

### **BACWA AIR Committee Meeting**

July 15, 2009 Oakland, CA



### **Introductions & Announcements**





### **AB 32 Updates**





### AB 32 Update: Mandatory Reporting of GHGs

Status	BACWA Workshop held on April 28, 2009
	Reports due on June 1, 2009
Workshop Follow-up	Who submitted inventory to CARB?
Follow-up	Preparation and/or Submittal Issues?
	•Renee Lawver/CARB was appreciative of workshop





## **AB 32 Update: Mandatory Reporting of GHGs**

Status	Drafting comment letter to Renee Lawver to improve reporting process
Applicability to WWTPs	The comments at the workshop included:  - Change natural gas units to therms to simplify looking up HHV and back-calculating to SCFs  - Reduce monthly Biogas HHV sampling and testing to semi-annual or annual after a consistent value is established.  - Add other established sampling or testing methods for HHV, which currently are not referenced in Title 17  - In the regulation text, consider changing the term "biogas" to "digester gas" to differentiate between landfill and POTW gas emissions and for consistent HHV estimation for digester gas specifically.
More Info	Email Sarah Merrill with any items to include in the comment letter: <a href="mailto:sarah.merrill@ch2m.com">sarah.merrill@ch2m.com</a>





Background	Uses targets and market mechanisms to reduce emissions; Financial incentives for entities that can reduce earlier or more cheaply than others.  Scoping Plan Directive: Implement a broad-based California capand-trade program to provide a fixed limit on emissions
Applicability to WWTPs	TBD—cap requirement & opportunity for selling GHG offsets Federal program may require states to delay their C&T programs for 5 years
More Info	http://www.arb.ca.gov/cc/capandtrade/capandtrade.htm





### CARB's Timeline

- Focus in 2009: work through implications of different issues and policy decisions
- Focus in 2010: finalize program design and develop regulatory language
- End of 2010: Board action on cap-and-trade regulation
- 2012: C&T program begins
- Extensive public process throughout





### **Capped Sources**

#### 2012-2014 (Narrow Scope)

- In-State Electricity Generation Facilities(>25,000 MT CO2e/year) & Imported Electricity
- Large Industrial Facilities (>25,000 MT CO2e/year)

#### 2015-2020 (Broad Scope)

- Adds 'upstream' treatment of fuel combustion where fuel enters into commerce covering
- upstream where the CO2 or GHG first enters the economy
- Small industrial fuel use (for facilities <25,000 MT CO2e/year)</li>
- Residential and commercial fuel use
- Transportation fuel use



#### **CWCCG Comment Letter to CARB Regarding C&T**

#### CWCCG Comments

- 1. Proposed definition of eligible offset projects may limit bone fide projects
- 2. No cap for POTWs:
  - variable emissions: changing diurnal & seasonal WW strength
  - other treatment regulations result in more GHG
  - Market changes difficult for essential public services
- 3. Exclude biogenic emissions: particularly combustion of biomass (i.e. biogas & wastederived biomass)



# **AB 32 Update: Implementation Fee**

Purpose	Fee authorized by the AB 32 Scoping Plan will support the implementation of the Scoping Plan, past start-up loans and future costs.
Applicability to WWTPs	<ul> <li>Affected entities: Natural gas utilities and select users, Natural gas pipeline owners and operators, transportation fuel producers and importers, refineries, cement manufacturers, importers of out-of-state electricity, and facilities that combust coal.</li> <li>i.e. it seems that WWTPs will be indirectly affected by higher fuel and energy costs.</li> </ul>
Status	<ul> <li>January 2010: Fee Determination Notices will be sent to affected entities according to 2008 emissions reports</li> <li>March 2010: Affected entities to remit fee to ARB</li> </ul>
More Info	http://www.arb.ca.gov/cc/adminfee/adminfee.htm



