



Missouri Department of Natural Resources  
Air Pollution Control Program

# Final Mandatory Greenhouse Gases Reporting Rule

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2009 Air Compliance Seminar  
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## Rule overview

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- Requires reporting of greenhouse gas (GHG) emissions from all sectors of the US economy
- GHGs: CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, SF<sub>6</sub>
- Purpose is to collect accurate and timely data for future climate change policies and programs
- Does not require control of GHGs

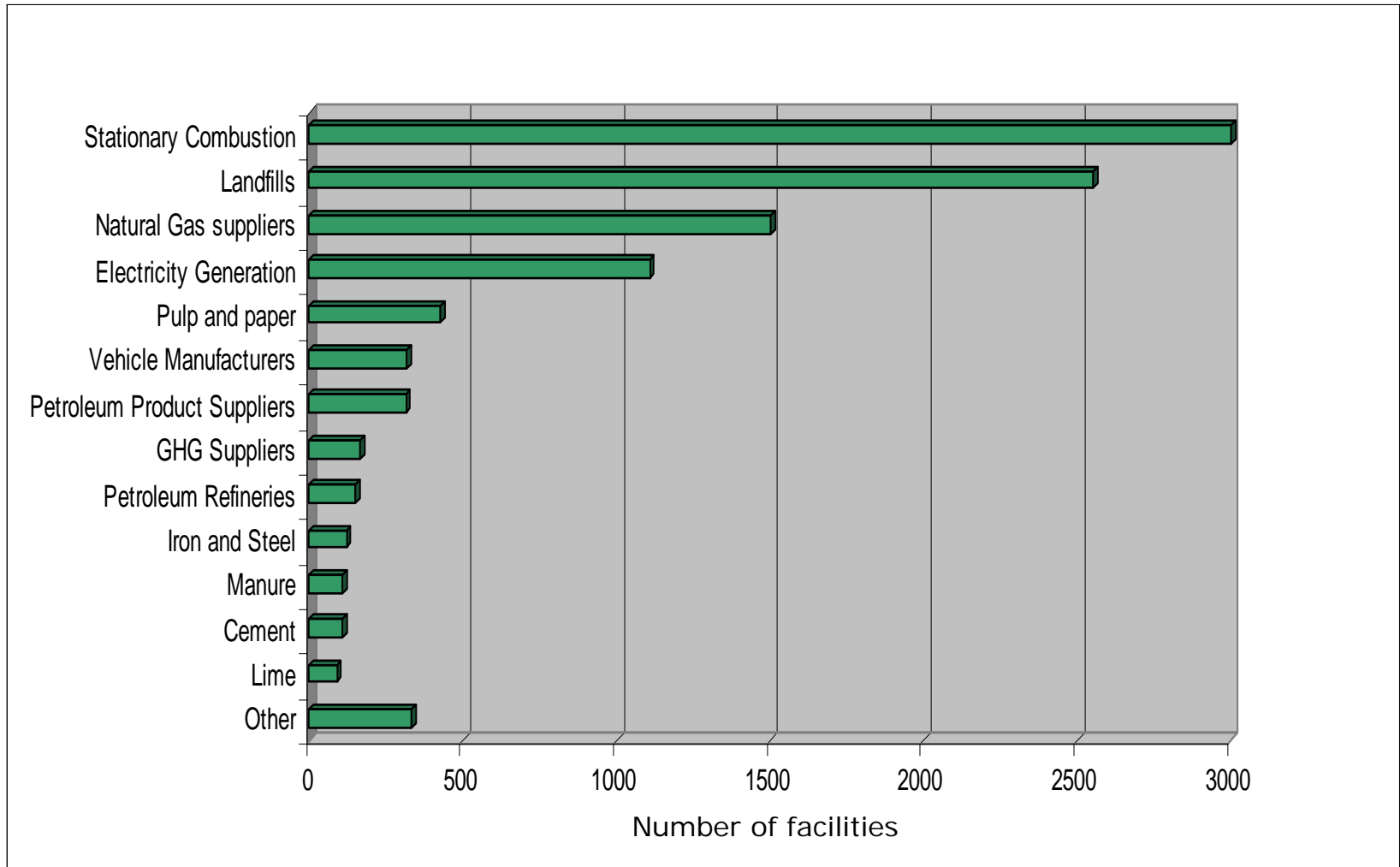


## Key elements of the rule

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- Reporting threshold of 25,000 metric tons of CO<sub>2</sub>e per year
- Monitoring begins January 1, 2010; first reports due March 31, 2011
- Annual reporting, direct to EPA
- EPA does verification

