

CLIMATE CHANGE: EPA ENDANGERMENT FINDING

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Despite the recent kerfuffle over “ClimateGate,” the famous leaked emails between researchers at the University of East Anglia’s Climate Research Unit that many climate naysayers are heralding as proof that climate scientists are doctoring the data, rules and regulations regarding climate change are taking shape in America. Precaution seems to be the rule of the day. On December 7, 2009, the U.S. Environmental Protection Agency (“EPA”) announced its finalization of the long-awaited Endangerment Finding, citing *Massachusetts v. EPA* for the proposition that the precautionary principle demands regulatory action to prevent harm, even if the harm may not be inevitable.

In a December 9th *New York Times* article, Thomas L. Friedman referred to EPA’s action as “Going Cheney on Climate.” Friedman looked back to then-Vice President Dick Cheney’s response to concerns that a Pakistani scientist was offering nuclear-weapons expertise to Al-Qaeda, where he declared: “If there’s a 1% chance that Pakistani scientists are helping Al-Qaeda build or develop a nuclear weapon, we have to treat it as a certainty in terms of response.” Cheney’s philosophy was seen as a driving way to react to military threats that are known as “low-probability, high-impact events.”

The “precautionary principle” has been present in environmental law for four decades or longer. It is found in most U.S. environmental laws, including the Clean Air Act (“CAA”). It is also found in most international environmental treaties, including the United Nations Framework Convention on Climate Change that is the founding treaty governing all climate change negotiations, from the controversial Kyoto Protocol of 1997 to the recent meetings in Copenhagen. In fact, catastrophic climate change is the quintessential “nuclear” worst-case scenario event among environmental disasters. So, applying the precautionary principle leads to the conclusion that despite the possibility that anthropogenic climate change may not be occurring (a contention most scientists disagree with), the argument for undertaking action is compelling due to the potentially high impact if it in fact is occurring.

U.S. EPA’s Endangerment Finding

In 2007, the United States Supreme Court determined in *Massachusetts v. EPA* that greenhouse gases (“GHGs”) are “air pollutants” under the Clean Air Act. The Court then held that EPA must determine whether or not emissions of GHGs from motor vehicles could reasonably be anticipated to endanger the public health or welfare, or whether the science is too uncertain to make a reasoned decision. After the Supreme Court’s ruling, the Agency undertook a consideration of the observed and projected effects of GHGs on climate and the possible health and welfare risks associated with climate change.

The EPA’s definition of GHGs includes the six well-mixed and directly emitted greenhouse gases that together constitute the root of the air pollution problem that is causing climate change: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). EPA’s online information regarding its Endangerment Finding states that human activity has increased the amount of these GHGs in the atmosphere to record high levels compared to both the recent and the distant past. According to the Agency, average global carbon dioxide concentrations are up 38% from pre-industrial levels, almost all due to human activity, and will continue to increase based on current projections. The EPA’s “Climate Change Facts” also include a determination that the climate is warming, as evidenced by global average air and ocean temperatures (8 of the 10 warmest years on record have occurred since 2001), widespread melting of snow and ice, and rising sea levels.

The Endangerment Finding ties anthropogenic GHG releases to the warming climate, stating that “most of the global warming of the last 50 years is very likely due to human-induced increases in greenhouse gas emissions.” The Agency cites multiple lines of evidence in support of this statement, including the scientific community’s understanding of the physical properties of GHGs and of historical climate change

events as well as computer modeling. EPA also finds that future warming is likely to continue, and that the 21st century warming trend is very likely to be more drastic than the 20th century warming trend.

The Agency states that the key effects supporting its Endangerment Finding regarding the public health of current and future generations include: temperature – the number of extremely hot days increasing, resulting in increased mortality; air quality – worsening regional ground-level ozone pollution linked to respiratory health problems; increase of climate-sensitive diseases and allergens, including water-borne and food-borne pathogens; adverse impacts to vulnerable populations such as the elderly and the poor; and more severe and extreme storm events. According to the Agency, the key effects supporting its Finding regarding environmental and welfare effects include: sea level rise and coastal flooding; drought; decrease in snow packs, affecting seasonal water supplies; adverse impact for livestock management and irrigation; increase in wildfires and tree mortality; forced shifting of species northward or to higher altitudes; and negative consequences on biodiversity.