### **CEQA GHG Thresholds**

Background	<ul> <li>The OPR is establishing framework for new CEQA climate change requirements</li> <li>ARB was asked to make quantitative standard recommendations for CEQA GHG-related thresholds of significance.</li> </ul>
Status	<ul> <li>October 24, 2008 – Preliminary Draft Staff Proposal released</li> <li>April 13, 2009 – OPR submitted proposed amendments to the CEQA Guidelines for GHG emissions to the Secretary of Natural Resources</li> <li>July 3, 2009 – the Natural Resource Agency began rulemaking procedure, comment period opened</li> <li>August 18 &amp; 20, 2009 – Public Hearings scheduled</li> <li>August 20, 2009 – Comment period closed</li> <li>January 1, 2010 – Deadline for guidelines to be certified and adopted</li> </ul>
More Info	Overview: <a href="http://opr.ca.gov/index.php?a=ceqa/index.html">http://opr.ca.gov/index.php?a=ceqa/index.html</a> Comment Process: <a href="http://ceres.ca.gov/ceqa/guidelines/">http://ceres.ca.gov/ceqa/guidelines/</a>



#### **CEQA GHG Thresholds**

#### Proposed Amendment Summary

- no explicit threshold outlined by OPR/CEQA Guidelines
  - ARB originally recommended Quantitative Standard of ~7,000 metric tons CO2e/yr (including electricity usage)
- Allowing local lead agencies to dictate thresholds of significance and mitigation measures
- BAAQMD = 1,175 MT CO2/yr. vs. 3,750 MT/yr.
  - SCAQMD = 10,000 MT CO2/yr., not lifecycle
- Comments due by August 20, 2009 to California Natural Resources Agency



# Low Carbon Fuel Standard

Status	April 23, 2009- regulation adopted to implement California Low Carbon Fuel Standard.
General Regulation Info.	<ul> <li>Diversifying the variety of fuels</li> <li>California fuels to meet an average declining standard of 'carbon intensity'.</li> <li>Funding: The Alternative and Renewable Fuel and Vehicle Technology Program, AB 118, will provide significant funding over the next 7 years. (AB 118 discussed in later slides)</li> </ul>
Future Opportunities	-Push to explicitly include "waste-derived" alternative fuel industry research to be funded through program as a low carbon fuel option -> Comment letter submitted to ARB by L.A. County Sanitation District
More Info	http://www.energy.ca.gov/low carbon fuel standard/



## Low Carbon Fuel Standard

### LACSD Comments

February 23, 2009 - LA County Sanitation District submitted comments

- waste-to-alternative fuel options not explicitly recognized
- more GREET pathways for waste-derived fuels needed.
   Sources to examine are:
  - Landfill gas Sewage digester gas
  - Biosolids Green waste
  - Fats and grease Municipal waste
- Green option: Biofuel crops grown on otherwise marginal land, irrigated with recycled water
  - lessens demand for virgin forests & food crop land
- define "renewable biomass" to include waste-derived alternative fuel from solid waste, et al. specifically



### **National Regulatory Updates**





## **EPA Updates: Draft Mandatory Reporting of GHGs**

Status	Proposed Rule publication: April 10, 2009 - Final rule still being developed
Applicability to WWTPs	<ul> <li>Reporting for General Stationary Combustion above 25,000 MT <u>CO2-e</u>/yr (section 98.2)</li> </ul>
	Wastewater Treatment section focuses on industrial, not municipal wastewater treatment
	Biogenic emissions not included in emissions total/ reporting threshold
	No electricity generation or cogeneration reporting requirements or any combustion emissions below 25,000 MT CO2-e/yr similar those in CA
More Info	http://www.epa.gov/climatechange/emissions/ghgrulemaking.html





## **EPA Updates: Draft Mandatory Reporting of GHGs**

CWCCG Comment Letter Update	<ul> <li>CWCCG issued a comment letter to the EPA regarding:</li> <li>➤ exclude essential public services from GSC</li> <li>➤ delegate program to CARB to eliminate burden of double-reporting</li> <li>➤ Biogenic emission sources excluded—supported!</li> <li>➤ Exclusion of lower threshold Title V entities—supported</li> </ul>
More Info	http://www.epa.gov/climatechange/emissions/ghgrulemaking.html





## **EPA Updates: Combustion Engine Emissions Standards**

Background	The EPA has recently amended the National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines.
Applicability to WWTFs	The updated regulations <u>do not exempt</u> landfill and digester gas-fired stationary engines from new emissions requirements - Specifically names "Landfill/Digester" engines - Regulates engines ≥ 50 hp, emission and maintenance standards
Status	<ul> <li>Released final rule – January 18, 2008</li> <li>Public hearing on proposed amendments – April 6, 2009</li> <li>Comments still being received (marked late, but still considered)</li> </ul>
More Info	http://www.epa.gov/ttn/atw/rice/ricepg.html