# About 10,000 U.S. facilities covered and 85% of total U.S. emissions



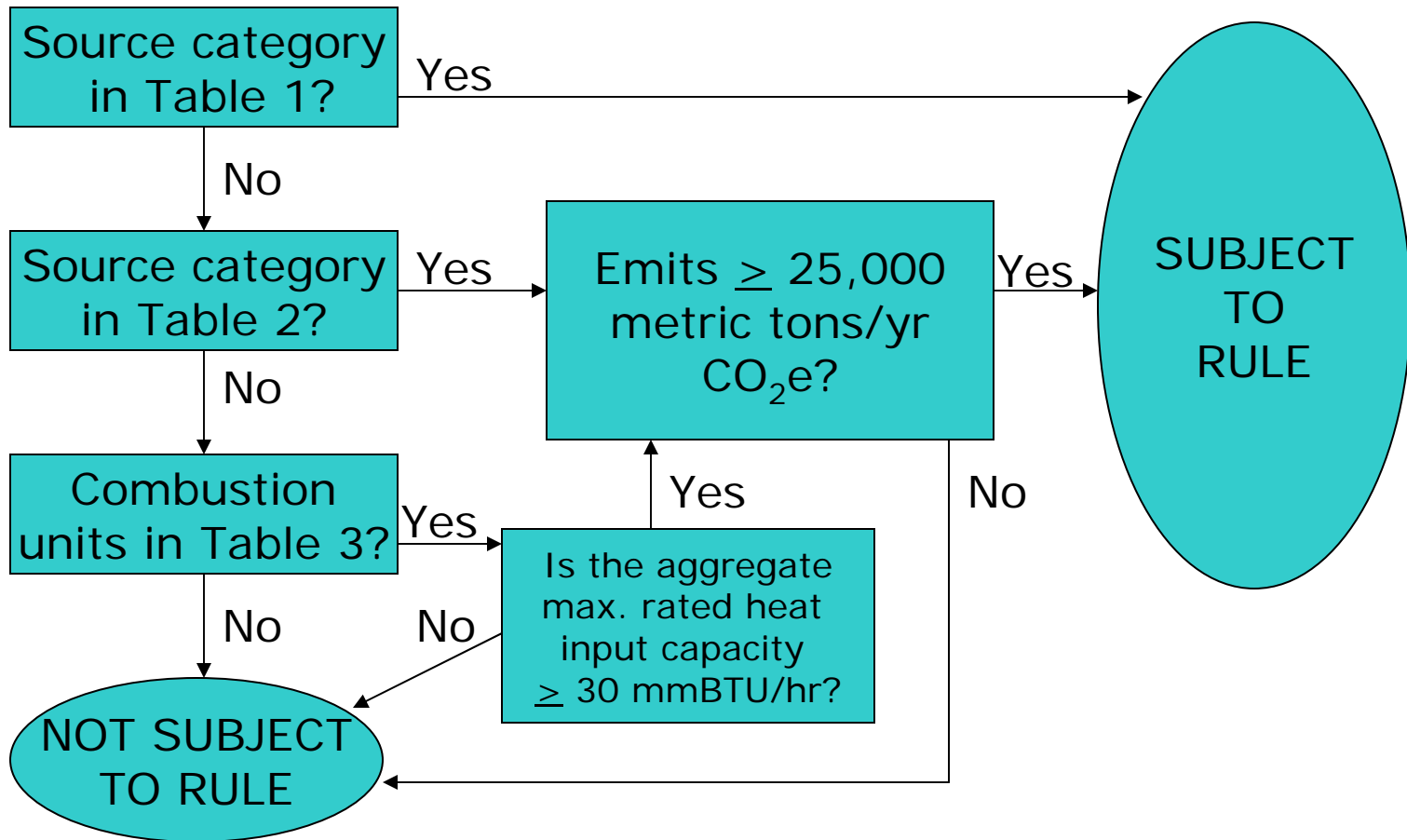


## How much is 25,000 MTCO<sub>2</sub>e?

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- Annual GHG emissions equivalent to:
  - 131 railcars worth of coal,
  - 3,400 homes electricity use,
  - 4,600 passenger vehicles,
  - 58,100 barrels of oil consumed, or
  - 1,041,000 propane cylinders for BBQ
- Majority of commercial building owners and small businesses not likely to meet threshold

