Revisions went into effect January 1, 2014
Regulation available here: http://www.arb.ca.gov/cc/reporting/ghg-rep/regulation/mrr-regulation.htm
Most updates are effective for 2013 data reporting (see section 95103(h))
– Provisions requiring new data or methods are effective for 2014 data reporting or 2013, using best available methods for data
See “Applicability of 2013 Revisions” guidance spreadsheet
– Lists all regulation changes and when they become effective
– Good reference for identifying areas with revisions

Outline
– MRR Updates
  – What has changed?
  – When do these changes become effective?
– Hydrogen Production
  – Additional data reporting requirements
  – Reporting Product Data
– Petroleum Refineries
  – Applicability of revisions
  – (CWB discussed in separate training)

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Applicability of 2013 Revisions

- Excerpt of guidance spreadsheet
- http://www.arb.ca.gov/cc/reporting/ghg-rep/guidance/guidance-docs.htm

Hydrogen Production Revision Applicability

- 2014 BAM (Best Available Methods for 2013 data reported in 2014)
  - 95114(e)(1) - report C and H content of feedstocks
  - 95114(g) – report CH₄
  - 95114(i) – report and subtract transferred CO₂ and emissions reported elsewhere from your facility totals
  - 95114(j) - report on-purpose and by-product H₂ production
  - 95114(k) – report combustion CH₄ and N₂O emissions
  - 95114(l) – report flaring emissions
- 2014 (full reg requirements for 2013 data reported in 2014)
  - Clarification of source category
  - Report C content & mole wt. for fuels and feedstocks
Hydrogen Emissions
Avoiding Double Counting

- You must report and subtract transferred CO₂ and emissions reported elsewhere from your facility totals
- You must perform these subtractions to avoid double counting these emissions
- Cal e-GGRT does not do these subtractions


Hydrogen Production
On-Purpose
(covered product data)

- “On-purpose hydrogen” means hydrogen produced as a result of a process dedicated to producing hydrogen (e.g., steam methane reforming). Reporters must NOT include any:
  - Chemicals other than molecular hydrogen (e.g., CH₄ or steam)
  - H₂ later condensed and sold as liquid hydrogen

Hydrogen Production
By-Product

- “By-product hydrogen” means hydrogen produced as a result of a process or processes dedicated to producing other products (e.g., catalytic reforming). Reporters must NOT include any:
  - Chemicals other than molecular hydrogen (e.g., CH₄ or steam)
  - H₂ later condensed and sold as liquid hydrogen

Liquid Hydrogen Sold
(covered product data)

- “Liquid hydrogen sold” means the total amount of molecular hydrogen in liquid form sold to other entities
  - Based on sales records
  - Less any impurities
Hydrogen Production

• On-purpose and by-product reporting fields added to Cal e-GGRT and are shown below

<table>
<thead>
<tr>
<th>SUBPART 5 OTHER INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please complete the required information included below.</td>
</tr>
</tbody>
</table>

- **Is the hydrogen plant part of an integrated refinery operation?**
  - Yes
  - No

- **Annual mass of on-purpose hydrogen gas produced (covered product data)**
  - (metric tons)

- **Annual mass of hydrogen (in) in feedstocks**
  - (metric tons)

- **Annual mass of by-product hydrogen gas produced**
  - (metric tons)

- **Annual mass of liquid hydrogen sold (covered product data)**
  - (metric tons)

Hydrogen Reporting Flaring Emissions

**HYDROGEN PRODUCTION UNITS**

<table>
<thead>
<tr>
<th>Name/ID</th>
<th>CO₂ (metric tons)</th>
<th>Status</th>
<th>Delete</th>
</tr>
</thead>
<tbody>
<tr>
<td>QP H Unit 2</td>
<td>Incomplete</td>
<td>OPEN</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Incomplete</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **ADD a Unit**

**HYDROGEN PRODUCTION UNITS (units monitored by CEMS)**

<table>
<thead>
<tr>
<th>Name/ID</th>
<th>Status</th>
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</thead>
<tbody>
<tr>
<td>No units have been added</td>
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<td></td>
</tr>
</tbody>
</table>

- **ADD a Unit Monitored by CEMS**

**FLARES**

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<th>Name/ID</th>
<th>Type</th>
<th>CO₂ (metric tons)</th>
<th>Status</th>
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</thead>
<tbody>
<tr>
<td>Orig</td>
<td>Flare</td>
<td>Incomplete</td>
<td>OPEN</td>
<td>X</td>
</tr>
</tbody>
</table>

- **ADD a Flare**

* A status of “Incomplete” means that one or more required data elements are incomplete. For details, refer to the Data Completeness validation messages in your validation Report by clicking the “New Validation” link above. If there are no validation messages for this subpage you will not see this link. 

