



AIR ISSUES & REGULATIONS COMMITTEE
A Committee of the Bay Area Clean Water Agencies

Summer Committee Meeting
August 15, 2012
10:00 am – 1:00 pm

Introductions & Opening

Agenda

- Introductions and Opening
- Regulatory Updates
 - I. Local Regulatory News
 - II. State Regulatory News
 - III. National Regulatory News
- Grant Opportunities
- AIR Business Items
- BACWA Meeting Updates
- BAAQMD Advocacy
- Closing



Local Regulatory News

Local Regulatory News

BAAQMD: Amendments to Reg. 2, Rules 1, 2, 4 and 6

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BAAQMD: Amendments to Reg. 2, Rules 1, 2, 4 and 6

- BAAQMD proposed to amend regulations for permitting stationary sources to incorporate recent U.S. EPA requirements for NO₂, PM_{2.5}, and GHG Prevention of Significant Deterioration (PSD) & Title V permitting
- Amending Reg. 2 to make it consistent with recent changes in Fed. requirements, so BAAQMD can issue PSD and New Source Review (NSR) permits
 - BAAQMD can obtain approval of its State Implementation Plan (SIP)
 - Clean Air Act requires SIPs for areas in non-attainment of air quality standards



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BAAQMD: Amendments to Reg. 2, Rules 1, 2, 4 and 6

- Most of the changes will affect major facilities
 - Facilities that apply for new or modified permits for sources of PM_{2.5} will be subject to a new BACT
 - Smaller facilities that are not applying for new or modified permits will not be affected by the rule changes
- District staff have circulated 2 drafts of proposed amendments & solicited public comments; will be finalizing a proposal this summer
- CEQA Notice of Preparation & Initial Study complete
- Draft EIR will be prepared and circulated for public review & comment
- Amendments to be fully adopted by BAAQMD after CARB approval in December 2012 & the USEPA in 2013 or later

Additional details can be found at:

<http://www.baaqmd.gov/Divisions/Engineering/Proposed-Reg-2-Changes.aspx>



Local Regulatory News

BAAQMD: Amendments to Reg. 3: FEES

BAAQMD: Amendments to Reg. 3, FEES

- BAAQMD amended Reg. 3 (Fees) on June 6, 2012 & increased fee revenue to meet FY-12/13 budgetary needs
- Amended fees effective on July 1
- Regulation establishes fees to be charged for Hearing Board filings, renewal of permits, costs of environmental documentation, air toxics inventories, equipment registrations, etc.



BAAQMD: Amendments to Reg. 3, Increase in FEES

Examples of fee increases that may impact you (Range 7-9%):

- Permits fees for new and modified sources: \$416 (from \$389)
- Filing fee to bank emissions: \$416 (from \$389)
- Annual fee for Reg. 2 Rule 9: \$1051 (from \$982), not to exceed \$10,515 (from \$9,827)
- Hearing Board fees increased for all categories
- Excess emissions fees \$2.87 Per Pound (from \$2.63) for air contaminants; \$14.26 Per Pound (from \$13.08) for toxic air contaminants
- Major Facility Review fee: \$497 (from \$456)
- Equipment Regulation Fee:
 - Diesel Engine: Registration - \$141 (from \$129); Renewal - \$94 (from \$86)
 - Boiler, steam generator or process heater: Registration - \$496 (from \$455); Renewal - \$65 (new)
- GHG emission fee: \$0.048 per metric ton of CO₂eq (no change)



State Regulatory News

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State Regulatory News

Mandatory Reporting

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California Mandatory Reporting Rule

Key modifications that impact most POTWs:

- GSC Reporting threshold lowered from 25,000 metric tons/year of CO₂ to 10,000 metric tons/year of CO₂e
 - Includes both biomass and fossil fuel combustion emissions
 - Facilities with emissions between 10,000 & 25,000 metric tons/year may file an abbreviated report and will not be required to undergo third-party verification.
- Cogeneration category (> 1 MW power & 2500 metric tons/yr of emissions) has been eliminated
 - Cogen facilities with emissions > 10,000 metric tons/year of CO₂e will report as electricity generation sources
 - Cogen facilities with emissions < 10,000 metric tons/year of CO₂e can drop out



