

REGULATION OF GREENHOUSE GASES UNDER THE CLEAN AIR ACT



SUPREME COURT RULING IN MASSACHUSETTS V. EPA

Recent activity at the Environmental Protection Agency (EPA) to regulate greenhouse gases began in earnest following the US Supreme Court ruling in [Mass. v. EPA](#) in 2007. This case found that carbon dioxide and other greenhouse gas (GHG) emissions meet the definition of “air pollutants” under the [Clean Air Act](#) (the Act). With the definition confirmed, EPA was then required by the Court to determine whether or not emissions of greenhouse gases from new motor vehicles (the specific sector cited in the law suit) cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare.

ENDANGERMENT FINDING

On December 7, 2009, EPA made this scientific determination – the “[endangerment finding](#)” – a required step in the process leading to specific regulation of GHG emissions. Based on an extensive review of scientific evidence, EPA made a broad determination that GHG emissions did endanger public health and welfare. It also ruled that emissions from motor vehicles would cause or contribute to the atmospheric concentrations of these key greenhouse gases and hence to the threat to public health and welfare from climate change. With the endangerment finding released, EPA was then required to regulate GHG emissions from motor vehicles, under Section 202(a) of the Clean Air Act.

CAR AND MOTOR VEHICLE STANDARDS

Under the Clean Air Act, California has the ability to implement stricter vehicle emissions standards than the national standards set by EPA, but must get a waiver from EPA to do so. A waiver request by California to implement GHG emissions standards for motor vehicles was granted in 2009, and other states also indicated they were interested in adopting the more stringent standards proposed by California. In order to avoid having two sets of vehicle standards, in May 2009, President Obama, with the support of EPA, DOT, California, environmental organizations, and the auto industry, announced [an agreement](#) that would create harmonized Corporate Average Fuel Efficiency (CAFE) standards and GHG emissions standards for car and light-duty motor vehicles from 2012-2016 at the Federal level, with California agreeing to adopt the Federal standards. These regulations of GHG emissions from light-duty motor vehicles were proposed in September 2009 and finalized

Mandatory Reporting: In response to requirements contained in Congressional action, EPA announced in Sept 2009, that it will require large emitters of greenhouse gases to begin collecting data under a new reporting system. Fossil fuel and industrial GHG suppliers, motor vehicle and engine manufacturers, and facilities that emit 25,000 metric tons or more of CO₂ equivalent per year will be required to report GHG emissions data to EPA annually. Data collection began in January 2010 with the first annual reports to be submitted to EPA in 2011.

in April 2010. Further, on August 2012, EPA and NHTSA, working together again, finalized standards to set emission and fuel efficiency requirements on heavy-duty vehicles. These standards will require reductions of 7-20 percent from current emissions for vehicles manufactured from 2014-2018.

STATIONARY SOURCE REGULATIONS

Under the Clean Air Act, once a pollutant is regulated under any part of the Act, (as was case with GHG emissions after the motor vehicle regulations were finalized in April 2010) major new sources or modifications are subject to the [Prevention of Significant Deterioration \(PSD\) program](#) and to [Title V operating permits](#). In the PSD program, major new or modified stationary sources (such as power plants and manufacturing facilities) are required to implement “best available control technologies” for pollution abatement. Under the Act, PSD and Title V operating permits are required for all sources that emit a regulated pollutant above 100 or 250 tons/year, depending on the source. Because this threshold, if applied to GHGs, would greatly increase the number of facilities requiring PSD review or Title V permitting, EPA has issued the [“Tailoring Rule”](#) to substantially increase these thresholds.

THE TAILORING RULE

On May 13, 2010, EPA issued the final version of the “tailoring” rule for greenhouse gas emissions. The final rule states that starting in January 2011, new or modified sources that already are subject to New Source Review requirements for other pollutants will be required to also meet these requirements for GHGs if they increase emissions by more than 75,000 tons of CO₂equivalent (CO₂e) annually. Then on July 1, 2011, the requirements will apply to new sources that emit at least 100,000 tons of CO₂e annually and to major modifications of existing sources emitting 75,000 tons of CO₂e annually, even if they do not meet the threshold new source review requirements for other pollutants. In July 2012, the requirements will begin applying Title V operating permit

requirements to existing sources not currently covered by Title V if they emit 100,000 tons of CO₂e annually. EPA will finalize another rulemaking by July 1, 2012, on the possible exclusion of smaller sources less than 50,000 tons of CO₂e annually. EPA will not require any permits for these smaller sources until at least April 30, 2016. In regulating these GHG emissions, EPA has developed [guidelines](#) for states to use in determining what would satisfy requirements as “best available control technology” as part of new source review of major modifications or new sources.

ADDITIONAL STATIONARY SOURCE RULES

As a consequence of the decision in *Mass. v. EPA*, EPA entered into a [December 2010 judicial settlement](#), ending a long-running lawsuit seeking the inclusion of GHGs under the New Source performance Standards (NSPS) provisions of the Clean Air Act. EPA committed to promulgating NSPS for GHGs for two existing source categories: [power plants](#) (proposed rule released on March 27, 2012) and [refineries](#) (yet to be proposed). NSPS are technology-based standards for both new and existing sources which apply to specific categories of stationary sources. Under the NSPS provisions of the Act, EPA has some flexibility to distinguish among classes, types, and sizes within categories of sources for the purpose of establishing such standards. Under the proposed standard (1,000 pounds of CO₂ per megawatt/hour), all new power plants would need to match the GHG emissions performance currently achieved by highly efficient natural gas combined cycle (NGCC) power plants. EPA has proposed phasing in the requirements so that coal-fired power plants already operating or permitted would continue operation or construction unaffected by the new rule. Based on factors such as the relative price of natural gas to coal, EPA, Department of Energy, and industry itself currently project that all new power plants are likely to natural gas-fired power plants, and there is no expectation that new coal-fired power plants will be constructed.

Other C2ES Resources:

EPA Climate and Energy Action:

<http://www.c2es.org/federal/executive/epa>

Endangerment Finding:

<http://www.c2es.org/federal/executive/epa/endangerment-finding>

New Source Review/Best Available Control Technology:

<http://www.c2es.org/federal/executive/epa/bact-guidance>

New Source Performance Standards:

<http://www.c2es.org/federal/executive/epa/ghg-standards-for-new-power-plants>

Tailoring Rule:

<http://www.c2es.org/federal/executive/epa/tailoring-rule>

Federal Vehicle Standards:

<http://www.c2es.org/federal/executive/vehicle-standards>

Mandatory Greenhouse Gas Reporting Rule:

<http://www.c2es.org/federal/executive/epa/ghg-reporting-rule>

FIGURE: EPA Timeline