## **EPA Updates: Combustion Engine Emissions Standards**

Comments	NACWA comment letter submitted June 3, 2009:
submitted	Emissions limits are too stringent
	- especially for engines that use landfill or digester gas
	- raise limits or impose reasonable O&M limits and standards
	- restrict number of hours operated for emergency engines
	- provide for startup, shutdown, and malfunction periods
	Cost has not been justified
	- likely to cost each utility millions
	- emergency engines are rarely used
	Clarify Landfill/Digestor Gas HP > 500 subcategory status
	Restrictions discourage alternative/available fuel use
More Info	http://www.nacwa.org/index.php?option=com_content&view=article&id=33:air-quality&catid=11:operations-wwi&Itemid=97





## **EPA Updates: Combustion Engine Emissions Standards**

#### This EPA standard is classic Cross Media issue:

- Combined Heat (CHP) & Power impacted
- SCAQMD Priority Reserve Lawsuit
- CEC mandate to promote CHP
- CHP workshops
  - 7/23—CEC
  - 7/27--CARB





## **EPA News: Water System Adaptation Partnership Act**

Background	<ul> <li>H.R. 2969, The Water System Adaptation Partnerships Act of 2009</li> <li>Would establish a competitive grant program at the EPA</li> <li>specifically to support water, wastewater, and stormwater facilities in addressing climate change issues: <ul> <li>Water quality</li> <li>Energy efficiency</li> <li>Renewable energy</li> <li>Water reuse</li> <li>Green Infrastructure</li> </ul> </li> </ul>
Status	• June 21, 2009 – Bill was introduced by Rep. Lois Capps (D-CA)
More Info	http://www.nacwa.org/index.php?option=com_content&view=art_icle&id=32&Itemid=104





## **EPA News: Water System Adaptation Partnership Act**

### Applicability to WWTFs

- July 9, 2009 Joint letter to Sen. Barbara Boxer from ACWA and CASA
- July 10, 2009 NACWA letter to Sen. Boxer
- Requests that HR 2969 be incorporated into climate change legislation that her committee is developing
- Water and wastewater agencies' climate change adaptation efforts need to be supported

"According to the EPA, a \$534 billion dollar gap exists between current investment in water and wastewater infrastructure and projected needs over the next 20 years."





### **CARB Fleet Regulations**





## Fleet Updates: Diesel Emission Control Strategy Amendments

Purpose	A verification procedure for diesel emissions control strategies (DECS) has been put into place to ensure real and durable emissions reductions of diesel PM and NOx.  Proposed Amendments include: pre-installation compatibility assessment, field demonstration data collecting procedures, repower practices, warranty claims will affect status of verification, etc.  See website for complete list.
Status	<ul> <li>Verification Procedure adopted May 2002</li> <li>Proposed amendments to be approved at public hearing on October 22-23, 2009</li> </ul>
More Info	http://www.arb.ca.gov/diesel/verdev/home/workshop_presentation.pdf





### Large, Spark-Ignition (LSI) Engines – Forklift Fleets

Applicability	Any fleet of 4 or more forklifts (or other LSI powered equipment) must comply with emissions standards requiring retrofit or replacement of engines out of compliance  Applies to: LSI engines of 25 hp or higher  Exempt: Smaller fleets & Low-use fleets (i.e. < 250 hr/yr.)
Status	<ul> <li>January 2009 – Effective date</li> <li>April 1, 2009 – Enforcement commences</li> <li>April 15, 2009 – Advisory posted</li> </ul>
More Info	http://www.arb.ca.gov/msprog/offroad/orspark/orspark.htm





### Large, Spark-Ignition (LSI) Engines – Forklift Fleets

### Regulation Update

As per the advisory posted April 15, 2009, a few exemptions/changes have been made:

- Until April 15, 2010, the following can be excluded from fleet average calculations:
  - 1) fully emission-controlled late model year fleets
  - 2) fully emission-controlled equipment with engine displacements > 3 liters
- For determining compliance with January 1, 2009 fleet average emission level standards, LSI equipment with > 3 liter engines and retrofit kits for this size of equipment engine can be included in the fleet average calculation.

