California Environmental Protection Agency

California Air Resources Board

California Regulation for the Mandatory Reporting of Greenhouse Gas Emissions

#### 2012 GHG Reporting

Subarticle 5: Petroleum and Natural Gas Systems

February 20, 2013 Presentation Slides Available Here: <u>http://www.arb.ca.gov/cc/reporting/ghg-</u> <u>rep/guidance/guidance-training.htm</u>

#### Outline

- Key Reporting Dates
- Rule Applicability: Effective Dates
- Subarticle 5 (Subpart W) Petroleum and Natural Gas Systems
  - Implementation of 2012 revisions
  - Emissions
  - Product data
  - Additional data to support cap-and-trade
- Resources
  - Reporting guidance
  - Cal e-GGRT- training, registration, help
- Q&A

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Key Reporting Dates				
Date	Activity			
February 1	Regulatory deadline: Due date for electric power entities to register specified facilities outside California			
February 13	Public release of Cal e-GGRT			
April 10	Regulatory deadline: Reporting deadline for facilities and suppliers of fuels and carbon dioxide, except when subject to abbreviated reporting			
June 3	Regulatory deadline: Reporting deadline for electric power entities and those subject to abbreviated reporting			
July 15	Regulatory deadline: Deadline for corrections to RPS Adjustment data required for electric power entity data reports			
September 3	Regulatory deadline: Final verification statements due (emissions data and product data)			
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#### Implementation of 2012 Revisions to Subarticle 5 • Revisions applying to reporting of 2012 data in 2013 – ARB incorporations of existing USEPA requirements – Clarifications to existing methods – Voluntary reporting requirements • Revisions applying to reporting of 2013 data in 2014 – Fugitive emissions added to > 25,000 MTCO2e applicability threshold – New reporting methodologies – New reporting requirements \* Note that new methods/requirements may be used for 2012 data reported in 2013, if data is available For additional guidance: http://www.arb.ca.gov/cc/reporting/ghg-rep/guidance/guidancedocs.htm

#### Subpart W – Reporting for New Methods

- Flexible implementation (2013/2014)
  - Intermittent bleed devices
  - New acid gas removal method
  - New blowdown reporting requirements
  - Produced water, crude oil, and condensate
- Effective for 2012 data reported in 2013
  - Best Available Monitoring Methods (BAMM)
  - Voluntary reporting of product data
    - Dry Gas
    - Natural Gas Liquids
    - Associated Gas

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#### **Determining Facility Basin**

- The basin boundaries for California are outlined in a copyrighted USGS map.
- ARB staff has added a table to guidance that lists the California counties in each basin boundary
- The table is located here: <u>http://www.arb.ca.gov/cc/reporting/ghg-</u> <u>rep/guidance/guidance\_subpart\_w.htm</u>

## **Onshore Production Storage Tanks**

- Onshore petroleum and natural gas production facilities are required to report emissions from *"onshore production and storage tanks"*. (95152(c)(8))
  - With the addition of the Crude Oil, Condensate, and Produced Water Dissolved CO<sub>2</sub> and CH<sub>4</sub> (95153(v)), emissions from onshore production tanks are reported based on the results of a flash liberation test, thus fulfilling the requirement in 95152(c)(8).

#### **Equipment and Pipeline Blowdowns**

- Acceptable methods for determining input variables for section 95153(g), required for all reporters:
  - N= number of blowdowns maintain a list
  - T<sub>a</sub> = temp at actual conditions System Control and Data Acquisition(SCADA), thermometer
  - P<sub>a</sub> = pressure at actual conditions SCADA, engineering estimate
  - Use the most accurate data available

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#### Compressor Leak Measurement: Safety Concerns

- Monitoring and QA/QC requirements are in section 95154(a)(4)
- Reporting facilities are directed to use an optical gas imaging device "for all sources that are inaccessible and cannot be monitored..."
  - This includes safety concerns when sampling compressor emissions exhibiting high H<sub>2</sub>S levels.
  - Use this provision to quantify emissions without exposing personnel to hazardous conditions.

#### Leak Survey Timing

- Timing of leak surveys is consistent with US EPA guidance and applies to natural gas distribution (section 95153(o)(8)(A).
- Over a five-year period, an equal proportion of sampling is not necessary, just complete sampling over the five-year period.

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#### Crude Oil, Condensate and Produced Water Dissolved CO<sub>2</sub> and CH<sub>4</sub>

- Must sample prior to the point where liquids exit the separator and flash to atmospheric pressure.
- A temporary, portable separator may be used in cases where produced liquids do not routinely pass through a separator.
- Where total number of tanks makes sampling each stream prohibitively expensive, reporters may design a sampling plan that insures a representative number of samples are gathered to accurately quantify these emissions.