Hydrogen Production

• Additional hydrogen data reporting fields

- **Annual mass of all CO₂ captured, transferred off-site, and reported by the hydrogen production facility as a supplier of CO₂ as described in section 98114(j)**
- (metric tons)

- **Annual quantity of carbon, other than CO₂, collected and transferred off site in either gas, liquid or solid forms**
- (kg carbon)

- **Amount of carbon dioxide calculated and reported using other methods in the regulation [98114(g)]**
- (metric tons)

- **Amount of methane calculated and reported using other methods in the regulation [98114(g)]**
- (metric tons)
Reporting CH₄ and N₂O stationary combustion emissions (95114(k))

- **CEMS**
  - Report these emissions in Subpart P
- **No CEMS**
  - Report CH₄ and N₂O emissions in Subpart C
  - Create a new configuration in Subpart C
  - Name the configuration (e.g. H plant N₂O/CH₄)
  - Add fuel(s) to configuration
  - Select “enter my own” for CO₂ and enter zero
  - Let tool compute or enter your own values for CH₄ and N₂O

Petroleum Refineries Revision Applicability

- 2014 BAM (Best Available Methods for 2013 data reported in 2014)
  - no longer report CWT
  - for CWB must report annual volume unit throughput
- 2014 (full reg requirements apply for 2013 data reported in 2014)
  - 95113 – refineries are separate entities for reporting purposes
  - 95113(l)(1) - timing requirements for assessment of primary refinery products for materiality
  - 95113(l)(2) – provide Solomon EII documentation to verifier
Questions?

Additional Training Sessions

• ARB sector-specific training  (check link for times)
  http://www.arb.ca.gov/cc/reporting/ghg-rep/guidance/guidance-
  training.htm

• Contact ARB staff as needed for questions

Resource Web Sites

• Email reporting questions to: ghgreport@arb.ca.gov

• Reporting Guidance: Applicability, Metering
  http://www.arb.ca.gov/cc/reporting/ghg-rep/guidance/guidance.htm

• Cal e-GGRT Tool Training: Registration, Subparts
  http://www.arb.ca.gov/cc/reporting/ghg-rep/tool/ghg-tool.htm

• Cal e-GGRT Main Help Page
  http://www.ccdsupport.com/confluence/display/calhelp/Home

Key Reporting Dates

<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>February 1</td>
<td>Regulatory deadline: Due date for electric power entities to register specified facilities outside California</td>
</tr>
<tr>
<td>February 13</td>
<td>Public release of Cal e-GGRT</td>
</tr>
<tr>
<td>April 10</td>
<td>Regulatory deadline: Reporting deadline for facilities and suppliers of fuels and carbon dioxide, except when subject to abbreviated reporting</td>
</tr>
<tr>
<td>June 2</td>
<td>Regulatory deadline: Reporting deadline for electric power entities and those subject to abbreviated reporting</td>
</tr>
<tr>
<td>July 15</td>
<td>Regulatory deadline: Deadline for corrections to RPS Adjustment data required for electric power entity data reports</td>
</tr>
<tr>
<td>September 2</td>
<td>Regulatory deadline: Final verification statements due (emissions data and product data)</td>
</tr>
<tr>
<td>Subject Matter</td>
<td>Contact</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------------</td>
<td>--------------------------------</td>
</tr>
<tr>
<td>GHG Mandatory Reporting (General)</td>
<td>Brianae Aguila, Manager</td>
</tr>
<tr>
<td>Reporting Requirements, Stationary Combustion, Other Sectors (cement, glass,</td>
<td>Patrick Gaffney</td>
</tr>
<tr>
<td>pulp and paper, etc.)</td>
<td></td>
</tr>
<tr>
<td>Reporting Tool Registration and General Questions</td>
<td>Karen Lutter</td>
</tr>
<tr>
<td>Electricity Generation and Cogeneration Facilities</td>
<td>Patrick Gaffney</td>
</tr>
<tr>
<td>Electricity Retail Providers and Electricity Marketers</td>
<td>Wade McCartney</td>
</tr>
<tr>
<td>Fuel and CO₂ Suppliers - Transportation Fuels, Natural Gas, LPG, CO₂</td>
<td>Syd Partridge</td>
</tr>
<tr>
<td>Petroleum Refineries, Hydrogen Plants, Oil &amp; Gas Production</td>
<td>Byard Mosher</td>
</tr>
<tr>
<td>Product Data – Refineries, and Oil &amp; Gas</td>
<td>Byard Mosher</td>
</tr>
<tr>
<td>Greenhouse Gas Report Verification</td>
<td>Renee Lawver, Manager</td>
</tr>
<tr>
<td>Chief - Climate Change Program Evaluation Branch</td>
<td>Rajinder Sahota, Chief</td>
</tr>
</tbody>
</table>

END