

GHG Update for GCEAG Meeting

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Brian Boyer

COMM Engineering



GHG Reporting Rule

- Beginning 2010 required annual reporting of greenhouse gas (GHG) emissions from all sectors of economy – 40 CFR Part 98
- 25,000 metric tons CO₂e per year reporting threshold
- Data for future climate change regulation
- No requirement to require control GHGs
- Permitting and BACT rules for GHGs being developed now



O&G GHG Reporting Rule

- Track required data during calendar year
- Use 40 CFR 98 prescribed methods, factors and equations to calculate GHG emissions
- Submit annual reports to EPA using the Electronic Greenhouse Gas Reporting Tool (e-GGRT)
- EPA verification of emissions data



O&G GHG Reporting Rule

- 40 CFR 98 Subpart C – for stationary combustion sources (e.g., engines, heaters)
- 40 CFR 98 Subpart W – Petroleum and Natural Gas Industry - flare/vent/fugitive sources



O&G GHG Reporting Rule

- Subpart C initial reporting year began January 1, 2010
- Subpart C initial reports due March 31, 2011
- Subpart W initial reporting year began January 1, 2011
- Subpart W initial reports due March 31, 2012
- For 2011 and on, Subpart C and W apply



Subpart W Source Categories

- Onshore petroleum and natural gas production
- Offshore petroleum and natural gas production
- Onshore natural gas processing plants
- Onshore natural gas transmission compression
- Underground natural gas storage
- Liquefied natural gas (LNG) storage
- Liquefied natural gas import and export equipment
- Natural gas distribution



Example threshold triggers for reporting

25,000 metric tons CO₂e

- Burning 1.26 million std cubic feet per day (MMSCFD) of natural gas for an entire year
- Venting 179 thousand (MSCFD) of sales/fuel quality natural gas



Offshore Source Category

- Offshore production platforms to use Gulfwide Offshore Activity Data System (GOADS) for reporting under Subpart W starting in 2011
- Use 2008 GOADS report or later as available
- Required for OCS GOM platforms and state waters facilities
- For state waters, use GOADS methodology to calculate GHGs for Subpart W sources



Offshore Source Category

- Subpart C separate from Subpart W for GHG reporting
- Beginning 2011, aggregate emissions from Subpart C and Subpart W emission sources to determine if $\geq 25,000$ metric tons CO₂e for offshore facilities



Questions on GOADS for GHG Reporting

- What if facility not operating in 2008 and no GOADS report available?
- What requirement if 2011 actual Subpart W GHG emissions greater or less than GOADS 2008 report?