Proposed Mandatory Reporting Rule Amendments to CARB on Sept 20, 2012

- §95103(a-j) add process emissions to Abbreviated Reporting. However POTWs are not a listed industry sector for this reporting requirement.
- §95103(k) adds testing requirements for meters and other measurement devices to demonstrate accuracy between calibrations.
 - Patrick Gaffney/CARB: *Annual accuracy validation of equipment (meters) no longer required; it's now an option*



Proposed Mandatory Reporting Rule Amendments to CARB on Sept 20, 2012

- The proposed rule change in the spring added a re-requirement in §95115(n) for reporting of biogas flaring emissions from municipal waste landfills. However Gaffney said flaring is now exempt from emissions reporting
- Proposed for §95112(b): *“For an electricity generation system (a cogeneration system, a bigeneration system, a combined cycle electricity generation system, or a system with boilers and steam turbine generators), the operator may aggregate all the units that are integrated into the system for the purpose of reporting data to ARB.”*



California Mandatory Reporting Rule – Cogen Facilities

Recommended Measures for Former Cogen Reporters:

- Document Retention and Record Keeping Requirements
 - 10 yrs after certification with a C&T compliance obligation
 - 5 yrs w/o comp obligation
- Continue to Informally Estimate GSC GHG Emissions
 - High Heat Value (HHV) Measurements
 - Continue to measure
 - Use 841 Btu/scf EPA default
 - Use previous highest measured value



State Regulatory News

Stationary Refrigerant Management Program Regulation

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Stationary Refrigerant Management Program Regulation

- CARB adopted RMP regulation in 2009 to reduce GHG emissions from stationary sources
- Applies to a facility with a stationary, non-residential refrigeration system using >50 pounds of a high GWP refrigerant
- Regulation became effective on January 1, 2011 (but not enforced)
 - Requires facility registration, leak detection and monitoring, leak repair, retrofit or retirement, and recordkeeping
 - Applies only to systems used wholly or in part for refrigeration and process cooling
- Requirements phased over time starting with largest facilities
- CARB trying to defer enforcement to local Air Districts
- Web-based tool for implementing the registration, reporting, and fee payment provisions of this regulation. "Refrigerant Registration and Reporting System (R3)" www.arb.ca.gov/rmp-r3

For more information:

<http://www.arb.ca.gov/cc/reftrack/reftrack.htm#new>



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State Regulatory News

NRC's Report on Sea Level Rise

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NRC's Report on Sea Level Rise

- National Research Council Published Report - *Sea-Level Rise for the Coasts of California, Oregon, and Washington: Past, Present, and Future*
- Study was sponsored by the states of CA, WA, & OR; NOAA, USGS, and U.S. Army Corps of Engineers
- Report says that
 - Sea level off of the CA coast is expected to rise about one meter over the next century & will likely increase damage to the state's coast from storm surges and high waves
 - Sea levels off WA, OR, and northern CA will likely rise less, about 60 centimeters over the same period of time
- Extreme events could raise sea level much faster than the rates projected by the Committee (e.g. earthquake magnitude >8)

For more information:

<http://www8.nationalacademies.org/onpinews/newsitem.aspx?RecordID=13389>



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State Regulatory News

CalEPA's Bioresources Alliance Symposium

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SAVE THE DATE: CalEPA's Bioresources Alliance Symposium

September 11th and 12th

- Symposium on Renewable Energy from Organic Residuals
- Includes presentations on how to evaluate what-works-best-where & overcoming regulatory & financial hurdles when implementing projects involving biogas and products from municipal organics, biosolids, green wastes, food wastes, FOG and animal wastes
- Two-day conference includes a tour of a nearby organics residual processing center

SAVE THE DATE: CalEPA's Bioresources Alliance Symposium

When:

Sept. 11-12: Tues.-Wed., 8:30 a.m.-5 p.m.

Where:

California EPA Building, 1001 I St, Sacramento, CA

Fee:

\$175.00 Includes morning refreshments, lunch on first day & field trip

To Register:

http://extension.ucdavis.edu/unit/environmental_management/course/description/?type=A&unit=ENV&SectionID=163245&course_title=CBA%20Symposium%20%20Renewable%20Energy%20from%20Organic%20Residuals&prgList=NAT&AreaName=Natural+Resources



