USEPA's Mandatory GHG Reporting Rule

Rule Changes & Roadmap for Reporting

Philadelphia A&WMA –DVC Conference
15 December 2010

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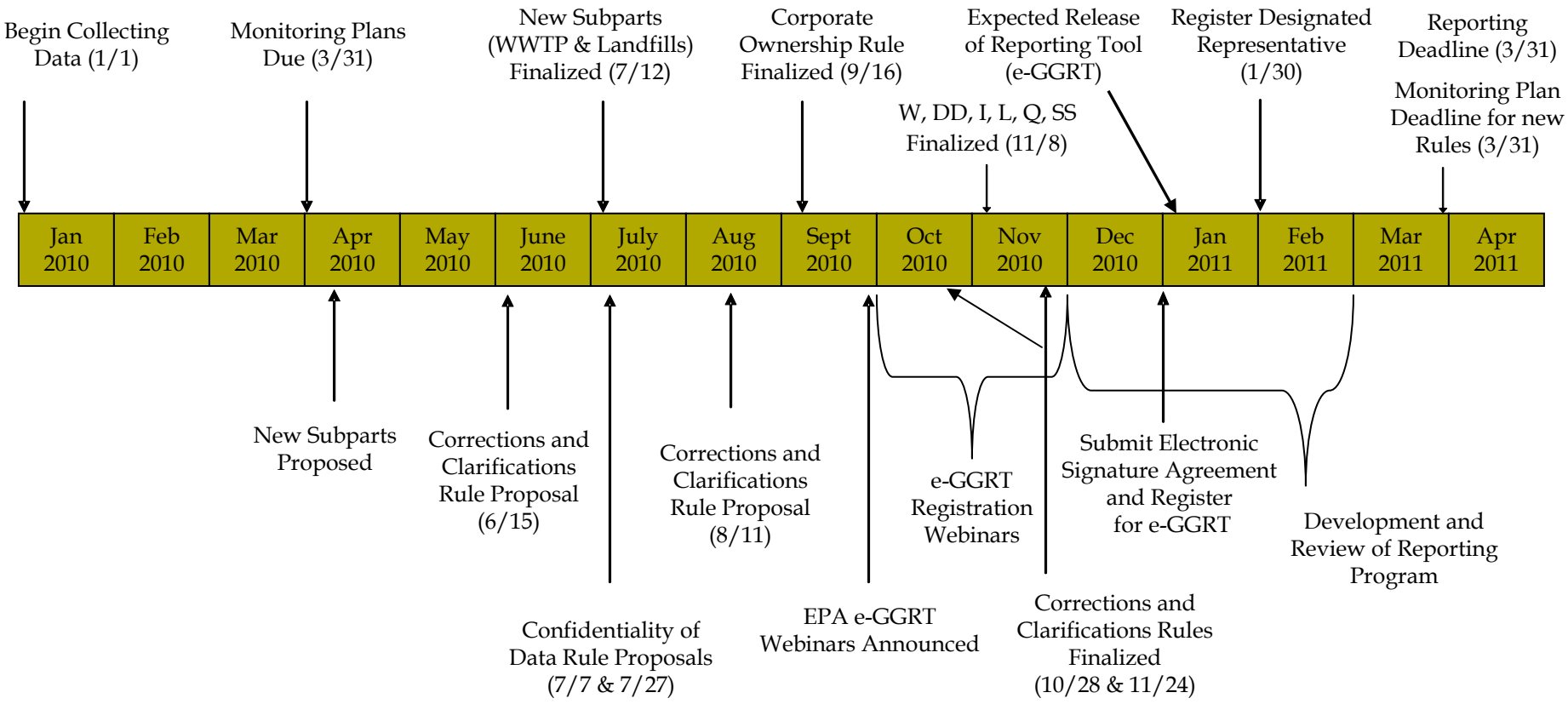
Mandatory Reporting Rule, Let's Summarize…

- Lot's of changes, revisions, clarifications since rule issued in October 2009
- Not expecting EPA will release e-GGRT until early next year
- The reporting tool has complexity
- Leave today with ideas for actions to ensure accurate and complete submittal in March 2011

2010 GHG Reporting - Regulatory Timeline



Technical Edits and Clarifications Finalized Oct. 28 & Nov. 24

- Retroactive to January 1

- Removes requirement to describe QA/QC and keep maintenance records for fuel billing meters

