



## **AIR ISSUES & REGULATIONS COMMITTEE**

**A Committee of the Bay Area Clean Water Agencies**

### Committee Meeting

September 17, 2014

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
- Technical Resources
- Grant Opportunities
- CASA Energy Workgroup Updates\*
- AIR Business Items
- Closing

\*Refer to S. Deslauriers' slides regarding CWCCG Updates



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# Local Regulatory News

## Local Regulatory News

# BAAQMD Clean Air Plan & Climate Protection Strategy

# BAAQMD Clean Air Plan & Climate Protection Strategy

- BAAQMD to incorporate a Climate Protection Strategy into the 2014 Clean Air Plan updates, including a multi-pollutant strategy
- BACWA AIR Comment Letter:
  - Specifically addresses the following cross-media issues:
    - Nutrient removal contributing to increased GHG emissions
    - Conflicts between air quality regulations pushing POTWs to flare biogas and GHG regulations encouraging POTWs to increase the use of biogas
    - Encouraging incentives for green infrastructure
  - Submitted on June 6<sup>th</sup>
- BAAQMD's Path Forward:
  - Currently soliciting input and ideas
  - Will respond to comments later in the planning process
  - Conducting an analysis to identify gaps in current policies
  - Workshops will be scheduled later this fall



# State Regulatory News

## State Regulatory News

# Low Carbon Fuel Standard: Biomethane Fuel Pathway

# Low Carbon Fuel Standard (LCFS): Biomethane Fuel Pathway

- Biomethane produced from anaerobic digestion of WW sludge
- Two Certified LCFS Pathways:
  - Small-to-Medium POTW ( $\leq 20$  MGD): 30.5 g CO<sub>2</sub>e/MJ
  - Medium-to-Large POTW ( $> 20$  MGD): 7.9 g CO<sub>2</sub>e/MJ
- Factors contributing to the increased carbon intensity values:
  - Give credit for avoidance of flaring emissions
  - Remove credit for process emissions from biogas usage
  - Account for fugitive CH<sub>4</sub> from tail gas or oxidized CO<sub>2</sub> from flaring
  - Do not include thermophilic digesters
  - Give same credit to onsite use of power and grid export
  - Do not include the avoidance of fossil fuel-based fertilizer offsets
  - Do allow for co-digestion of FOG but not food waste
- Apply for site-specific pathway through Method 2B
- September 25<sup>th</sup> workshop to discuss availability of low-carbon-intensity fuels



## State Regulatory News

# GHG Mandatory Reporting Regulation Amendments

# GHG Mandatory Reporting Regulation Amendments

- September 18<sup>th</sup> hearing to discuss amendments to 3 regulations:
  - Regulation for the Mandatory Reporting of GHG Emissions
  - California Cap on GHG Emissions and Market-Based Compliance Mechanisms
  - Cost of Implementation Fee Regulation
- Proposed amendments potentially applicable to POTWs:
  - Clarify reporting applicability for biofuel production facilities that produce and deliver transportation fuels outside the bulk terminal/transfer system
  - Clarify that biofuel production facilities must report biofuel delivered outside the bulk transfer/terminal system
  - Added renewable diesel as a reportable biomass-derived transportation fuel

- Additional information is available at:

<http://www.arb.ca.gov/regact/2014/ghg2014/ghg2014.htm>



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## State Regulatory News

# Southern California Alliance of POTWs: ATCM Comments

# Southern California Alliance of POTWs: ATCM Comments

- Southern California Alliance of POTWs (SCAP):
  - Represents 81 POTWs in Los Angeles, Orange, San Diego, Santa Barbara, Riverside, San Bernardino, and Ventura counties
  - SCAP agencies employ various sized fleets of portable diesel engines for both emergency and non-emergency uses
- Recently submitted comments to CARB regarding the Portable Diesel-Fueled Engines Air Toxic Control Measure (ATCM):
  - Industry may not be able to meet the 2017 and 2020 deadlines:
    - 2017: Requires purchase of many new engines that are not Tier 4, since not all engine classes are currently available
    - 2020: Requires subsequent repurchasing of the new engines with a Tier 4 equivalent engine
  - Request amendments that recognize:
    - Tier 4 engine market availability issues
    - Industries' good faith efforts to date
  - Responses to comments not yet received