State Regulatory News

PERP: New Fleet Emission Requirements

PERP: *New Fleet Emission Requirements*

- Beginning January 1, 2013 portable diesel engines registered in PERP or operating under air district permits must comply with weighted PM emission fleet averages expressed as g/bhp-hr
- Requirements are part of the ATCM for diesel PM from portable engines
- Compliance can be determined by determining weighted PM emissions averages for all the engines within each of the 3 categories by using the CARB Fleet Calculator
- Information needs to be reported to CARB by March 1, 2013
- Fleet emission requirements to become more stringent in January 2017 and 2020; Plan accordingly



PERP: *New Fleet Emission Requirements*

Below are the standards effective January 1, 2013:

Engine Size Category in Fleet	50 to less than 175 hp	175 to 750 hp	Greater than 750 hp
Weighted PM Fleet Average	0.3 g/bhp-hr	0.15 g/bhp-hr	0.25 g/bhp-hr



PERP: *New Fleet Emission Requirements*

If your fleet average emissions are above the standard you must clean up your fleet by using the following options:

- Replace older, dirtier engines with newer, cleaner engines
- Replace diesel engines with electric power
- Install add on controls to engines such as an approved diesel particulate filter (DPF)

See below for more information:

<http://www.arb.ca.gov/portable/perp/2013changes.pdf>



National Regulatory News

National Regulatory News

EPA's proposed standards for PM pollution

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EPA's proposed NAAQS for PM

- On June 14, 2012, USEPA proposed to strengthen the National Ambient Air Quality Standards (NAAQS) for PM pollution
- EPA rule sets a new NAAQS for PM_{2.5}, but not emission limits for individual sources
 - Up to BAAQMD to develop the emission limits for individual sources so the region will meet the NAAQS
 - As a result on the pending NAAQS for PM_{2.5}, BAAQMD is now regulating PM_{2.5} as a criterion pollutant
- When BAAQMD revises their NSR, PSD, and PM_{2.5} rules this summer, any new source with PM_{2.5} emissions over 10 lbs/day will have to install BACT for PM_{2.5}
- Regulations on existing sources will follow over the next 5 years or so

For more info:

<http://www.epa.gov/pm/actions.html>



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EPA's Current PM Standards: BAAQMD Attainment Status

	24-hour	Proposed NAAQS	Current NAAQS	Current Bay Area Status	State AAQS	Bay Area Status
PM ₁₀ (coarse)	24-hour avg	150 µg/m ³	150 µg/m ³	Attainment	50 µg/m ³	Non-attainment
	Annual avg	No std	No std	-	20 µg/m ³	Non-attainment
PM _{2.5} (fine)	24-hour avg	35 µg/m ³	35 µg/m ³	Non-attainment	No std	
	Annual avg	12-13 µg/m ³	15 µg/m ³	Attainment	12 µg/m ³	Non-attainment

* EPA has also proposed to set a separate fine particle standard to improve visibility, primarily in urban areas. Two options proposed for this 24-hour standard:

- 30 deciviews
- 28 deciviews

(A deciview is a yardstick for measuring visibility)



National Regulatory News

EPA's Adaptation Strategies Guide for Water Utilities

EPA's *Adaptation Strategies Guide for Water Utilities*

- Developed by EPA's Climate Ready Water Utilities initiative
 - To assist drinking water and wastewater utilities in gaining a better understanding of what climate change-related impacts they may face in their region
 - To describe adaptation strategies that can be used to prepare their system for those impacts.
- Guide contains easy-to-understand climate science and information, utility adaptation case studies, as well as an adaptation planning worksheet
- Guide can be downloaded from the link below:
<http://water.epa.gov/infrastructure/watersecurity/climate/index.cfm#asg>



National Regulatory News

EPA's Document on Energy Efficiency

EPA's Document on Energy Efficiency

- EPA recently released the document: '*Energy Efficiency in Local Government Operations: A Guide to Developing and Implementing Greenhouse Gas Reduction Programs*'
- Described how local governments can lead by example and achieve multiple benefits by improving the energy efficiency of their new, existing, and renovated facilities and their day-to-day operations
- Designed to be used by facility managers, energy and environment staff, other local government agencies
- Document can be downloaded from the link below:

http://www.epa.gov/statelocalclimate/documents/pdf/ee_municipal_operations.pdf



National Regulatory News

EPA Webcast on Utility Sustainability

SAVE THE DATE: EPA Webcast on Utility Sustainability

- EPA is hosting a series of webcasts based on its new handbook, *Planning for Sustainability: A Handbook for Water and Wastewater Utilities*
 - Thursday, **September 13, 2012**, 1:00-2:30 pm EST
 - Free webcast!
- Will focus on how utilities can engage with various stakeholders in the community to establish sustainability goals that reflect utility and community free
- Registration is available now at:
<https://www1.gotomeeting.com/register/797362152>