#### Provided:

- 1) Equipment and/or retrofit kits were purchased or leased on or before April 15, 2010
- 2) Equipment is included in the inventory
- 3) Kits are installed by December 31, 2010



# In-Use, Off-Road Diesel Regulation Updates

Regulation Applicability	<ul> <li>Applies to any self-propelled, diesel fueled vehicles that cannot be registered and licensed to drive on-road with ≥ 25 hp (Loaders, Forklifts, Backhoes, etc.)</li> <li>Note: requirements vary by fleet size</li> </ul>
Updates	<ul> <li>Public hearing to be held on July 23, 2009</li> <li>Amendments to be considered will allow fleet owners to:</li> <li>1. Gradually meet compliance standards over the course of 3 years (2011-2013)</li> <li>2. Receive credit for both PM and NOx reductions made in fleet if total hp is decreased</li> <li>3. Receive credit for reducing activity to satisfy retrofitting and turnover requirements</li> </ul>
More Info	General website: <a href="http://www.arb.ca.gov/msprog/ordiesel/ordiesel.htm">http://www.arb.ca.gov/msprog/ordiesel/ordiesel.htm</a> Helpful Regulation Fact Sheet: <a href="http://www.arb.ca.gov/msprog/ordiesel/faq/ordoverview.pdf">http://www.arb.ca.gov/msprog/ordiesel/faq/ordoverview.pdf</a>





### Fleet Updates: September AIR ISSUES & REGULATION S (AIR) Trainings on ARB Off-Road Regs

Purpose	Additional series of training seminars on the In-Use Off-Road Diesel Vehicle regulation announced:  • in-depth presentation of the regulation and how to comply  • grant opportunities.  • speak one-on-one with providers of exhaust retrofit devices.
Workshop Details	<ul> <li>September 8 &amp; 9, 2009</li> <li>Locations around the state. Local sessions in Sacramento, CA</li> <li>Morning and afternoon sessions</li> <li>Available via webcast</li> </ul>
More Info	http://www.arb.ca.gov/training/courses.php?course=504





## Fleet Updates: Fleet Calculator Tool Available

Purpose	ARB has posted an updated version of the fleet calculator for the Truck and Bus Regulation. The calculator is designed to: - assist fleet owners in determining the yearly compliance - plan for the coming years utilizing various compliance options available in the regulation - works in an Excel file format
More Info	http://www.arb.ca.gov/msprog/onrdiesel/calculators.htm





## Fleet Updates: On-Road Diesel Trucks Regulation Outreach

Background	ARB Outreach Goals developed to assist in:  • understanding regulatory requirements  • finding applicable funding assistance programs  • to include telephone and Internet resources
Available Resources	<ul> <li>Telephone hotline: (866) 6DIESEL (866-634-3735)</li> <li>Website is being finalized.</li> </ul>
More Info	http://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm





# **Grant & Loan Opportunities**





## **CEC Updates: Grant Programs**& Bonds Available

Status	The California Energy Commission (CEC) has rolled our a series of funding programs for energy-related projects as part of the HR 1 American Recovery and Reinvestment Act of 2009.
More Info	http://www.energy.ca.gov/recovery/

#### Relevant Programs

#### **Energy Efficiency & Conservation Block Grant Program**

Funds Available	National Total: \$3.2 billion	CA State Total: \$350 million
	CEC Allocation: ~ \$50 million	
Program Synopsis	Supports development of Energy strategies and programs, including renewable energy project insta	ding energy audit programs and
Status	July 14 & 15, 2009 – Public Wo	orkshops on guidelines to be held
More Info	http://www.energy.ca.gov/recov	very/blockgrant.html



## CEC Updates: Relevant Programs

**State Energy Program** 

Funds Available	National Total: \$3.1 billion CA State Total: \$226 million
Program Synopsis	To support programs in various sectors, including industrial, institutional and agricultural, in renewable energy research, deployment and transmission planning
Status	July 2009 – CEC guidelines to be presented, applications currently N/A
More Info	http://www.energy.ca.gov/recovery/sep.html

**Clean Cities Program** 

Funds Available	National Total: \$300 million, \$5 million min \$15 million max. award
Program Synopsis	Competitive program for governments to purchase alternative fuel vehicles and infrastructure.
Status	March 10, 2009 – Pilot Program solicitation released
	Sept 30, 2009 – Applications to DOE (Round 2)
More Info	http://www1.eere.energy.gov/cleancities/



## CEC Updates: Other Funding Opportunities

**Renewable Energy Loan Guarantees** 

Funds Available	National Total: \$6 billion
Synopsis	Competitive loans for renewable power generation and transmission projects (including biomass and methane gas) See website for information on solicitations.
More Info	http://www.energy.gov/recovery/funding.htm

**Qualified Energy Conservation Bonds** 

Funds Available	Final Act Estimates: \$803 million
Synopsis	The bill authorizes additional \$2.4 billion in loans and grants to finance government programs and initiatives to reduce GHG emissions.