- Provides relief from having to resubmit annual report for every error within 45 days of discovery
  - Limited to substantive error, i.e. one that affects reported emissions
  - Would still notify the EPA of the nonsubstantive error but do not have to resubmit report
  - Can get a 30-day extension upon request

- Missing data records reduced
  - Old: Cause, duration, actions to restore, actions to prevent
  - New: Cause, actions to restore

Technical Edits and Clarifications Finalized Oct. 28 & Nov. 24

- Adds new Equation C-1a to allow fuel bills measured in therms (0.1 MMBTU) or MMBTU to be used directly, rather than having to get heating value data from suppliers to convert therms or MMBTU to scf

- Confirms pilot gas does not need be reported

- Substantial changes in what must be reported for Subpart C to support EPA electronic reporting

  - Added:
    - » Start and end dates of when calculation methodologies are used
    - » Additional data on heat inputs and HHV for fuel blends

  - Removed:
    - » Heat input, customer meter number, and ID number of each unit on a common pipe → Just report heat input of largest unit

Technical Edits and Clarifications Finalized Oct. 28 & Nov. 24

- Do not have to report small sources on a common pipe with large sources, e.g. water heaters on same line as process heaters
  - Attribute the small sources to a large source(s)
  - Allowed if common fuel is measured and large sources account for 95% of fuel used
  - Can use company records for confirming 95% split, documented in GHG Monitoring Plan