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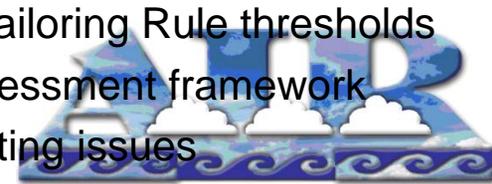
# National Regulatory News

## National Regulatory News

# GHG Tailoring & Deferral Rules

# GHG Tailoring & Deferral Rules

- June 24<sup>th</sup> Supreme Court ruling:
  - Affirmed USEPA's ability to regulate GHG emissions
  - Found key aspects of the GHG Tailoring Rule to be improper
- GHG Tailoring Rule Findings:
  - GHG emissions alone cannot trigger Prevention of Significant Deterioration (PSD) or Title V requirements
  - If criteria pollutant emissions trigger PSD or Title V requirements, USEPA can require a technical evaluation of GHG reduction options
- Next Steps:
  - USEPA will propose an amended regulation
  - States may re-write regulations to remove the GHG emissions trigger
- GHG Deferral Rule (Expired July 21<sup>st</sup>):
  - Deferred inclusion of biogenic CO<sub>2</sub> emissions toward Tailoring Rule thresholds
  - Decision does not directly impact the biogenic CO<sub>2</sub> assessment framework
  - Decision narrows the scope of the biogenic CO<sub>2</sub> permitting issues



# Additional Items

**Additional Items**

**Technical Resources**

# CARB Diesel Vehicle and Equipment Training Courses

Course	Date	Location
#504: In-Use Off-Road Diesel Vehicle Regulation	Sep. 29	Salinas
#505: Large Spark-Ignition (LSI) Fleet Regulation	Sep. 29	Salinas
#511.2: Diesel Particulate Filter Operations & Maintenance	Sep. 30	Salinas
#521: How to Comply with the Truck and Bus Regulation	Sep. 23	Webinar

Additional course information is available at:  
<https://ssl.arb.ca.gov/training/courselist.php>



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# USEPA Water and Climate Reports

- Water/Wastewater Utilities and Extreme Climate and Weather Events: Case Studies on Community Response, Lessons Learned, Adaptation, and Planning Needs for the Future:
  - Examines how water, wastewater, and storm water utilities have made decisions in response to recent extreme weather events
  - Available at: <http://www.waterrf.org/Pages/Projects.aspx?PID=4416>
- Next Steps & Preliminary Views on the Application of Clean Air Act Permitting Programs to GHGs Following the Supreme Court's Decision in *UARG v. USEPA*:
  - Discusses treatment of GHG emissions in state permitting regulations
  - Available at: <http://www.epa.gov/nsr/documents/20140724memo.pdf>
- Waste Less, Pollute Less: Using Urban Water Conservation to Advance Clean Water Act Compliance:
  - Explains how urban water conservation can help address water quality and water supply needs while keeping costs down for ratepayers
  - Available at: <http://www.nrdc.org/water/clean-water-act-urban-conservation.asp>
- Using SRFs to Build Climate-Resilient Communities:
  - Explains how decision makers can maximize the effectiveness of SRFs to make communities more resilient to climate change risks
  - Available at: <http://www.nrdc.org/globalwarming/state-revolving-funds.asp>



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# USEPA ENERGY STAR® Webinars

- September 23<sup>rd</sup>: Portfolio Manager 101
  - Introduce/demonstrate the core functionality of the ENERGY STAR Portfolio Manager tool
- September 24<sup>th</sup>: Portfolio Manager 201
  - Dive deeper into more advanced functionalities of the tool
- September 24<sup>th</sup>: Energy Efficiency Measure Cost Studies
  - Explain the importance of measure cost studies, including their role in:
    - Assessing the cost-effectiveness of energy efficiency measures, programs, and portfolios
    - Rebate and incentive levels
- September 25<sup>th</sup>: How to Apply for ENERGY STAR Certification
  - Learn how to apply for, and understand the value of, ENERGY STAR Certification
- Registration information is available at:  
<http://www.energystar.gov/buildings/training>