Additional Items

Additional Items

Grant Opportunities

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EPA's 2013 Climate Leadership Awards

- EPA co-sponsors the Climate Leadership Awards (CLA) with 3 NGO partners: The Climate Registry, the Center for Climate and Energy Solutions, & the Association of Climate Change Officers
- CLA is a national awards program that recognizes and incentivizes exemplary corporate, organizational, and individual leadership in response to climate change
- Applications will be accepted for the following recognition categories:
 - Excellence in Greenhouse Gas Management (Goal Setting Certificate)
 - Excellence in Greenhouse Gas Management
 - Supply Chain Leadership Award,
 - Organizational Leadership Award
 - Individual Leadership Award
- Applications will be accepted b/w August 22 – October 22, 2012

For more information:

<http://www.epa.gov/climateleadership/awards/index.html>



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Carl Moyer Memorial Air Quality Standards Attainment Program

- Voluntary program that offers grants to owners of heavy-duty vehicles and equipment (off-road equipment, trucks); administered by BAAQMD
- Projects will be selected for funding on a first-come, first-served basis; applications accepted starting July 23rd, 2012
- Grants are available for projects that:
 - Install verified emission control devices
 - Replace older heavy-duty engines with newer and cleaner engines
 - Replace older equipment with newer and cleaner equipment
 - Purchase new equipment that is cleaner than the law requires
 - Install electric idling-reduction equipment
- **Up to \$10 million - Funding available now!**

For more info:

http://www.baaqmd.gov/?sc_itemid=08F9594F-BF34-4A2A-BD38-9A3D0CCFF8F8



Carl Moyer On-Road Voucher Incentive Program

- Provides funding to reduce emissions from on-road heavy-duty diesel trucks
 - Replace old high-polluting vehicles - maximum funding up to \$45,000
 - Retrofit engine model years 1994 – 2006 – maximum funding up to \$10,000
- Applies to owners & operators of fleets of <10 vehicles; on-road truck with a gross vehicle weight rating (GVWR) of >14,000 pounds
- **Up to \$2 million - Funding available now!**

For more info:

http://www.baaqmd.gov/?sc_itemid=3EC5FE3B-C1E4-419E-8922-97CC438C38DA



State Water Board's Clean Water State Revolving Fund Program

- CWSRF is still accepting applications on a continuous basis
- Eligibility: Any city, town, district, or other public body created under state law
- Offers low interest financing agreements for water quality projects
 - Annually, the program disburses between \$200 and \$300 million to eligible projects
- Eligible projects include - Wastewater Treatment Facility Construction Projects, local sewers, etc.

For application and instructions:

www.waterboards.ca.gov/water_issues/programs/grants_loans/srf/srf_forms.shtml



CARB's Clean Vehicle Rebate Project (CVRP)

- Rebate funding for Hybrid & Zero-Emission Vehicles; administered by the California Center for Sustainable Energy (CCSE)
- Program is designed to accelerate the number of ultra-clean vehicles sold in CA & help establish a sustainable market
- Rebates of up to \$2,500 per light-duty vehicle are available for individuals and business owners who purchase or lease new eligible zero-emission or plug-in hybrid electric vehicles
- Funding will be provided on first-come, first-served basis; Funding is expected through 2015, with specific funding amounts determined annually by CARB

For application and instructions:

<http://energycenter.org/index.php/incentive-programs/clean-vehicle-rebate-project>



Additional Items

AIR Business Items

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BACWA AIR Budget Update

Total Budget for FY 12/13: \$74,465

- Last year was \$79,557
- S. San Francisco bowed out
- Spent July 1st – August 10th: \$5,400



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Additional Items

AIR Committee Meeting Update

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Options for Six Meetings – Doing More with Less

Possible Options:

1. Six meetings/no newsletter - approx. \$9K shortfall
2. Four meetings/Smaller newsletter
3. Option 1 or 2 with greater participation from members
 - a. To track specific issues and draft responses to regulators
 - b. To write the newsletter
 - c. To lead meetings
4. Other ideas?