EPA's final action resulted in two distinct "findings:"

1. The "Endangerment Finding," in which the EPA finds that GHGs constitute air pollution that threatens both the public health and welfare of current and future generations.
2. The "Cause or Contribute Finding," in which the EPA finds that the combined GHGs from motor vehicles contribute to the atmospheric concentrations of GHGs and hence to the threat of climate change.

New Regulations

EPA's Endangerment Finding heralds new regulations. As we previously reported, EPA has already issued regulations, known as the Mandatory Reporting Rule, requiring emissions monitoring and reporting for major sources of GHGs that will commence in 2010. (Additional information regarding the Mandatory Reporting Rule is available at http://www.uhlaw.com/epa_final_ghg_rule/.) But the Endangerment Finding clears the way for regulations that will actually set limits and controls on GHG emissions. In fact, the Finding actually triggers a requirement for the regulation of GHGs as pollutants under the Clean Air Act.

The most immediate regulatory action which EPA plans to take will be finalizing GHG emissions standards for so-called "light-duty vehicles" (LDVs), or passenger cars and light-duty trucks. The U.S. Department of Transportation's National Highway Traffic Safety Administration (NHTSA) and EPA jointly proposed a rule on September 15, 2009, which would establish a national program to significantly improve vehicle fuel economy and place carbon emission level limits on LDVs, the category of vehicles under 8,500 pounds loaded weight (including passenger cars). The proposed rule would cover model year 2012-2016 vehicles and include new miles per gallon (MPG) requirements under the NHTSA's Corporate Average Fuel Economy (CAFÉ) program. The program would ratchet up over time, and model year 2016 vehicles would have to meet an estimated combined average emission level of 250 grams of carbon dioxide per mile. If this standard is met solely through fuel economy improvements, the most direct way to reduce carbon emissions from a combustion engine, then the overall LDV fleet in 2016 would achieve 35.5 MPG.

EPA and NHTSA met with stakeholders during the rulemaking proceedings last spring to ensure that these goals are aggressive and achievable, even when considering the current financial state of the auto industry. U.S. auto emissions account for 23% of U.S. GHG emissions and 4% of world GHG emissions. The proposed standards would reduce GHG emissions by almost 950 million metric tons and conserve 1.8 billion barrels of oil over the life of the model 2012-2016 cars, an economic benefit worth more than four times the lifetime cost of these cars according to EPA. The proposed rule is anticipated to be finalized in March 2010, so that CAFÉ regulations are in place 18 months prior to the start of production for the model 2012 vehicles, as required by the Energy Policy and Conservation Act.

Once the LDV regulation is finalized and published and cleared under the Congressional Review Act, EPA will consider GHGs to be "subject to regulation" for all new emission sources. Thus, the LDV regulation will trigger CAA permitting requirements under the Prevention of Significant Deterioration

(PSD) and Operating Permit (Title V) programs for all sources of GHGs. Since the Act prescribes no “significance” thresholds for GHGs and almost every sector of the economy has GHG emissions of some sort, state permitting agencies have voiced a concern that GHG permitting will simply be too significant of a burden to accomplish. In response to this concern, the EPA announced on September 30, 2009 a proposal known as the “Tailoring Rule.”

The Tailoring Rule focuses on large facilities that emit over 25,000 tons of GHGs per year, measured in carbon dioxide equivalents (CO₂e). (Note that this is the same threshold that triggers the Mandatory Reporting Rule requirements beginning in 2010.) The facilities would be required to obtain permits demonstrating they are using the best practices and technologies to minimize GHG emissions. The proposed new thresholds would define when CAA permits would be required for new and existing facilities under the New Source Review and Title V programs.