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#### Use of Common Pipe Measurement

- Section 95153(y)(2)(A) indicates that 'company records' may be used to determine combustion emissions for non-pipeline quality natural gas.
- For purposes of this regulation, 'company records' includes common pipe measurements.
- For disaggregating unit level emissions , please follow the unit aggregation guidance: <u>http://www.arb.ca.gov/cc/reporting/ghg-</u> <u>rep/guidance/unit\_aggregation.pdf</u>

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#### Use of Best Available Monitoring Methods (BAMM)

- 2012 emissions data reported in 2013 for Subpart W only:
  - Reporting entities may use BAMM for data inputs listed in Sections 95154(f)(1) through (f)(4).
- 2013 emissions data reported in 2014 may no longer use BAMM for emissions data listed in 95154(f)(1) – (f)(4).

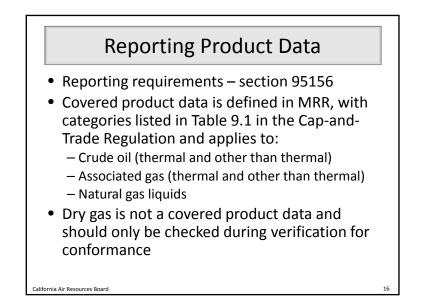
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#### Verification of Reported Activity Data

- All Subpart W reporters are required to report Activity Data as detailed in section 95157.
- The Activity Data reported under Section 95157 must be verified <u>for conformance</u> by the third-party verification body
- Reporters should use best available data (e.g. company records, engineering calculations) to apportion combustion emissions to the process and unit level where required in section 95157.

Questions?



# Reporting Covered Product Data for 2012

- Crude oil is required for 2012 data reported in 2013
- Associated gas and natural gas liquids are voluntary for 2012 data

## 2011 Product Data

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- The reporting guidance gives step-by-step instructions to fill out the 2011 Product Data workbook.
- 2011 data voluntarily reported in 2013 will not be used for determining an entity's allowance allocation

#### Petroleum and Natural Gas Systems Product Data XML Workbook Updates

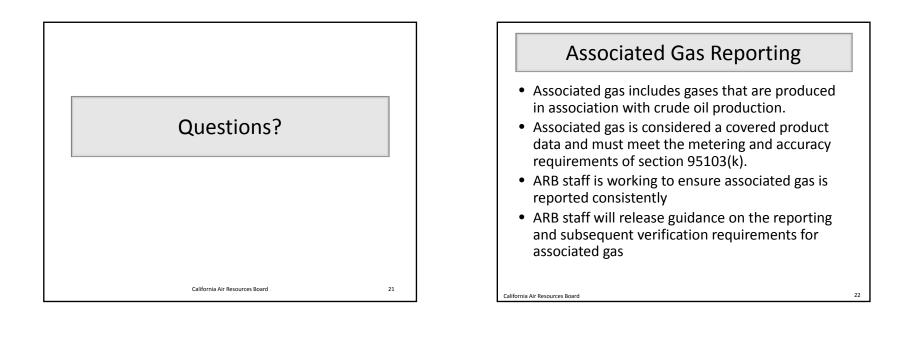
- Onshore Production tab contains new columns
  - Refer to the product data reporting guidance for specifics
  - Evaluation for conformance on new fields
  - Evaluation for conformance and material misstatement if voluntary information is reported
- New tab: Natural Gas Liquid Processing or Natural Gas Liquid Fractionating facility (NGL)

## Product Data Upload Workbooks

- Updated workbooks are in the reporting tool
   2011 Product Data spreadsheet is separate from
- the 2012 xml upload file.Upload Workbooks and Guidance are available
  - here: - <u>http://www.ccdsupport.com/confluence/display/c</u>

alhelp/Reporting+Form+Instructions

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#### Associated Gas Discussion

- What do reporters consider 'associated gas'?
- Are there metering and accuracy issues with reporting associated gas?
- What are the perceived verification impediments?

## Additional Training

- ARB sector-specific training (see link for times) <u>http://www.arb.ca.gov/cc/reporting/ghg-rep/tool/ghg-tool.htm</u>
  - February 21 Fuel Suppliers: Transportation, NG, etc.
  - February 28 Refinery Product Data
  - Mid-April Electric Power Entities

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 Contact ARB staff as needed for questions: ghgreport@arb.ca.gov

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Resources	
<ul> <li>Reporting Guidance: Applicability, Metering, Product Data <a href="http://www.arb.ca.gov/cc/reporting/ghg-rep/guidance/guidance.htm">http://www.arb.ca.gov/cc/reporting/ghg-rep/guidance/guidance.htm</a></li> </ul>	<u>1</u>
<ul> <li>Tool Training: Registration, Subparts <a href="http://www.arb.ca.gov/cc/reporting/ghg-rep/tool/ghg-tool.htm">http://www.arb.ca.gov/cc/reporting/ghg-rep/tool/ghg-tool.htm</a></li> </ul>	
Cal e-GGRT Main Help Page <a href="http://www.ccdsupport.com/confluence/display/calhelp/Home">http://www.ccdsupport.com/confluence/display/calhelp/Home</a>	
<ul> <li>U.S. EPA Detailed Sector Training Slides         <u>http://www.epa.gov/climatechange/emissions/training.html</u> (use as a supplement to ARB summary slides)     </li> </ul>	
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