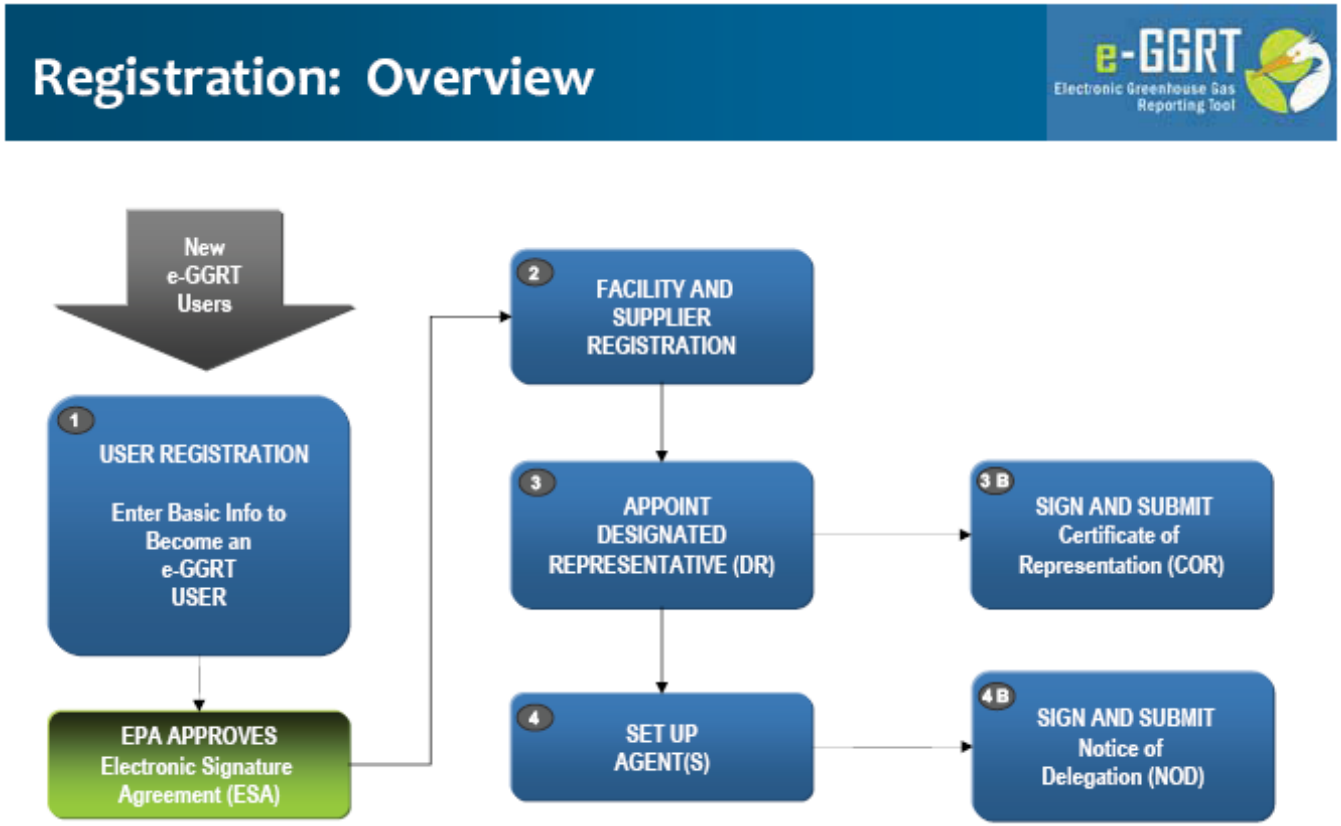
Electronic Reporting

- All reporting under the GHG Reporting Program will be electronic.
- EPA's Electronic Greenhouse Gas Reporting Tool (e-GGRT) is under development.
  - Web-based system for facility/supplier to EPA reporting
  - Web-forms will guide reporters through data entry and submission
  - Built-in emissions calculations
  - Will include a mechanism to submit file directly using Extensible Markup Language (XML) format

