

Permitting Greenhouse Gases: South Coast Approach

NACAA Permitting Workshop

July 14 -15, 2009

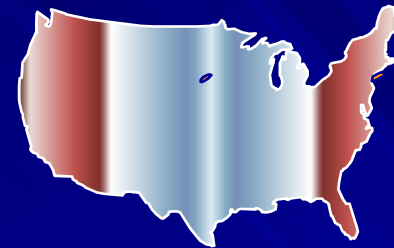
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Permitting Greenhouse Gases (GHGs)

- Federal Programs



- State of California Programs



- SCAQMD Local Programs



Federal Requirements

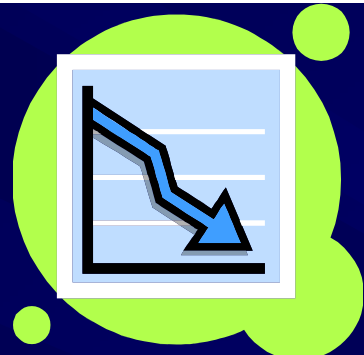
- Proposed mandatory GHG reporting on April 10, 2009
 - No permit requirements, but will cover most large industrial facilities with permits
- Waxman-Markey (cleared the House on June 26, 2009)
 - Title V permits will be implementation mechanism
 - Can't require Title V permit just on basis of the bill
- EPA issued proposed Endangerment Finding for GHG under the Clean Air Act on April 17, 2009.
 - EPA identified six greenhouse gases (GHGs) that contribute to air pollution which "may endanger public health or welfare," i.e., carbon dioxide (CO₂), methane, nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulfur hexafluoride (SF₆)
 - Currently applies to motor vehicle emission but the findings may form the basis for the regulation of stationary and mobile sources emission under the CAA.
- EPA grants California GHG waiver on June 30, 2009
 - Enables state to enforce GHG emission standards for new motor vehicle beginning the current model year (Reverses previous Administration's decisions)

State Requirements – Assembly Bill 32 CA Global Warming Solutions Act of 2006

- Set 2020 cap at 1990 GHG emission levels
- Mandatory Reporting Requirements
- Scoping Plan
- Discrete Early Action Measures

State Mandatory Reporting Regulations

- Approved by the State in December, 2007
- Submit GHG Emission Reports by June 1, 2009 using on-line Reporting Tool
- Step-by-Step Guides for using the Reporting Tool provided for different industry sectors (general stationary combustion facilities, cement plants, refineries, hydrogen plants, oil & gas production, electricity generating and cogeneration facilities)



State Scoping Plan Reduction Goals

- Reduce 169 MMT from business-as-usual in 2020
 - ~600 MMT (30%) less than 1990 levels
 - ~42 MMT (10%) less than current levels
- Early action measures = ~ 25% of needed reductions
- Sets path to start towards 2050 goal of 80% reduction from 1990 levels

State Scoping Plan Key Elements

- Expand energy efficiency programs, building and appliance standards
- 33% renewable energy by 2020
- CA cap-and-trade program linked to regional Western Climate Initiative (WCI) markets
 - 85% of emissions under cap
 - Start with electricity generation and large industry in 2012
 - Add transportation and natural gas in 2015

State Scoping Plan Key Elements

(cont'd.)

- Existing laws and policies
- Targeted fees to fund implementation
- Mix of strategies – market, regulations, voluntary measures, fees, public education, etc. (few specifics yet)

Nine State Discrete Early Actions

Actions	Affect Permits?
Low Carbon Fuel Standard	No
Landfill Methane Capture	Yes
Reductions from Mobile AC	No
Semiconductor Reduction	Yes
SF6 Reductions	Yes
High GWP Consumer Products	No
Heavy-Duty Measure	No
Tire Pressure Program	No
Shore Power	Yes

Other State Scoping Plan Rules that Will Affect Permits

- Refrigerant Rule
- Oil & gas transmission
- Foam recovery & destruction
- Combined heat & power

Key Policy Considerations for SCAQMD

- Maximize co-benefits
- Integrate smoothly with permit programs
- Implementation issues – role of local agencies
 - Permitting
 - Inspection
 - Enforcement
- Revenue Use – help reduce toxics & air pollution

Climate Change and Local Air District Programs

- Climate change will impact almost every aspect of what local air districts do
- Most, but not all, GHG reduction strategies reduce criteria and/or toxic air pollutants
- Need to be smart about integration with existing district programs
 - avoid conflicts, duplication

What Might Permits Cover?

