



# Fact Sheet

## Timeline of EPA Action on Greenhouse Gases

July 2011

The U.S. Environmental Protection Agency (EPA) has the authority to regulate greenhouse gas (GHG) emissions, but not all sources of emissions are currently regulated. As of July 1, 2011, new facilities that would emit more than 100,000 tons per year of carbon dioxide-equivalent (CO<sub>2</sub>e) must undergo an analysis of emissions-lowering technology before receiving a permit to emit GHGs.

The timeline below shows the steps that have led up to this new regulation, and what steps still need to be taken for the EPA to complete its GHG emissions rules.

**May 2007:** The U.S. Supreme Court ruled in *Massachusetts v. EPA* that GHGs are air pollutants covered by the Clean Air Act. EPA may regulate GHGs if they are determined to be a danger to human health.

**December 2009:** EPA issued its “Endangerment Finding,” which found that current and projected levels of six GHGs threaten the health and human welfare of current and future generations.

**May 2010:** EPA issued its “Tailoring Rule,” which limited air permitting guidelines to the largest stationary sources of GHGs, excluding smaller factories, restaurants and farms.

**December 2010:** EPA issued guidance to states on implementing the new GHG guidelines.

**January 2011:** New GHG air permitting began for facilities that would have to go through air permitting for non-GHG pollutants anyway.

**January 2011:** EPA proposed a three-year deferral of GHG permitting for facilities that use biomass.

**July 2011:** New GHG permitting began for new facilities that would emit more than 100,000 tons of CO<sub>2</sub>e per year and for facilities that will undergo major modification that would increase emissions by 75,000 tons of CO<sub>2</sub>e per year.

**July 2011:** EPA finalized a three-year deferral of GHG permitting for facilities that use biomass.

**September 2011:** EPA will propose GHG guidelines under the “New Source Performance Standards” (NSPS), which will establish emission levels for new and existing power plants.

**December 2011:** EPA will propose GHG NSPS standards for oil refineries.

**May 2012:** EPA will issue final GHG standards for power plants.

**November 2012:** EPA will issue final GHG standards for oil refineries.

**2015:** EPA will complete study to examine GHG permitting for smaller sources of emissions.

## BACKGROUND

The first phase of EPA regulations applied only to proposals to build or expand large industrial facilities, such as power plants, oil refineries and cement factories which meet certain criteria. Those facilities would have had to obtain air permits anyway under the [Prevention of Significant Deterioration](#) program because their emissions would exceed a threshold amount for previously-regulated pollutants. To be required to obtain a GHG permit, facilities also would have to emit at least 75,000 tons of carbon dioxide per year, or an equivalent mix of other GHGs.

State and local agencies still approve the proposals to build or modify facilities under the new GHG program. The new rules took effect January 2, 2011 and stem from the 2007 ruling by the U.S. Supreme Court, which found the EPA has the authority to regulate GHGs under the Clean Air Act.

Beginning July 1, 2011, the scope of the regulations expanded to include all proposals to build new facilities that would emit more than 100,000 tons of CO<sub>2</sub>e per year, regardless of the emission of previously-regulated pollutants. Similarly, the regulations include all proposals to modify existing facilities that would result in an annual increase of 75,000 tons of CO<sub>2</sub>e.

## PERMIT REQUIREMENTS

Proposals that fall under the regulations must conduct a Best Available Control Technology (BACT) analysis, a five-step process to regulate GHG emissions. The process begins with identifying available emission control technologies and ranking them in descending order of effectiveness. Technically infeasible options are thrown out, the remaining control options are ranked again, and the best available option or combination is selected.

In general, the process favors commercially demonstrated technologies that can be reasonably installed. Energy, environmental and economic impacts are considered. EPA guidelines state that the use of operating conditions, processes or facility designs that enhance energy efficiency should be considered in BACT analyses. Another consideration could be carbon capture and sequestration technology. However, EPA acknowledged that the process of pumping carbon dioxide into underground formations likely will be eliminated during the analyses because of its cost or infeasibility.

Although the EPA issued the regulations, state and local authorities review BACT analyses and issue air permits on a case-by-case basis.

The new air permits apply only to the largest new or modified sources of GHGs. EPA is studying how to proceed with regard to permitting smaller sources.

In July, EPA finalized a three-year deferral for large industrial facilities that burn, ferment, or anaerobically digest biomass, temporarily exempting those proposals from GHG permitting regulations. The deferral provides time for EPA to study the net atmospheric impact of biomass and solicit independent scientific analysis.

Later this year, EPA will propose GHG emission standards for power plants and oil refineries under a separate provision of the Clean Air Act. [The New Source Performance Standards](#) will establish industry-wide emission limits for new facilities, and can be applied to existing facilities which meet certain criteria.