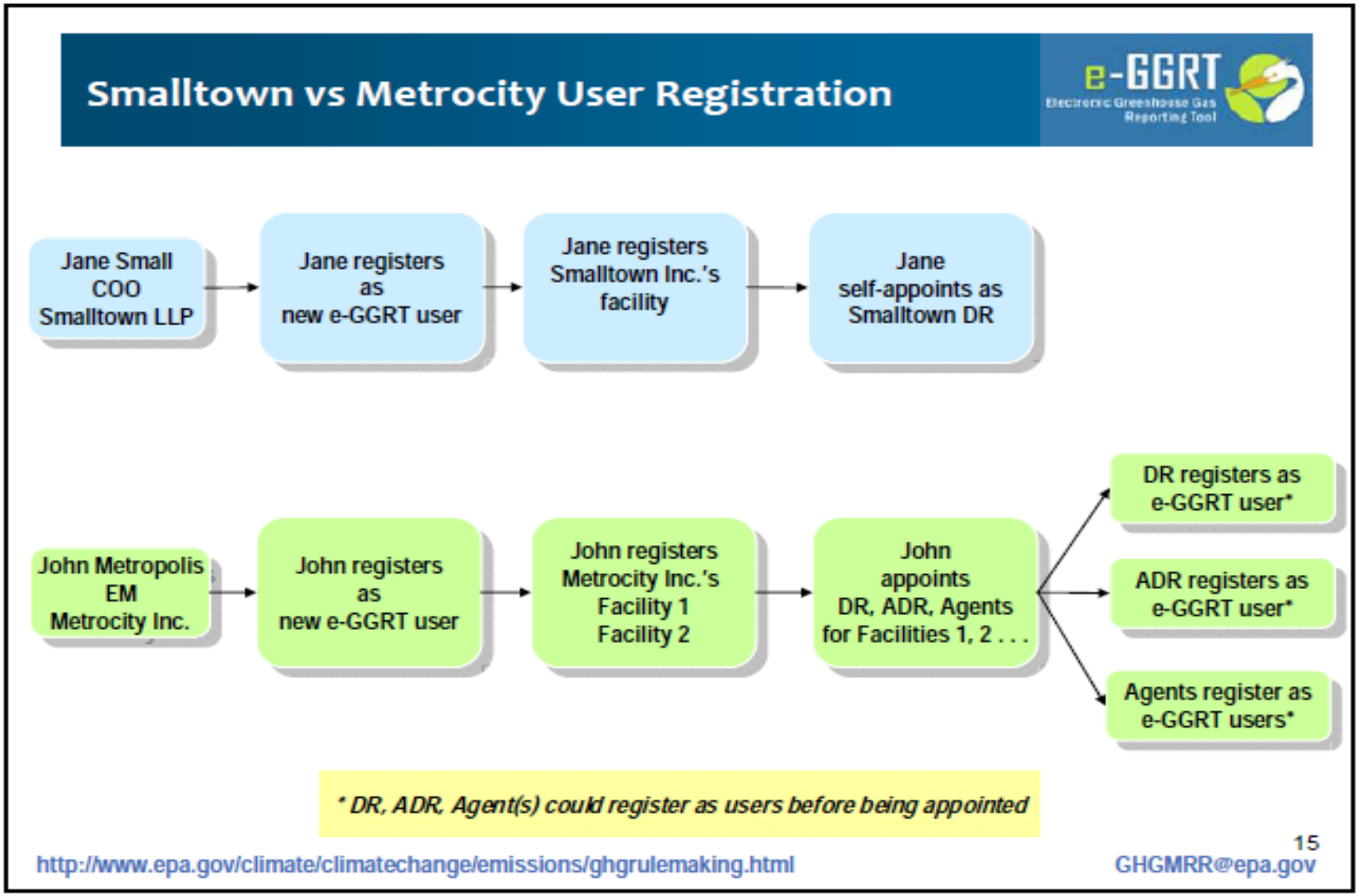
e-GGRT Registration

- e-GGRT will handle user and facility registration
- Facility or supplier representatives can create e-GGRT user accounts and Register facilities and suppliers
  - Identify Designated Representatives and Alternate Designated Representatives
  - Submit Certificates of Representation to EPA
  - Identify Agents
  - Submit Notices of Delegation to EPA
- Deadline for the 2010 reporting year: Certificates of Representation must be submitted to EPA no later than **January 30, 2011.**
- Register early !
  - User account set-up includes electronic signature agreement processing; allow **at least 10 days** before the deadline to set-up user account and register facilities or suppliers.

e-GGRT Flowchart for Registration



e-GGRT Registration Example



2010 GHG Reporting - What Should I Do Now?

What should I have done already (yesterday)?

- Identify gaps in managing inventory
  - Applicability analysis and compliance plan
  - Equipment needs and documentation of changes
  - Monitoring plan with updated procedures and training requirements
- Set up system to calculate emissions and manage recordkeeping with change log
- Attempt a dry run
  - This will identify more gaps

2010 GHG Reporting - ROADMAP TO COMPLIANCE

Step 1 – Prepare Tools

- Prepare calculation tool
- Procedures for review and sign off
- Training for team and management

2010 CO_2 Emissions

Client Name - Location

Facility Equipment		2010 Fuel Information		Source Heat Input mmbtu	2010 GHG Emission Calcs		
Equipment ID	Equipment Size	Fuel Usage	Fuel Type		metric ton CO_2	metric ton CH_4	metric ton N_2O
CB Boiler 1	30 MMBtu/hr	gallons	No. 6 fuel oil	0	0	0.000	0.000
		mmcf	Natural gas	0	0	0.000	0.000
CB Boiler 2	30 MMBtu/hr	gallons	No. 6 fuel oil	0	0	0.000	0.000
		mmcf	Natural gas	0	0	0.000	0.000
CB Boiler 3	50 MMBTU/hr	gallons	No. 2 fuel oil	0	0	0.000	0.000
		mmcf	Natural gas	0	0	0.000	0.000
CB Boiler 4	50 MMBTU/hr	gallons	No. 2 fuel oil	0	0	0.000	0.000
		mmcf	Natural gas	0	0	0.000	0.000
Dryers 1-4	9 MMBTU/hr x 4	mmcf	Natural gas	0	0	0.000	0.000
Total GHG Emissions (metric tons):					**0**	**0.000**	**0.000**
Global Warming Equivalent[2]:					1	21	310
Total Metric Tons CO2e in 2010					**0**	**0**	**0**
					0		

Dec 2010 → **Jan 2011** → **Feb 2011** → **Mar 2011** → **Mar 31, 2011**

2010 GHG Reporting - ROADMAP TO COMPLIANCE

Step 1 – Prepare Tools

Prepare calculation tool

Procedures for review and sign off

Training for team and management

Step 2 – Review and Update

- Review rule changes
- Update Monitoring Plan
- Perform readiness review

Monitoring Plan

Greenhouse Gas (GHG) Reporting Rule

Monitoring Plan

for

Client Name

Street Address

Richmond, VA

March 2010; Revision 0

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Representative of the facility in electronic format yet to be specified by the USEPA.

The Richmond Facility must have one person who is designated as responsible for certifying, signing, and submitting the GHG emissions reports. The Certificate of Representation must be submitted to the USEPA at least 60 days before the deadline for submission of the GHG emissions report (by 30 January).

NOTE THAT THE RICHMOND FACILITY WILL NOT BE REQUIRED TO SUBMIT A GHG EMISSIONS INVENTORY IN 2011 IF THE GHG EMISSIONS FROM THE SITE IN CY2010 ARE FEWER THAN 25,000 METRIC TONS.

However, once the Richmond Facility exceeds the 25,000 metric tons in a single year, annual reports will be due each year by 31 March, regardless
subsequent years. Once an emissions inventory is
lity must continue to submit an inventory until one of
ue:

r than 25,000 metric tons per year CO_2e for five
e years;

r than 15,000 metric tons per year for three consecutive

n all units and operations covered by the GHG
Rule.