- Source-specific AB 32 rules
- Cap-and-trade
 - Monitoring, Reporting & Recordkeeping
 - Allowance holdings
 - Other requirements
- CEQA mitigation
- Offset related conditions



Local Agency SCAQMD Key GHG Activities

- SoCal Climate Solutions Exchange
- GHG reporting
- CEQA thresholds
- Tree Planting Initiative

SCAQMD's SoCal Climate Solutions Exchange

- Two main components
- Rule 2701 – SoCal Climate Solutions Exchange
- Rule 2702 – GHG Reductions

SCAQMD Background



- Chairman's Initiative
- Objective: high quality GHG reductions for voluntary actions
 - Enhance local economy and capture local co-benefits
- Potential uses
 - CEQA mitigation
 - Offset “footprint”
 - Other programs TBD

Protocols

- Recommending 3 CARB-approved protocols, with local requirements for manure management
- Additional protocols in development

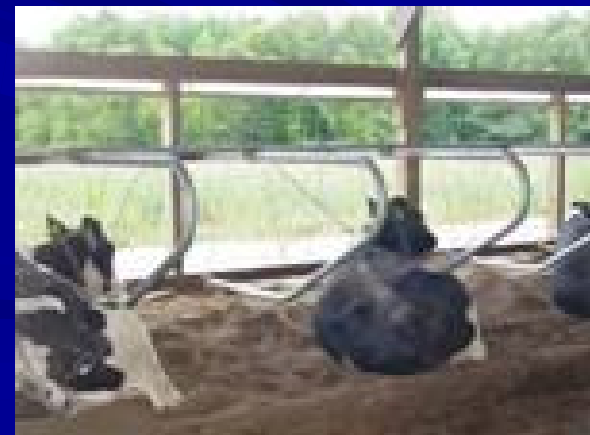
Tree Planting



Forest



Manure Management



Rule 2701 – SoCal Climate Solutions Exchange

- Projects in District by private parties
- Any party may purchase or use
- AQMD verifies, issue certified reductions
- Electronic bulletin board

Rule 2702 – GHG Reductions

- Parties pay into district fund
- District would fund projects, verify reductions
 - RFP process
 - Pre-approved protocols
- Procedures for requesting and evaluating reductions, fees, implementation
- Priority for projects with co-benefits in EJ areas
- Comprehensive annual report to Board