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Additional Items

BAAQMD Advocacy

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BAAQMD Advocacy

AIR members raised concern during last meeting regarding BAAQMD's service quality level going down & the fees going up

- Backlog of permit reviews
- BAAQMD not following their own permit review timeline rules
- Lack of communication from the District staff

Any other specific concerns?

Proposed solutions in letter:

- ✓ *Improved electronic permitting ala South Coast AQMD*
- ✓ *A workshop with BACWA AIR to discuss solutions*
- ✓ *Dedicated permit staff for POTWs*



AIR/CWCCG Issues Matrix + Website

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Closing

Next Meeting: Wednesday, October 17th

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Supplementary Slides (IF TIME ALLOWS)

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BAAQMD: Amendments to Reg. 2, Rules 1, 2, 4 and 6

Major amendments include:

- Revise the New Source Review Rule (Regulation 2-2) to incorporate new Federal PSD requirements, including the NAAQS for NO₂ (1-hour) and PM_{2.5} (24-hour and annual) and GHG PSD review requirements.
- Incorporate EPA PM_{2.5} requirements for NSR (i.e., BACT requirement for PM_{2.5} at a 10 lb/day threshold) and emissions banking
- Incorporate EPA Title V permitting requirements for Major Sources of GHGs (Tailoring Rule)
- Clarifying language has been added to match the Statewide PERP
- Removed permit exemption for space heaters



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BAAQMD: Amendments to Reg. 2, Rules 1, 2, 4 and 6

Major amendments include:

- Clarifying language has been added to permit exemptions owing to previous misinterpretations
- Clarifying language has been added to further detail the procedure of determining a modified source and the calculation of emission increases
- Reorganize Regulation 2: Rules 1, 2, 4 and 6 so that it is easier to read; applicable definitions are now located in Rule 1 and standards are now located in the most appropriate rules
- Add public noticing requirements for new facilities and modifications to existing facilities that may result in a significant increase of criteria pollutants



Cap and Trade - Summary

- Final C&T Regulations approved December 14, 2011 by CARB
- Wastewater treatment operations are not subject to the cap, only two agencies on the Draft Covered Entities List
- 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)
- Enforcement of CARB's Cap & Trade rule has been deferred from 2012 to 2013
- Covered entities must register for the Cap and Trade Program by January 31, 2012 at:
<http://www.arb.ca.gov/cc/capandtrade/registration/registration.htm>



Reporting Deadlines for Modified Mandatory Reporting

Following are the reporting deadlines if your facility is subject to the modified mandatory reporting requirements:

- *April 10, 2012*: Reports are due for facilities and suppliers of fuels and carbon dioxide, except when subject to Abbreviated Reporting
- *June 1, 2012*: Reports are due for Electric Power Entities, and current reporters subject to Abbreviated Reporting. Facilities that have not previously reported to CARB do not have to file reports until June 1, 2013 (per Title 17, CCR 95103(a)(7))
- *September 1, 2012*: Final verification statements due (emissions data and product data)



California Electronic Greenhouse Gas Reporting Tool

- California GHG data reporting tool is now available!



- Cal e-GGRT is based on the U.S. EPA e-GGRT tool
- Tool must be used for submitting 2012 reports on 2011 data, and all subsequent data submissions
- Cal e-GGRT Training is available and archived for sector-specific reporting

For more info on the Reporting Tool:

<http://www.arb.ca.gov/cc/reporting/ghg-rep/tool/ghg-tool.htm>



Slide 57

DB24 Will update this based on Jim's email dated 06/15.
Bhargava, Divya/SJC, 8/10/2012

California Mandatory Reporting Rule – Cogen Facilities

Former cogen reporters that emitted <10,000 metric tons CO₂e of GSC emissions:

- Do not need to report or contact CARB at this time, and it is unlikely in the future
- However, the issue of cessation for facilities in this category is under review within CARB
- If CARB staff determine that further reporting is required for these facilities, they will notify the facility's designated manager



California Mandatory Reporting Rule

- On December 14, 2011, CARB adopted modifications to its regulation for mandatory reporting of GHGs in order to align with the Federal Mandatory Reporting Regulation
- Changes affect emissions of the 2011 operating year, which are reported to CARB in 2012
- General information on the mandatory reporting program can be found at: <http://www.arb.ca.gov/cc/ccei.htm>



State Regulatory News

California's Renewable Portfolio Standard

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California's Renewable Portfolio Standard