# What facilities must report?





## All-in source categories (Table 1)

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- Adipic acid production
- Aluminum production\*
- Ammonia manufacturing
- Cement production\*
- Electricity production\*
- HCFC-22 production
- HFC-23 destruction process
- Lime manufacturing\*
- Manure management systems\*
- Municipal solid waste landfills\*
- Nitric acid production\*
- Petrochemical production
- Petroleum refineries
- Phosphoric acid production
- Silicon carbide production
- Soda ash production
- Titanium dioxide production

\*Missouri source



## Threshold source categories (Table 2)

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- Ferroalloy production
- Glass production\*
- Hydrogen production\*
- Iron and steel production
- Lead production\*
- Pulp and paper manufacturing
- Zinc production

\*Missouri source



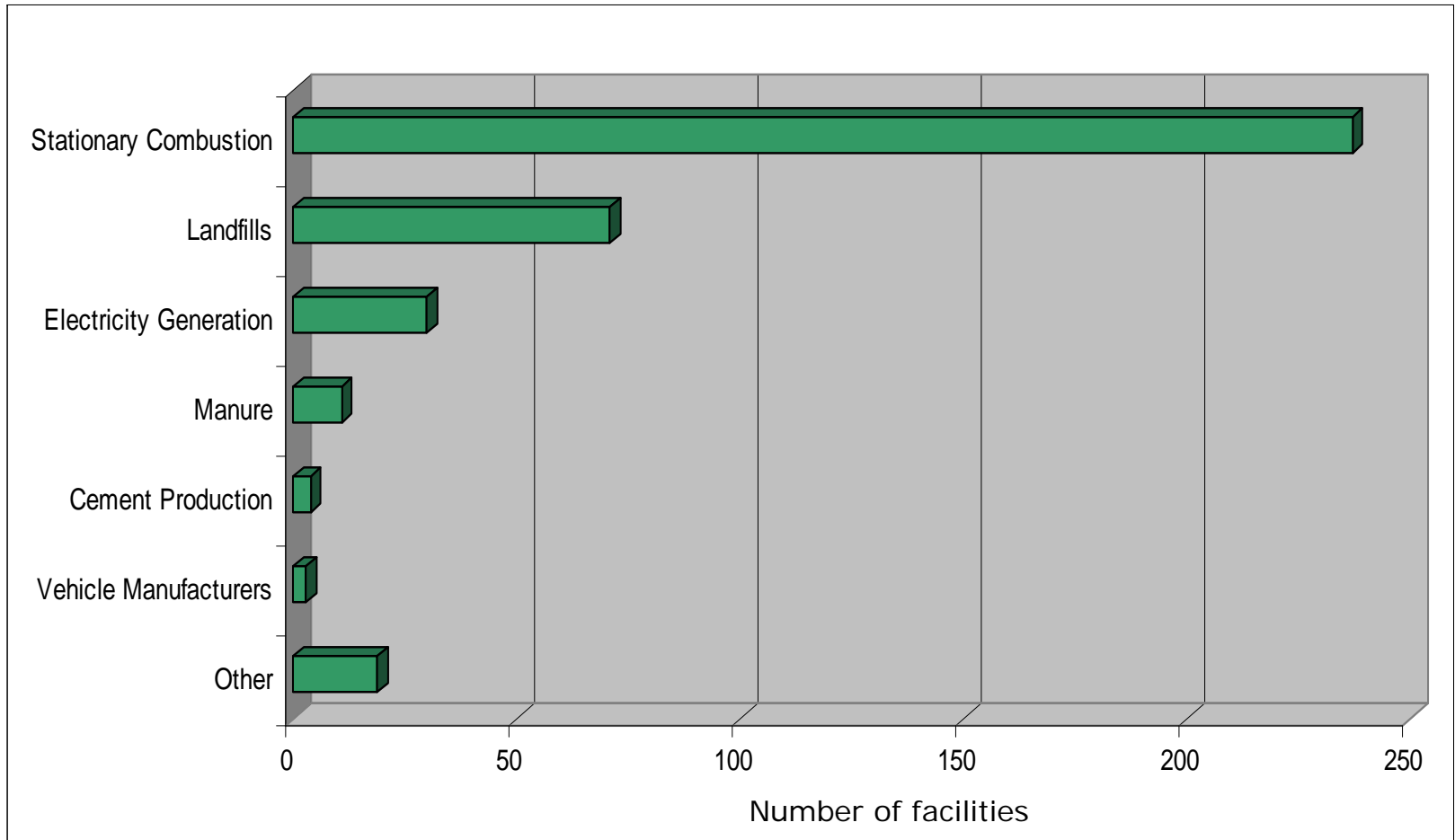
## Combustion units (Table 3)

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- Boilers
- Stationary internal combustion engines
- Process heaters
- Combustion turbines

# Estimate of Missouri facilities

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## Who is not included, but could be later?