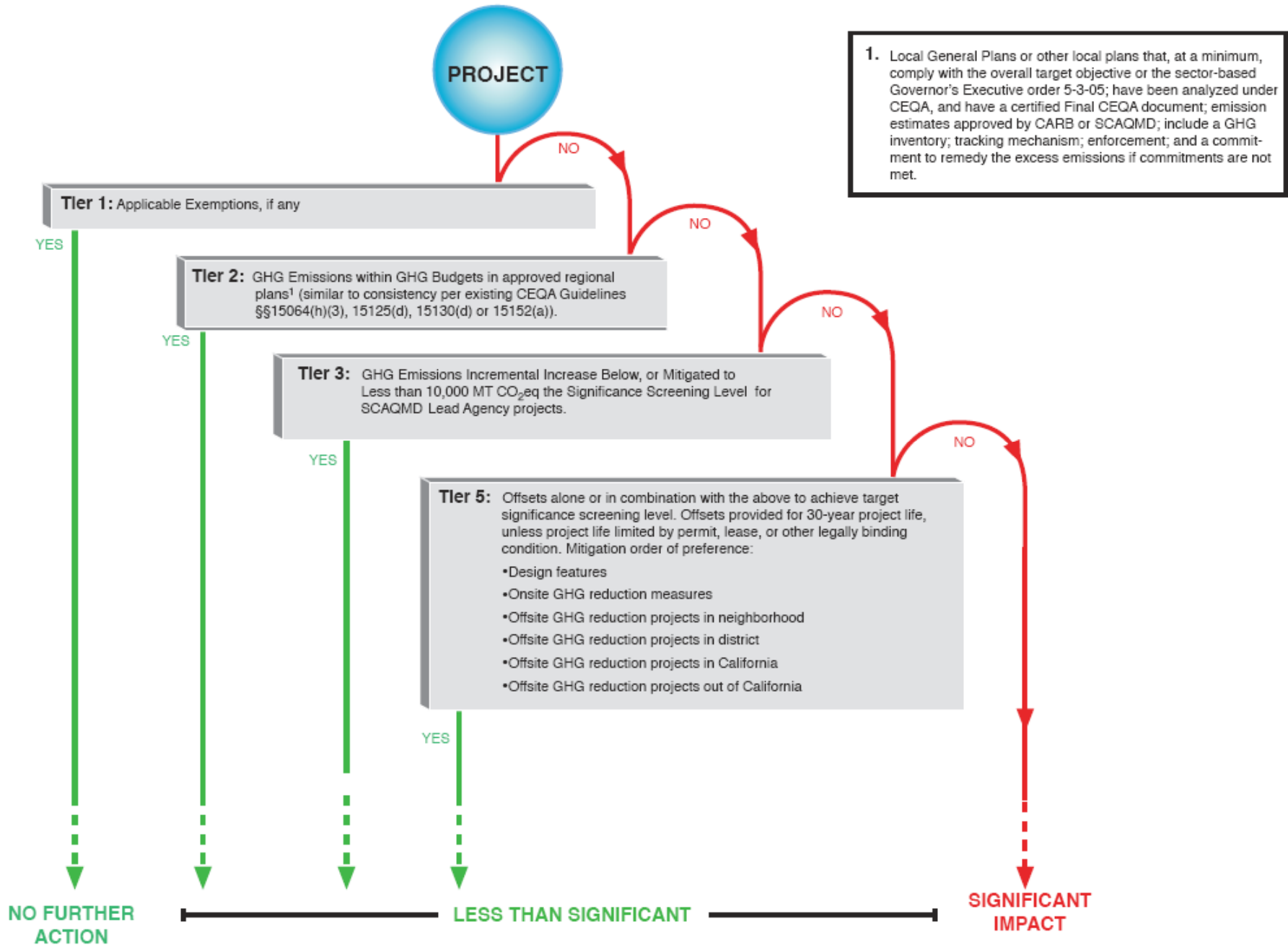
GHG Emissions Reporting

- State requirement
- Added voluntary component to web-based annual reporting
- Satisfies state requirements
 - Interface in development

SCAQMD's Interim CEQA Significance Levels

- Adopted by the Governing Board 12/5/08
- Applicability – industrial (stationary source) projects
 - Only when AQMD assumes lead agency role
 - SCAQMD rules, regulations or Plans, e.g., AQMP
 - Discretionary permit projects where SCAQMD has primary approval authority
 - Not recommended at this time for use by other agencies or land use projects (residential/commercial)

Draft AQMD Staff CEQA Greenhouse Gas Significance Threshold



SCAQMD's Interim GHG Proposal – Methodology

- Capture 90% of GHG emissions from district-wide new/modified stationary/industrial projects
 - ✓ Surveyed Annual Emission Reports for 1,297 existing facilities
 - ✓ Natural gas combustion sources
 - ✓ 10% off facilities responsible for ~ 90% off emissions emitting 10,000 MTY or more of CO₂E
- Threshold applies to both emissions from construction & operational phases plus indirect emissions (electricity, water use, etc.)

SCAQMD's Tree Planting Initiative

- \$1.5 million match funding for cities and counties
- Trees to be low-ozone forming, CA native
- Extra points if drought tolerant
- Student employment and outreach component