- On March 21, Governor Brown signed SB 2 1X into law, which requires the state's energy utilities to meet a goal of 33% renewables portfolio by 2020
- Requires energy utilities to meet incremental targets for their renewable energy portfolio requirements:
 - 25% of retail sales by December 31, 2016
 - 33% of retail sales by December 31, 2020
- Renewable energy credits (REC) will be used to demonstrate compliance with state RPS policies
 - One REC equiv one megawatt-hour (MWh) of electricity generated from a renewable resource

California's Renewable Portfolio Standard

- Final Decision Implementing Energy Division Staff Proposal on RPS Portfolio Content Categories passed on December 21, 2011
 - Establishes three portfolio content categories
 - Places “unbundled RECs” in Category 3
 - All bundled renewable energy products in Category 1
- IOUs and POUs to meet the 33% goal
- CPUC, CEC and CARB working in tandem to implement
- Opportunities to influence CEC for POUs



State Regulatory News

CalRecycle's Anaerobic Digestion Initiative

CalRecycle's Anaerobic Digestion Initiative & Composting Regulations

- CalRecycle seeks to reduce by 50 percent the amount of organic waste disposed in the state's landfills by 2020
- To assist in achieving those objectives, CalRecycle intends to adopt the Anaerobic Digestion Initiative
 - CalRecycle will be revising regulations for anaerobic digestion (including anaerobic digesters at POTW's)
- CASA, EBMUD, and SFPUC argued that digesters at POTWs should be exempt from CalRecycle regulation because of already being regulated by the State Water Boards and US EPA
- Latest meetings with Calrecycle & the State Water Board have been positive



State Regulatory News

CARB's ATCM Regulation

Amendments to the ATCM for Stationary CI Engines

- Purpose of CARB's Airborne Toxic Control Measure (ATCM) - to reduce diesel PM & criteria pollutant emissions from stationary diesel-fueled CI engines
- Applies to any person who owns or operates a stationary CI engine in California with a rated brake horsepower >50
- Purpose of the amendments:
 - to closely align emissions standards with those in the federal NSPS
 - to help clarify provisions in the ATCM
 - to address new information & to remove provisions no longer needed
- Amendments to ATCM became effective May 19th, 2011



Amendments to the ATCM for Stationary CI Engines

Elements of the Amendments that potentially impact POTW operations:

- *Emission Limits for New Emergency Standby Engines* (2007 model year or newer emissions limits for all pollutants)
- *Tier 4 Emissions Limit and Sell-Through Requirements for Prime Engines* (Aligns PM emissions limit with NSPS standard of 0.02 g/bhp-hr, and align with NSPS final rule deadlines for installing prime engines from a previous model year)

For more info:

<http://www.arb.ca.gov/diesel/statporthome.htm>



State Regulatory News

Fleet Regulations

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Heavy-Duty Diesel In-Use Compliance Regulation

- In 2006, CARB adopted a new in-use compliance test procedure that allows for a more efficient and cost-effective test method to conduct in-use compliance testing of HDDEs
- Emission measurement allowances needed to account for variability associated with field testing
- CARB adopted gaseous measurement allowances in December 2007 following the completion of a gaseous research study
- PM research study completed in 2010 and the ARB, USEPA, and the Engine Manufacturers Association have agreed on a PM measurement allowance value



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Heavy-Duty Diesel In-Use Compliance Regulation

- CARB conducted public hearing on June 23, 2011, to consider adoption of amendments to California's HDDE test procedures
- Amendments would modify measurement allowance for the regulated PM emissions during heavy-duty diesel in-use compliance testing when using portable emissions measurement systems (PEMS)
- Amendments are identical to the modifications already adopted by EPA in November 2010
- Amendments adopted by CARB

For more info:

<http://www.arb.ca.gov/regact/2011/hdiuc11/hdiuc11.htm>



Tier 4 Off-Road Diesel CI Engines

- CARB is proposing updates to the existing test procedures for new Tier 4 off-road diesel CI engines, and has released a draft of the proposed amendments to the test procedures. Specifically, ARB is planning on proposing modifications to the California tier 4 off-road CI engine regulations in order to increase the level of harmonization with the current USEPA Regulations.
- Please see link below for the draft test procedure amendment proposal:

http://www.arb.ca.gov/msprog/mailouts/mouts_11.htm