The PSD program is a subset of New Source Review, initially established in the 1977 CAA amendments and later modified in the 1990 amendments. PSD rules require new stationary sources that meet emissions applicability thresholds to obtain a PSD permit outlining how they will control emissions. The permit requires the facilities to apply best available control technologies (BACT), which is determined on a case-by-case basis taking several factors into account, including cost effectiveness. The 1990 CAA amendments required that states develop operating permit programs, known as Title V Operating Permits. The permits contain all air emission control requirements that apply to the facility and are reviewed every 5 years. Existing facilities with GHG emissions greater than 25,000 tons per year of CO₂e that already have Operating Permits would not need to immediately revise them. However, at the 5-year review point when the permits must be renewed these facilities would be required to include estimates of the GHG emissions in their permit applications (using the same data reported under the new Mandatory Reporting Rule). Also, any new facility or modification to a facility that triggers the PSD permitting requirements would need to apply for a revision to their permits to incorporate BACT.

The Tailoring Rule would allow EPA to regulate sources representing 70% of the national GHG emissions from stationary sources – such as power plants, refineries, and cement production facilities – while allowing the agency to exempt small farms, restaurants, and other types of small facilities. Under the proposed thresholds, EPA estimates that 400 new sources and modifications would be subject to PSD review each year for GHG emissions. Approximately 14,000 large sources would need to obtain Operating Permits. In both cases, the majority of the permits would be needed for existing sources rather than new sources.

Finding Likely to be Challenged

EPA’s Endangerment Finding was not made without opposition. This hot-button political topic generated some 380,000 public comments, most of which were mass mailings facilitated by lobbying groups. But there were 11,000 individual comments raising scientific and legal issues. Also, the U.S. Chamber of Commerce petitioned for an “on the record” hearing under the Administrative Procedure Act (“APA”). EPA rejected the Chamber’s request on the basis that the CAA only requires the Agency to follow the rulemaking provisions contained in Section 307(d) rather than the “extraordinarily rarely used formal rulemaking provisions” of the APA. However, the request of the Chamber and the numerous comments may have been the reason that EPA’s finding went to such great effort to justify the determination – it is 280 pages long.

The Finding has been met with much criticism. The Associated General Contractors of America urges the administration to “rethink its misguided approach.” The National Petrochemical & Refiners Association’s President has said the Endangerment Finding is founded on “selective science, a weak legal and policy foundation, and a failure to account for numerous uncertainties in the models.” Similarly, the American Petroleum Institute claims the Finding is unsupported by the record. One entity, the Competitive Enterprise Institute, has announced that it will be filing suit. The Institute announced on December 7 that it would sue in federal court to overturn the Finding on the basis that there is no sound science showing human activity is a cause of climate change. The Institute cites East Anglia’s ClimateGate as evidence that EPA failed to consider whether scientists may be distorting data when making its Finding.

Given the deference courts regularly afford to administrative agencies in making their regulatory determinations, it is unlikely that a challenge to the Endangerment Finding will succeed. Even if the Finding withstands legal challenges, however, the fight will not be over. EPA's subsequent efforts to regulate GHGs via the Tailoring Rule will likely be subject to legal challenge. Under the Clean Air Act, the threshold action levels for criteria pollutants such as lead, sulfur dioxide, and nitrogen dioxide, are 100 and 250 tons per year. EPA concedes that without the Tailoring Rule, these lower thresholds would take effect automatically for GHGs with the adoption of any EPA rule that controls or limits GHGs, such as the proposed CAFÉ standards. But EPA says that regulating ubiquitous contaminants such as GHGs at that level would be logistically impossible. EPA's Tailoring Rule would likely be challenged as an *ultra vires* attempt to usurp the legislature on this issue, in effect an argument that EPA doesn't have the power to decide that the legislatively-enacted 100 and 250 ton per year levels are not appropriate for GHGs. It is an argument that many legal minds recognize as compelling. Ultimately, however, only the courts can decide whether the Tailoring Rule is valid.

For more information regarding EPA's Endangerment Finding or other Clean Air Act and Climate Change matters, contact **Stephen Armstrong** at 312.977.4479 or sharmstrong@uhlaw.com or **Jon Sanders** at 312.977.4484 or jpsanders@uhlaw.com in the Environmental Practices Group at Ungaretti & Harris.

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