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3.0 ***MONITORING PLAN [40 CFR 98.3(g)(5)]***

The GHG Reporting Rule requires development of a written GHG Monitoring Plan. This plan, as well as the information collected in conformance with the plan, must be available for review by regulatory authorities during an audit.

3.1 ***POSITIONS OF RESPONSIBILITY [40 CFR 98.3(g)(5)(i)(A)]***

Identification of positions of responsibility, (i.e. job titles) for collection of GHG emissions data is described below.

Table 3-1 ***Positions and Responsibilities for GHG Emission Data Collection***

Job Title, Richmond Facility	Responsibility *(As related to emission data collection)*
Environmental Manager	Communicate methods and importance of air emissions data collection Calculate natural gas usage per combustion unit based on meter readings; Check emissions calculations and back up data used for the calculations Check GHG emissions calculations and data used to generate calculations
Boiler Operators	Record natural gas flow meter readings to the boilers and heaters; Record boiler and heater run times; Record fuel oil volume consumed
Extruder Operators	Record dryer run time; Record dryer natural gas usage per flow meter readings
Receiving Department	Receive and maintain fuel oil and natural gas invoices from the suppliers
Environmental Engineer	Receives fuel oil and natural consumption data from the boiler operators and Extruder Operators, including information from the Richmond Facility Receiving Department, Boiler House, and Extruder Dept. for the Richmond Facility combustion units; Compiles data into an Excel spreadsheet that calculates GHG emissions Leads QA/QC data collection; Leads data inconsistency inquiries and resolution management; Coordinates report certification and submittal with Designated Representative; Identifies data collection changes and addresses changes per GHG Protocol Management of Change; Completes the GHG Revision Log; Completes Missing Data Calculation Log