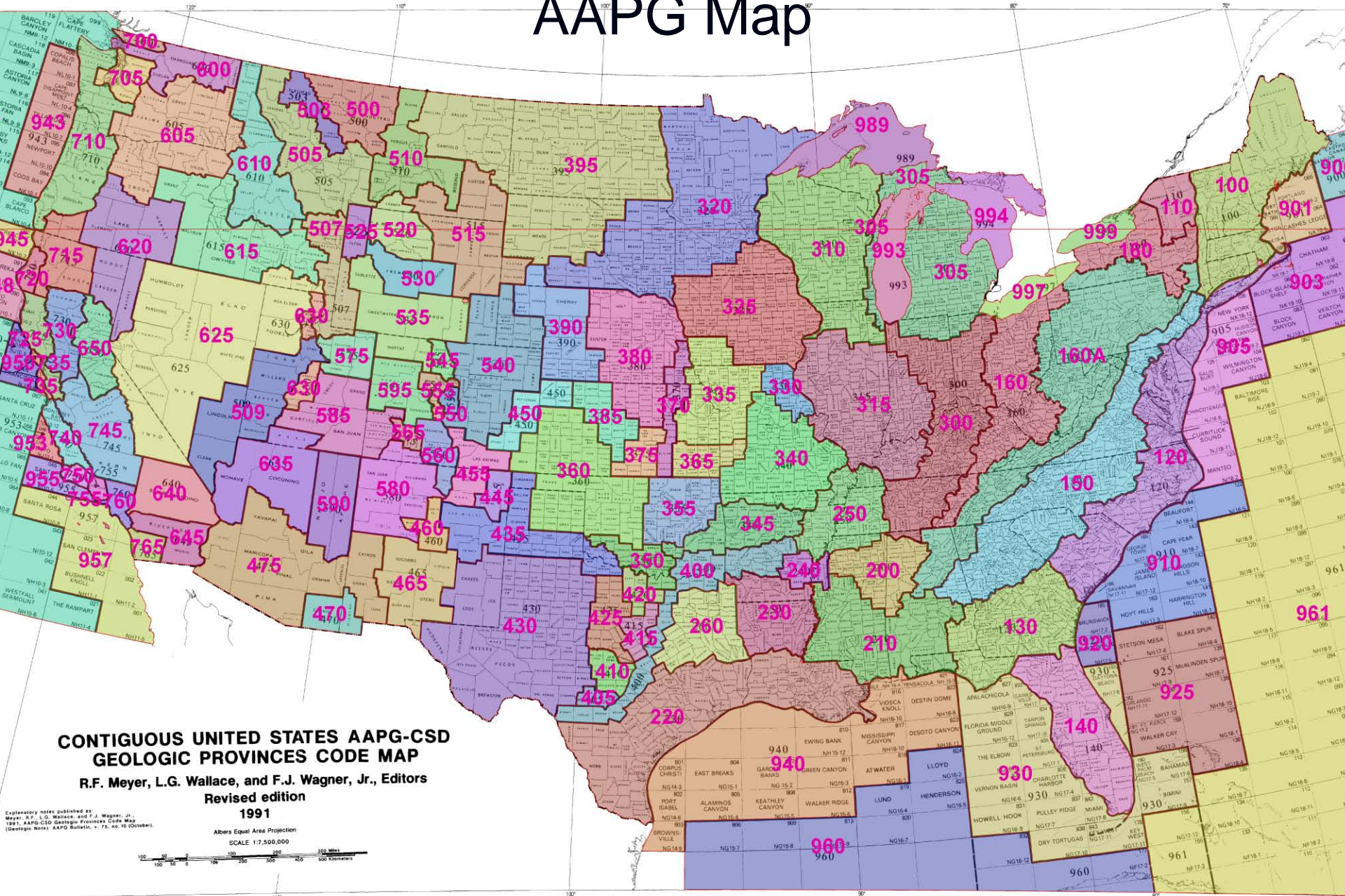


Subpart W – Onshore O&G

- For onshore O&G facilities, Subpart W includes Subpart C emission sources
- Aggregate emissions from onshore O&G facilities and assoc. operations in the same hydrocarbon “Basin” as defined by American Association of Petroleum Geologists (AAPG) Geologic Provinces Code Map
- Aggregate facilities (well pad and associated with at well pad) that are under common ownership or control in a single Basin



AAPG Map



Subpart W Source Categories

- Report if actual GHG emissions in the Basin $\geq 25,000$ metric tons CO₂e per calendar year for aggregated O&G facilities and associated operations
- First Subpart W report due March 31, 2012
- Electronic report to EPA to be summarized by pollutant types and equipment types
- Format for report to be determined by EPA



Subpart W Sources – Onshore O&G

- High, low and intermittent bleed pneumatic device venting
- Natural gas driven pneumatic pump venting
- Well venting for liquids unloading
- Gas well venting during completions and workovers
- Well testing venting and flaring
- Flare stack emissions
- Onshore production storage tanks
- Reciprocating and centrifugal compressor seal leaks
- Assoc gas venting and flaring from produced hydrocarbons
- Dehydrator vents
- EOR injection pump blowdown
- EOR hydrocarbon liquids dissolved CO₂
- Acid Gas Removal (AGR) vents
- Fugitive Emission leaks from valves, connectors, etc.



Subpart W Sources – Onshore O&G

- Stationary and portable combustion sources
 - Compressor, generator, pump engines
 - Drilling rig engines
 - Line heaters, heater treaters,
 - Reboilers
 - Boilers



Other Requirements

- Written GHG monitoring Plan
- Keep records for 3 years. Includes:
 - Gas analyses
 - Calculation sheets
 - Operating, production and fuel used records
 - Calibration records
- Have records available for audit by EPA
- Assignment of Designated Representative

Important Dates for 2010 Reporting

- Assignment of Designated Representative by January 20, 2011 (true due date 1/30/2011)
- Setup your CDX (EPA Central Data Exchange) user account online
- Use CDX account to access e-GGRT (Electronic Greenhouse Gas Reporting Tool)
- Submit 2010 GHG report if required by March 31, 2011

COMM Engineering

P.O. Box 53463

Lafayette, LA

(337) 237-4373

www.commengineering.com

brian@commengineering.com