## CEC Updates: Other Funding Opportunities

**Clean Renewable Energy Bonds** 

Funds Available	Final Act Estimates: \$578 million
Synopsis	The bill authorizes an additional \$1.6 billion in bonds to finance electricity generation projects from alternative resources, including biomass, landfill gas and trash combustion facilities.
More Info	http://www.energy.gov/recovery/funding.htm

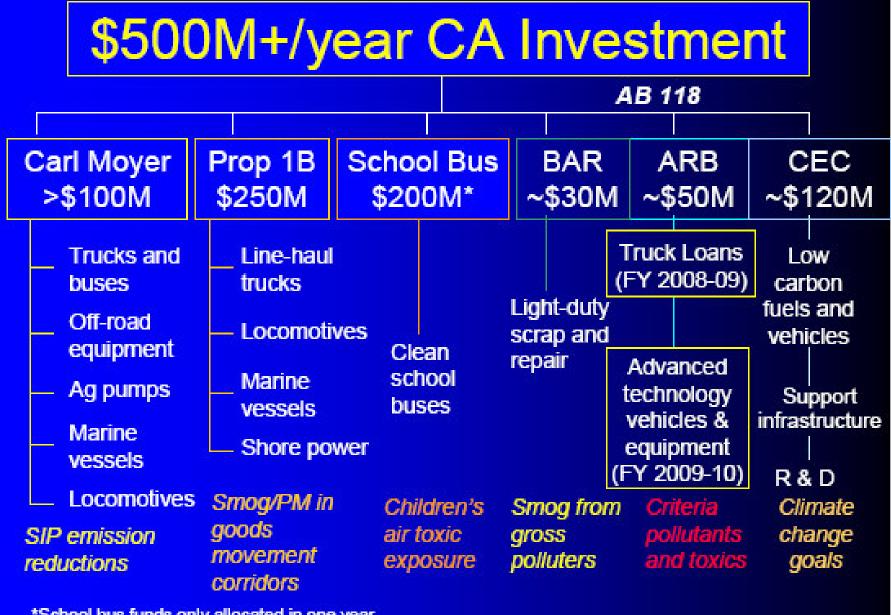




### Climate Showcase Communities Grant Program

Funds Available	Total: \$10 million Awards from \$100,000 - \$500,000 per project
Synopsis	To help create "replicable models of sustainable community action that generate cost-effective & persistent GHG reductions while improving the environmental, economic, public health, or social conditions in a community"  -Recipients to meet a 50% cost-share
Status	Proposal accepted through July 22, 2009 Grants awarded through January 2010
More Info	http://www.epa.gov/RDEE/energy-programs/state-and-local/showcase.html





\*School bus funds only allocated in one year.



## **AB 118: An Air Quality Incentive Program Bill**

Purpose	AB 118 provides approximately \$200 million annually through 2015 for three new air quality incentive programs:  1. The <u>Air Quality Improvement Program (AQIP)</u> administered by ARB
	2. The Alternative and Renewable Fuel and Vehicle  Technology Program administered by the California  Energy Commission
	3. The Enhanced Fleet Modernization Program administered by the Bureau of Automotive Repair
Status	<ul> <li>Signed by Governor Schwarzeneggar in October 2007</li> <li>April 24, 2009- approved AQIP Guidelines and Funding Plan for FY 2009-10</li> </ul>
More Info	http://www.energy.ca.gov/ab118/index.html





## AB 118: The AQIP Funding Plan

Background	The AQIP will provide about \$50 million per year for grants to fund clean vehicles and equipment, air quality research, and workforce training
Status	<ul> <li>On April 24, 2009, the Board adopted the AQIP Guidelines and approved the AQIP Funding Plan for Fiscal Year 2009-10</li> </ul>
More Info	http://www.arb.ca.gov/msprog/aqip/aqip.htm
Future Opportunities	Possible future opportunity for lobbying to obtain funding for digestor emissions and cogeneration research.