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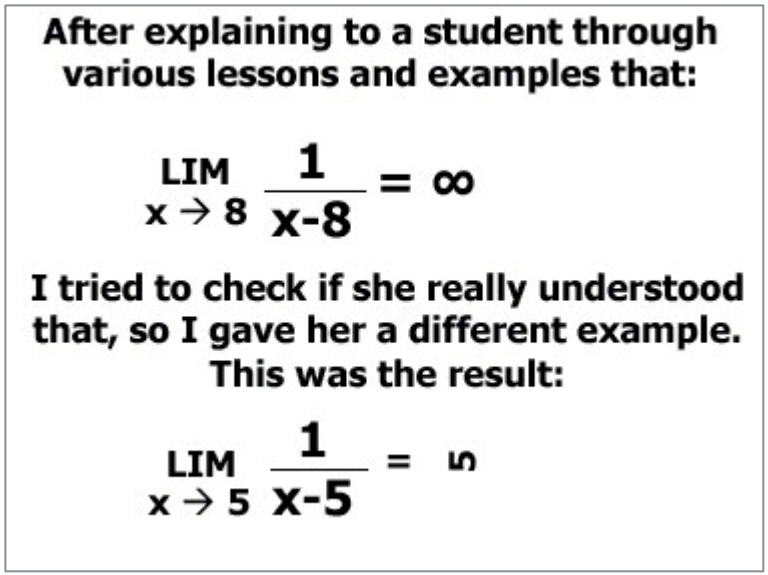
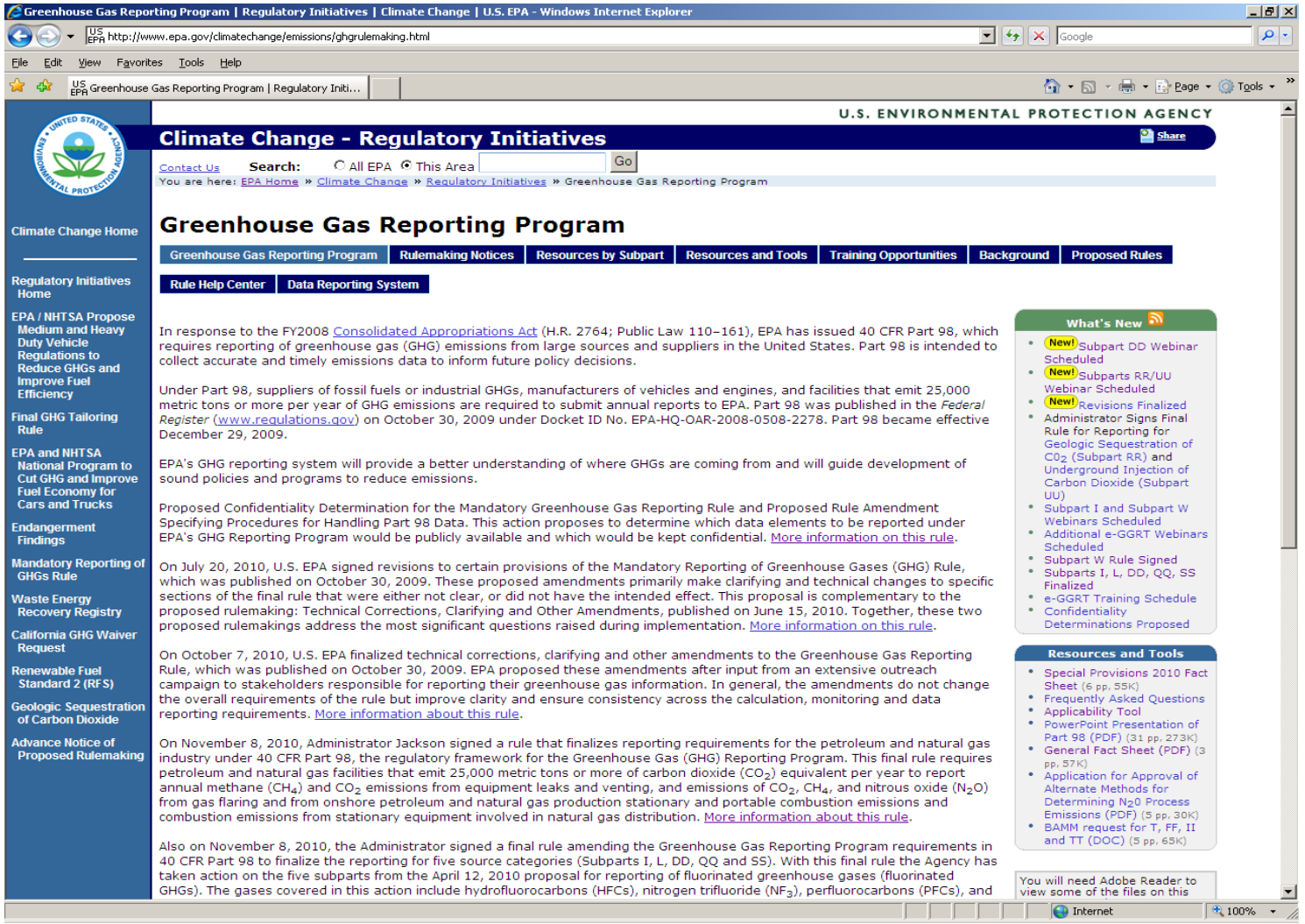
Check and Update

- Readiness review
  - Activities scheduled
  - All records available
    - » Devil is in the details
      - › Management of fuels
      - › Missing data management
      - › Exceptions and inclusions
      - › Aggregated reporting - Common Pipe, etc.
  - Personnel in place for review



Watch for Updates!



http://www.epa.gov/climatechange/emissions/ghgrulemaking.html

2010 GHG Reporting - ROADMAP TO COMPLIANCE

Step 1 – Prepare Tools

Prepare calculation tool

Procedures for review and sign off

Training for team and management

Step 2 – Review and Update

Review 2010 rule changes

Perform readiness review

Update Monitoring Plan

Step 3 – Start Using e-GGRT

- **Submit paper Electronic Signature Agreement**
- **Register Designated Representative, users, agents (before Jan. 30th)**
- **Attend EPA e-GGRT training**
- **Get familiar with reporting functions when the full online tool is available**

When will it be available?

"The e-GGRT registration module will be available in early fall 2010 in anticipation of reporting deadlines in 2011 "

2010 GHG Reporting - ROADMAP TO COMPLIANCE

Step 1 – Prepare Tools

Prepare calculation tool

Procedures for review and sign off

Training for team and management

Step 2 – Review and Update

Review 2010 rule changes

Perform readiness review

Update Monitoring Plan

Step 3 – Start Using e-GGRT

line

Step 4 – Compile Report and Submit

- Fuel consumption, CEM data, carbon content, molecular weight, HHV data, etc., etc., as applicable
- Run through calculations
- Brief management and obtain certification authority
- Load e-GGRT

Questions?

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