# Department of Energy (DOE) Biogas and Energy Reports

- Biogas Opportunities Roadmap:
  - Identifies CH<sub>4</sub> emission reduction actions through the use of biogas systems
  - Describes various wastewater-specific examples and opportunities
  - Available at:  
[http://www.usda.gov/oce/reports/energy/Biogas\\_Opportunities\\_Roadmap\\_8-1-14.pdf](http://www.usda.gov/oce/reports/energy/Biogas_Opportunities_Roadmap_8-1-14.pdf)
- Evaluates two technologies for making buildings more efficient:
  - Condensing Boilers:
    - Perform more efficiently than conventional boilers by extracting more of the heat energy released through steam in the combustion process
    - Reduces natural gas consumption over 14% compared with conventional boilers
    - Additional information is available at: <http://www.gsa.gov/portal/content/163495>
  - Biomass Boilers (burn solid wood fuel instead of oil):
    - Efficient alternative for hot-water heated facilities where natural gas is unavailable
    - Most cost-effective for buildings in cold northern climates
    - Additional information is available at: <http://www.gsa.gov/portal/content/193335>



**Additional Items**

**Grant Opportunities**

# Electric Program Investment Charge (EPIC) Program Funding: PON-14-301

- PON-14-301: Demonstrating Secure, Reliable Microgrids and Grid-Linked Electric Vehicles to Build Resilient, Low-Carbon Facilities and Communities:
  - \$26.5 million in available funding, with a 25% match requirement
  - Projects should:
    - Demonstrate the reliable integration of energy efficient demand-side resources, distributed clean energy generation, and smart grid components to enable energy-smart community development
    - Support the development of microgrids that incorporate clean, low-carbon energy resources with energy storage and on-site energy management systems
- EPIC Groups Relevant to POTWs:
  - Group I: Microgrids to support critical facilities during power emergencies
  - Group II: Renewable-based microgrids
  - \$5 million in available funding per project (in each Group)
- Applications due November 3<sup>rd</sup>
- Additional information is available at:  
<http://www.energy.ca.gov/contracts/epic.html#PON-14-301>



# EPIC Program Funding: PON-14-303

- PON-14-303: Advancing Cleaner, Less Costly, More Reliable Distributed Generation to Enable Customer Solutions & Zero-Net Energy Communities:
  - \$19.5 million in available funding
  - R&D activities that increase the technical performance and value of distributed biopower and photovoltaic technologies
- Development of Waste-to-Energy Bioenergy Systems:
  - \$1.5 million in available funding per project
  - Projects should develop technologies to utilize the organic fraction of municipal and food processing wastes to provide clean, reliable electricity generation
  - Projects should identify/evaluate new organic waste fuel sources, processing methods, conversion technologies, and O&M practices to increase efficiency, reduce costs, and improve environmental performance
- Applications due October 20<sup>th</sup>
- Additional information is available at:

<http://www.energy.ca.gov/contracts/epic.html#PON-14-303>



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# EPIC Program Funding: PON-14-304

- PON-14-304: Bringing Energy Efficiency Solutions to California's Industrial, Agriculture, and Water Sectors:
  - \$27.3 million in available funding
  - Technology demonstration and deployment projects (TDDP) that accelerate the commercialization of electricity-related, energy efficient industrial, agricultural, and water/wastewater processes at multiple sites
- Waste Water Energy Efficiency Projects:
  - \$5 million in available funding per project
  - Projects should target improvements in waste water energy efficiency (i.e., process improvements and pumps)
  - Projects must feature advanced pre-commercial technologies, methods, and approaches that are beyond the “proof-of-concept” stage
- Proposals due October 2<sup>nd</sup>
- Applications due January 2<sup>nd</sup>
- Additional information is available at:

<http://www.energy.ca.gov/contracts/epic.html#PON-14-304>



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# EPIC Program Funding: PON-14-305

- PON-14-305: Demonstrating Bioenergy Solutions That Support California's Industries, the Environment, and the Grid:
  - \$27 million in available funding
  - TDDP that demonstrate and appraise the operational and performance characteristics of pre-commercial biomass conversion technologies, generation systems, and development strategies
- Group 1 Projects:
  - \$1.5 million in available funding per project
  - Projects should deploy and evaluate new advanced pollution control equipment and/or low-emission generators capable of meeting local air quality standards
- Group 2 Projects:
  - \$2 million in available funding per project
  - Projects should deploy and evaluate advanced or novel biomass fuel handling and delivery systems that reduce the transportation costs of biomass feedstocks
- Applications due November 7<sup>th</sup>
- Additional information is available at:

<http://www.energy.ca.gov/contracts/epic.html#PON-14-305>



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# Renewable Energy and Efficient Energy Projects Loan Guarantee

- Program intended to support the first commercial-scale deployments of the next wave of innovative clean energy technologies
- Drop-in Biofuels:
  - Focuses on biofuels that are more compatible with today's engines, delivery infrastructure, and refueling station equipment
  - Projects provide nearly identical bio-based substitutes for crude oil, gasoline, diesel fuel, and jet fuel, or produce intermediate fuel feedstocks
- Waste-to-Energy:
  - Focuses on projects harnessing waste products, such as landfill CH<sub>4</sub> and segregated waste, as a source of energy
  - Projects will enable commercial-scale utilization of waste materials, which are otherwise discarded, and produce significant clean, renewable energy
- Part I applications due October 1<sup>st</sup>; Part II applications due January 14<sup>th</sup>
- Additional information is available at:  
<http://energy.gov/lpo/services/solicitations/renewable-energy-efficient-energy-projects-solicitation>



# State Water Board's Clean Water State Revolving Fund (CWSRF) Program

- CWSRF Program:
  - Accepts applications on a continuous basis
  - Offers low interest financing for water quality projects
  - Disburses \$200 - \$300 million annually
  - Any public body created under State law is eligible for funding
- CWSRF is currently focused on recycled water projects:
  - Create new water supplies as part of drought response
  - Recently approved \$800 million in 1% loans for eligible projects
  - Funding is **still** available, but eligible projects must:
    - Apply for funding by December 2, 2015
    - Be completed by January 17, 2017
  - Program still offers 30-year extended term financing options

- Additional information is available at:

[www.waterboards.ca.gov/water\\_issues/programs/grants\\_loans/srf/srf\\_forms.shtml](http://www.waterboards.ca.gov/water_issues/programs/grants_loans/srf/srf_forms.shtml)



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# Free Energy Audits

- California Energy Commission's (CEC) Energy Partnership Program:
  - Provides up to \$20,000 of technical support to identify energy projects and their technical and economic viability
  - Available to both water and wastewater utilities
- Applications accepted on a first-come, first-serve basis
- Questions: Shahid Chaudhry at (916) 654-4858 or [Shahid.Chaudhry@energy.ca.gov](mailto:Shahid.Chaudhry@energy.ca.gov)
- Additional information is available at: <http://www.energy.ca.gov/efficiency/partnership/>



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# Clean Vehicle Rebate Project (CVRP)

- CVRP Program:
  - Accelerates the number of ultra-clean vehicles sold in California
  - Helps establish a sustainable market
- CVRP offers rebate funding for zero-emission and plug-in hybrid electric vehicles:
  - \$110 million allocated for FY14-15 funding
  - 88% of funding still available
  - Accepting applications on a first-come, first-serve basis
- Rebates offered for purchase or lease:
  - \$5,000 per hydrogen fuel cell vehicle
  - \$2,500 per battery electric vehicle
  - \$1,500 per plug-in hybrid electric vehicle
- Additional information is available at: <http://energycenter.org/clean-vehicle-rebate-project>



# Carl Moyer Memorial Air Quality Standards Attainment Program

- BAAQMD's Carl Moyer Program:
  - Strives to reduce air emissions from local heavy/medium-duty engines
  - Accepting applications on a first-come, first-serve basis
- Grants:
  - Cannot be used for projects currently required by law
  - 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
- Applications are now being accepted
- Additional information is available at:  
[http://www.baaqmd.gov/Divisions/Strategic-Incentives/Funding\\_Sources/Carl-Moyer-Program.aspx](http://www.baaqmd.gov/Divisions/Strategic-Incentives/Funding_Sources/Carl-Moyer-Program.aspx)
- CARB is currently revising the Carl Moyer Program



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# Voucher Incentive Program: On-road Heavy-Duty Vehicles