## AB 118: Truck Loan Program

Background	Under the AQIP, the PLACE program has been developed to address fleet emissions reduction.
Relevance to WWTPs	Truck Loan Program (PLACE)  - For both on and off-road fleets  - Financing Options:  > Loan guarantees, Interest-rate buy downs, Lease buy-backs, Extended repayment periods, etc.  Eligibility Requirements:  - For small businesses: 100 or fewer employees and < \$10 million annual revenue (on 3 yr. average)  - Off-Road: Fleets of all sizes (small, medium, large, as defined by the off-road rule) are eligible  On-Road: Fleets of 20 or fewer heavy-duty vehicles are eligible  Loan Applications are now available and being accepted by participating CalCAP lenders.
More Info	http://www.arb.ca.gov/ba/loan/loan.htm





# AB 118: The Alternative and Renewable Fuel & Vehicle Technology Program

AQIP Relevance to WWTPs	The Alternative and Renewable Fuel and Vehicle Technology Program, AB 118, will provide approximately \$120 million dollars per year over seven years to deploy the cleanest fuels and vehicles.
More Info	http://www.energy.ca.gov/proceedings/2008-ALT-1/index.html
Future Opportunities	<ul> <li>April 30, 2009: Investment Plan (for next 2 years) released</li> <li>Focused on electricity and hydrogen powered options</li> <li>Could provide funding in the future for "waste-derived" alternative fuel research and development</li> </ul>





### Carl Moyer Grant Money Available

Background	The Carl Moyer Program offers grants to owners of heavy-duty vehicles and equipment to reduce air pollution emissions. Grant money can be used to install particle filters, replace engines in older equipment, or purchase new equipment to replace older models.
Status	See next slide
More Info	http://www.baaqmd.gov/Divisions/Strategic-Incentives/Carl- Moyer-Program.aspx





### Carl Moyer Grant Money Available

Status	-April 15, 2009: \$20 million in grant money through the Carl Moyer Program became available - July 2009: Additional \$2.4 million available for small on-road fleets of 3 or less - To date: ~ \$13 million has been allocated to eligible projects > Note: First come, first served – applications still being accepted
Applicability	<ul> <li>Approximately \$9 million dollars are still available for diesel emission reduction projects.</li> <li>Grant money can be used for fleet retrofitting and replacement</li> <li>Highest priority given to the following communities: Concord,</li> <li>E. San Francisco, Redwood City/East Palo Alto, Richmond/San Pablo, San Jose, and W. Alameda County</li> </ul>
More Info	Grant applications can be found at: <a href="https://www.baaqmd.gov/moyer">www.baaqmd.gov/moyer</a> Grants Hotline: (415) 749-4994





### **Local Regulatory Updates**





## **BAAQMD Update: Regulation 3 Fee Increase**

Status	- Hearing held on April 15, 2009 regarding Regulation 3 Fees - Revised version effective 7/1/09
Applicability	The fees will increase for:  • Stationary Combustion of Fuels (excludes flares)  — See Schedule B  • Solid Waste Disposal Sites (inactive and active)  — See Schedule K  • Major Stationary Sources (>50 tons/yr threshold)  — See Schedule M  • Greenhouse Gases, etc.: \$0.045/ MT of CO2-e  — See Schedule T  For a full list of affected sources, see the website link for the updated Regulation 3.
More Info	http://www.baaqmd.gov/Divisions/Planning-and- Research/Rules-and-Regulations.aspx





## **BAAQMD Update: Possible Composting Rule**

#### Contact: Robert Cave/BAAQMD

- preliminary stages of developing regulations on composting operations
- needs to gather data on operations in the district
- hoping for rule development in 2010

Attendees: Jim Sandoval, Zachary Key (City of Santa Rosa), Dean Paige (City of Santa Rosa), Greg Kester (CASA)

- explained the operations and importance of compost operations to their facilities
- presented issues for biosolids operators when similar rules were instated in South Coast and San Joaquin Air Districts
- stressed the need to consider cross-media impacts and net environmental benefits of composting operations





#### **Discussion**





#### AIR Committee 2009/10

Future Meetings	Business as usual vs topical Newsletters





### Closing

Next Meeting Date: October 21, 2009

Time: 10 am - 1 pm

Location: CH2M HILL Offices

Oakland, CA