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- Electronics manufacturing\*
- Ethanol production\*
- Fluorinate GHG production
- Food processing\*
- Magnesium production
- Oil and natural gas systems\*
- Sulfur hexafluoride from electrical equipment
- Underground coal mines
- Industrial landfills
- Wastewater treatment\*
- Coal suppliers\*
- Geological sequestration

\*Missouri source

## Example

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- Lime manufacturing plant emits 22,000 metric tons per year from lime kilns
- Yes, required to report
- Source category in Table 1

## Example

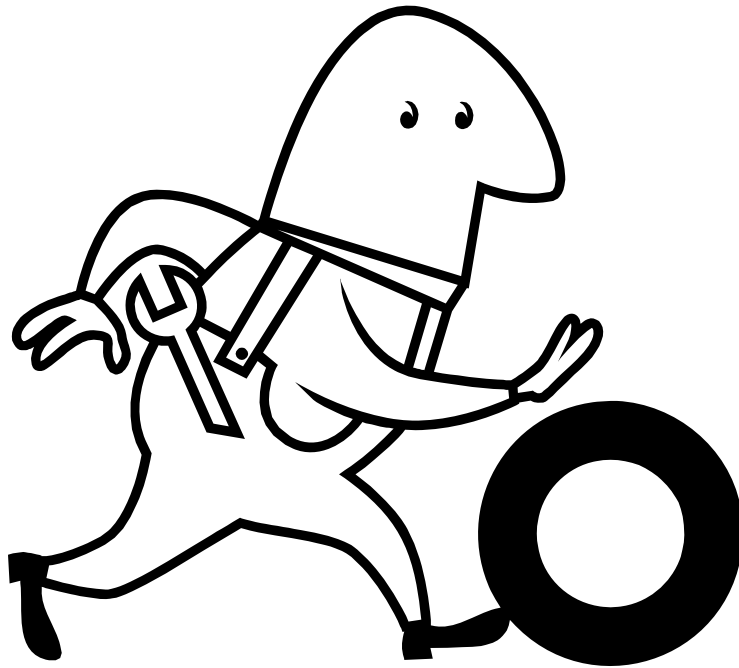
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- Pulp mill emits 22,000 metric tons per year in combined emissions from pulping process, stationary fuel combustion and carbonates
- Not required to report
- Source category in Table 2, but emissions less than 25,000 metric tons per year

# Example

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- Automobile assembly plant emits 30,000 metric tons per year from a coal-fired boiler
- Yes, required to report
- Not a source category in Table 1 or 2, but emissions from stationary fuel combustion greater than 25,000 tons per year



## Exiting the program

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- If annual reports demonstrate CO<sub>2</sub>e less than 25,000 for 5 consecutive years
- If annual reports demonstrate CO<sub>2</sub>e less than 15,000 for 3 consecutive years
- If you shut down all processes/units covered by rule



## Mobile source requirements

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- Mobile source emissions will be captured by reports from fuel suppliers and manufacturers of vehicles and engines (not light-duty)
- No fleet operator or state and local government requirements
- Manufacturers will begin reporting CO<sub>2</sub> starting with model year 2011



## What about state and regional programs?

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- Rules does not preempt states from regulating or requiring reporting of GHGs
- State/regional programs are broader in scope with different objectives
- No state delegation of data collection
- EPA is working with states



## Technical assistance

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- Online applicability tool: assess whether you need to report
- Materials – information sheets, checklists
- Trainings and webinars
- Other material to come later
- [www.epa.gov/climatechange/emissions/ghgrulemaking.html](http://www.epa.gov/climatechange/emissions/ghgrulemaking.html)



Questions or comments?

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## Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule

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- Light Duty Vehicle Rule – required by Consent Decree – Promulgated by March 2010
- Will control greenhouse gases from light-duty vehicles
- Will trigger applicability of PSD and Title V requirements of stationary sources that emit greenhouse gases



## Tailoring Rule – Public notice

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- <http://www.epa.gov/fedrgstr/EPA-AIR/2009/October/Day-27/a24163.pdf>
- Public Notice period closes December 28, 2009



## Tailoring Rule – Accepting comments on:

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- PSD significance level
- Potential to Emit definition
  - Alter definition to allow for seasonal operation?
- Use of General Permits
- Presumptive BACT



# Tailoring Rule

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- Pending applications
- Questions