- Voucher Incentive Program:
  - Provides funding to reduce on-road heavy-duty diesel truck emissions
  - Applies to owners and operators of fleets of < 10 vehicles
  - Applies to on-road trucks with a GVWR > 14,000 pounds
- Available funds:
  - Total of \$3 million available now for the BAAQMD
  - Up to \$45,000 towards the purchase of a new vehicle
  - Up to \$10,000 for purchase and installation of a retrofit device
- Applications accepted on a first-come, first-serve basis
- BAAQMD-specific information is available at:  
<http://www.baaqmd.gov/Divisions/Strategic-Incentives/On-Road-Vehicles/Voucher-Incentive-Program.aspx>



# Hybrid & Zero-Emission Truck & Bus Voucher Incentive Project

- Voucher Incentive Project:
  - Provides vouchers to help California fleets purchase heavy- and medium-duty zero-emission trucks and buses
  - Fleets can order as many as 200 vouchers, with a limit of one voucher per vehicle
- Available funds:
  - Total of \$9.54 million available now
  - \$7 million in funding **still** available
  - Up to \$110,000 towards the purchase of a new truck or bus
  - Additional funding may come from cap-and-trade (C&T) revenue
- Applications accepted on a first-come, first-serve basis
- Additional information is available at:  
<http://www.californiahvip.org/default.aspx>



# Truck Loan Assistance Program

- Truck Loan Assistance Program:
  - Helps small business fleet owners finance truck upgrades required under CARB's In-Use Truck and Bus Regulation
  - Helps truck owners purchase cleaner trucks, exhaust retrofits, and truck efficiency upgrades
- Offers competitive-rate financing for fleets meeting the following criteria:
  - Company must be a small business (100 employees or less and less than \$10 million in annual revenue)
  - Fleet must operate in California a minimum of 51% of the total mileage
  - Fleet must be 10 or fewer heavy-duty trucks
- An additional \$10 million in funding is available from the 2014-2015 Investment Plan
- Additional information is available at:  
[http://www.arb.ca.gov/msprog/truckstop/funding/loans\\_fa.htm](http://www.arb.ca.gov/msprog/truckstop/funding/loans_fa.htm)



**Additional Items**

**CASA Energy Workgroup  
Updates**

# CASA Energy Workgroup Update

- Assembly Bill 1900 Phase 2 (Pipeline Interconnection Costs):
  - WWTPs can't afford biogas interconnection without financial help
  - WWTPs prefer funding to come from C&T auction proceeds or utilities
- Research on Biogas Constituents of Concern (CoCs):
  - CARB to identify CoCs in biogas from sources not yet studied
  - CEC to identify CoCs from combustion units that may yield secondary pollutants
- C&T Proceeds in Budget Update:
  - CASA's request for C&T funding for WWTPs was rejected
  - CASA continues to work with RWQCB to include funding in the next budget cycle
- CalRecycle's Composting and Anaerobic Digestion Regulations:
  - September 25<sup>th</sup> workshop to begin the formal rulemaking process
  - Expected to exclude POTWs accepting hauled in organic waste for co-digestion
- CPUC's Statewide Energy Efficiency Strategic Plan:
  - September 26<sup>th</sup> meeting to solicit wastewater-specific feedback
  - Register at: <https://www.eventbrite.com/e/20142025-ca-statewide-ee-strategic-plan-waterwastewater-consultation-tickets-12942028957>



**Additional Items**

**AIR Business Items**

# BACWA AIR Business Items

- Total budget for FY 2014/2015: \$77,064
  - Spent: \$16,527 (through Friday, September 5<sup>th</sup>)
  - 21% of budget
- Feedback on e-mail communications:
  - Format: Digest/summary
  - Frequency: Once per week
- Feedback on CWCCG/CASA Energy Workgroup participation:
  - CH2M HILL will attend on BACWA AIR's behalf
  - CH2M HILL will provide an overview at BACWA AIR meetings
- Meeting schedule:
  - Current schedule - 3<sup>rd</sup> Wednesday (every other month)
  - BACWA Board Meetings - 3<sup>rd</sup> Friday (every month)
  - Discuss date change to accommodate BACWA Board Meetings
- Annual newsletter is available at:  
<http://bacwa.org/Portals/0/Committees/AirIssuesRegulations/Library/BACWA%20AIR%202014%20Newsletter%20Final.pdf>



# Closing

Next Meeting: Wednesday, November 19, 2014

*Meeting will be held at EBMUD*