogenic Emissions Published in Federal Register

- EPA proposed rule to defer permitting of biomass and biogenic GHG emissions sources under the Tailoring Rule for 3 years
- Proposed rule officially published in the Federal Register on March 21, 2011
- Public hearing held in Washington D.C. on April 5<sup>th</sup>,  
Written comments due on May 5, 2011
- Biogenic CO<sub>2</sub> from wastewater facilities will be excluded from permitting consideration under the Tailoring Rule for at least 3 years.

*Good news for treatment sector!*



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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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## National Regulatory News

**Air Toxic Standards for Industrial,  
Commercial, & Institutional Boilers  
& Process Heaters**

# Final Federal Air Toxic Standards for Industrial, Commercial, & Institutional Boilers & Process Heaters

- February 21, 2011, USEPA finalized rule to reduce toxic air pollutant emissions from new & existing boilers and process heaters at Major & Area Source Facilities
- Major Source emits  $\geq 10$  TPY of any air toxic or  $\geq 25$  TPY of any combo of air toxics
- Area Source emits  $< 10$  TPY of any air toxic or  $< 25$  TPY of any combo of air toxics
  - Area Source rule DOES NOT apply to boilers that burn gaseous fuels or solid waste, including biogas, per page 249/276 of the rule



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# Final Federal Air Toxic Standards for Industrial, Commercial, & Institutional Boilers & Process Heaters

- Key Requirements for Major Source Facilities:
  - Work practice standard, instead of numeric emission limits, for new & existing natural gas- & refinery gas-fired units
    - Must perform an annual tune-up for each unit.
    - Units combusting “other gases” can qualify for work practice standards by demonstrating that they burn “clean fuel,” with contaminant levels similar to natural gas
  - Work practice standard instead of numeric emission limits for units with heat input capacity < 10 million MMBtu/hr
    - Required to perform tune-up for each unit once every 2 years



# Final Federal Air Toxic Standards for Industrial, Commercial, & Institutional Boilers & Process Heaters

- Key Requirements for Major Source Facilities (continued):
  - Numeric emission limits for all other boilers & process heaters located at major sources
    - Emission limits for:
      - mercury
      - dioxin
      - particulate matter (PM) (as a surrogate for non-mercury metals)
      - hydrogen chloride (HCl) (as a surrogate for acid gases)
      - carbon monoxide (CO) (as a surrogate for non-dioxin organic air toxics)



# Final Federal Air Toxic Standards for Industrial, Commercial, & Institutional Boilers & Process Heaters

- Key Requirements for Major Source Facilities (continued):
  - Requires monitoring to assure compliance with emission limits
  - Existing major source facilities required to conduct a one-time energy assessment to identify cost-effective energy conservation measures
- Final rule is posted at:

<http://www.epa.gov/airquality/combustion/actions.html>



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**National Regulatory News**

**Misc. National News**

# EPA Launches Climate Ready Water Utilities (CRWU) Initiative

- To assist water and wastewater utilities in implementing climate change adaptation and mitigation strategies
- Available CRWU-related tools and resources:
  - The Climate Resilience Evaluation and Awareness Tool (CREAT) designed to assess potential climate change impacts on water and wastewater utilities
  - CRWU Toolbox is a searchable online database of climate-related resource
  - Exercise Tool for Water Systems: Emergency Preparedness, Response, & Climate Resiliency
  - Utility Climate Change Adaptation Measures Guide
  - Adaptive Response Framework Guide

For more info:

<http://water.epa.gov/infrastructure/watersecurity/climate/>



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## Additional Items

*Any other regulations folks are tracking or concerned about?*

**Additional Items**

**Grant Opportunities**

# Urban Greening Grant Program

- California Natural Resources Agency will be administering the 2<sup>nd</sup> of 3 rounds of competitive grant program for urban greening plans and projects
- Grants will fund plans and projects that reduce GHG emissions and provide multiple benefits. Examples of projects:
  - decreasing air and water pollution
  - reducing consumption of natural resources & energy
  - increasing reliability of local water supplies
  - increasing adaptability to climate change
- All entities applying for UG project grant program required to submit a concept proposal form (available online and as a hard copy)
- Solicitation for applications to be issued in early May with an approximate 45 day submittal timeframe

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



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**Additional Items**

**AIR Business Items**

# Spring 2011 BACWA AIR Newsletter

- The BACWA Air Annual Newsletter was completed on April 19<sup>th</sup>, 2011
- A big thanks to all BACWA Air members who contributed articles:
  - **Bob Mouderrres** “City of San Jose Fuel Cell Project”
  - **Zackary Kay & his team** “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”
  - **Manisha Berde, Karri Ving & Nohemy Revilla** “Anaerobic Digestion of Fats, Oil, and Grease (FOG)”
  - **Ken Kaufman** “Waukesha Engine Emissions Control Schema”



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# BACWA AIR Budget Update

Total Budget for FY 10/11: \$81,000

- Spent to date: \$56,400
- % Spent to date: 70% through April 15<sup>th</sup> (81% of FY)



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# Adaptation Issues

- Jackie Kepke
- Tracking & advocating on behalf of BACWA
  - BCDC
  - Other legislature & regulations



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# AIR Committee FY 2011/12

- General format of committee
- Specific topics of interest?
- Newsletter(s)
- Website
- Guest speakers
- Chair/Vice Chair



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# Closing

Next Meeting: Wednesday – July 20, 2011