

August 15, 2014 – BACWA

Air Regulatory Update: California Wastewater Climate Change Group (CWCCG)



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Tracking key State and Federal issues

Mitigation

- Air: AB 32 – Global Warming Solutions Act
 - Scoping Plan Update
 - GHG Mandatory Reporting
 - Cap-and-Trade Program
- Air: EPA PSD and Title V GHG Tailoring Rule & Deferral Rule
- Energy:
 - SB 1122 – Bioenergy Projects
 - AB 1900 – Pipeline Biomethane
- Solids:
 - AB 341 – Waste Diversion

Adaptation

- CNRA Fourth CA Climate Change Assessment
- CEC and CAT Climate Change Research Plan



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California's Climate Future: Environmental Goals and Policy Report

- Discussion draft released September 2013
- Update to Gov Brown's 1978 *Urban Strategy for California*
- 20-30 year perspective
- Goals and objectives for
 - land use
 - population growth and distribution
 - conservation of natural resources
 - air and water quality



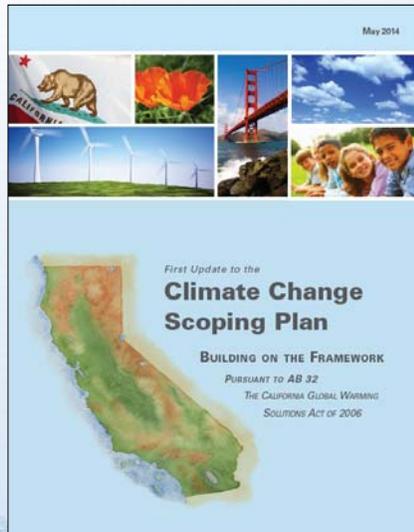
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http://opr.ca.gov/docs/EGPR_ReviewDraft.pdf

Mitigation

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First Update to the Climate Change Scoping Plan adopted May 22, 2014



- CA's climate change priorities for next 5 years
- Progress toward meeting 2020 goals
- 9 economic sectors for setting long term (2050) goals:
 - transportation, energy, water, waste management, agriculture, natural and working lands, short-lived climate pollutants, green buildings, and cap-and-trade
- Set an interim target between 2020 and 2050

CWCCG's primary concerns:

- Progress toward meeting the 2020 GHG emissions reduction target was not quantified
- Setting post 2020 GHG emission reduction targets without knowing progress to date
- Wastewater still shown as 5th largest source of anthropogenic methane in CA
- ARB is expanding its GHG monitoring program to examine wastewater treatment plants for fugitive methane emissions over next 5 years

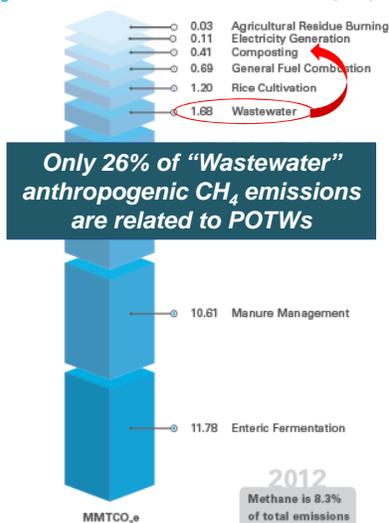
POTWs can contribute toward many State 2020 targets including...



- ↓ Greenhouse gases (1990 levels)
- ↑ Renewable energy (33%)
- ↓ Carbon intensity of fuel (10%)
- ↓ Waste to landfill (75%)

Met with ARB staff about “Wastewater” anthropogenic CH₄ emissions

Figure 3: California Methane Emission Sources (2012)



Breakdown of “Wastewater” (MMTCO₂e)

Domestic:	0.80
Industrial:	0.88
Total:	1.68

Breakdown of “Domestic” (MMTCO₂e)

Septic Systems:	0.37
Centralized:	0.41
Anaerobic (biogas):	0.02
Total:	0.80

Also discussed POTWs as a potential underestimated source of CH₄

- Page 24 states:
 - “ARB is also expanding the program to include flux chambers and controlled tracer release studies to study large area sources such as landfills, **wastewater treatment plants**, oil and gas extraction fields, natural gas leakage from pipelines, and other fugitive emission sources..”
- ARB Staff stated POTWs are not the primary target – believe CH₄ from POTWs is not grossly underestimated
- ARB Staff agreed to draw from POTW experience and studies/data
- CWCCG encouraging the formation of workgroups to establish work plans for review of data and reports
- SIDE: N₂O is to be looked at by ARB Research Group (Providing studies by K. Chandran Columbia University)

Federal GHG Regulations for Stationary Sources – Tailoring Rule

- **Utility Air Regulatory Group vs EPA – GHGs from stationary sources (including biogenic CO₂)**
 - June 23, 2014, Supreme Court ruled:
 - GHGs are an “air pollutant” subject to regulation under CAA
 - GHG emissions alone cannot bring you into PSD and Title V permitting programs
 - If facility is already in a program AND exceeds thresholds, EPA can bring GHGs into the programs
 - Subject to BACT in the PSD program
 - EPA to propose an amended regulation addressing:
 - Supreme Court ruling
 - Biogenic CO₂ emissions
- EPA to complete scientific analysis on biogenic CO₂ emission sources in summer 2014
<http://www.epa.gov/climatechange/Downloads/ghgemissions/Biogenic-CO2-Accounting-Framework-Report-Sept-2011.pdf>



Adaptation

CNRA 4th California Climate Change Assessment – Drafting Scope of Work

- First three climate change assessments looked at:
 1. 2006 – impacts to state resources such as water supply, public health, agriculture, coastal areas, forestry, and electricity production and demand
 2. 2009 – initial estimates of economic impacts, concluded adaptation could reduce economic impacts of loss and damage
 3. 2012 – vulnerability and adaptation options discussed in 2009 assessment, led to update of 2009 Climate Change Adaptation Strategy >> *Safeguarding California: Reducing Climate Risks*
 4. Goal is to “provide critical additional information to support decisions that will safeguard the people, economy, and resources of California”

CWCCG is providing specific input on three topics...investigating:

- Vulnerability to sea level rise
- Increasing recycled water use
- Increasing bioenergy production (primarily addressed in CEC's Climate Change Research Plan)

CARB AB 32
Scoping Plan

CNRA 4th Climate
Change Assessment

CEC Climate Change
Research Plan

Governor -
California's
Climate Future:
Environmental
Goals and Policy
Report

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Questions?

Next CWCCG meeting: September 17th (Face-to-Face)



Sarah Deslauriers
Program Manager

California Wastewater Climate Change Group
(925) 977-3148 sdeslauriers@carollo.com

<http://www.casaweb.org/>

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