BEFORE THE ADMINISTRATOR OF THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

THE STATES OF CALIFORNIA, CONNECTICUT, NEW JERSEY, NEW MEXICO, THE COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, THE CITY OF NEW YORK, THE DISTRICT OF COLUMBIA, AND THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT, **Petitioners,** **v.** **HONORABLE STEPHEN JOHNSON,** **In his official capacity as Administrator, United States Environmental Protection Agency** **Defendant.**	**Docket No.**

PETITION FOR RULE MAKING SEEKING THE REGULATION OF GREENHOUSE GAS EMISSIONS FROM AIRCRAFT

The States of California, Connecticut, New Jersey and New Mexico and the District of Columbia through their respective Attorneys General, the Commonwealth of Pennsylvania through its Department of Environmental Protection, the City of New York through its Corporation Counsel, and the South Coast Air Quality Management District through its District Counsel ("States"), acting pursuant to the Administrative Procedure Act, 5 U.S.C. 551 and the Clean Air Act, 42 U.S.C. § 7400, et seq., hereby petition the Administrator of the Environmental Protection Agency to undertake a rule making procedure under the Clean Air Act. Specifically, these States and local governments petition the Administrator to propose and adopt regulations setting emissions standards, expressed either as an emissions limitation or as work practices or

other requirements, to control and limit the emissions of greenhouse gases[1] from aircraft and to begin the process immediately. EPA has authority to adopt such standards pursuant to Section 231 of the Clean Air Act, 42 U.S.C. 7571.

As set forth herein, the States' environment and their residents are already suffering from the effects of global warming, and are projected to suffer much more acute effects as climate change becomes more severe. They bring this petition to protect their environment and natural resources. The States ask EPA to adopt regulations to control greenhouse gas emissions from new aircraft on the shortest possible time line, whether in the form of emissions limitations and/or work or operational practices, in order to reduce the contribution of this large and uncontrolled source category of greenhouse gas emissions to global warming and climate change.

I. CLIMATE CHANGE IS NOW OCCURRING, CAUSED IN SIGNIFICANT PART BY EMISSIONS OF GREENHOUSE GASES

A. Climate Change is Now Occurring

Climate change as a result of global warming may be the most important environmental issue now facing not only the United States, but the world. Greenhouse gases (primarily, carbon dioxide ("CO_2"), methane and nitrous oxide) persist and mix in the atmosphere, so that emissions anywhere in the world impact the climate everywhere. The impacts on climate change from greenhouse gas emissions have been extensively studied and documented. (*See* Oreskes, Naomi, *The Scientific Consensus on Climate Change*, 306 Science 1686 (Dec. 3, 2004) [review of 928 peer- reviewed scientific papers concerning climate change published between 1993 and 2003, noting the scientific consensus on the reality of anthropogenic climate change]; J. Hansen, *et al.*, *Earth's Energy Imbalance: Confirmation and Implications,* Sciencexpress (April 28, 2004) (available at http://pubs.giss.nasa.gov/abstracts/2005/HansenNazarenkoR.html) [NASA and Department of Energy scientists state that emission of CO_2 and other heat-trapping gases have warmed the oceans and are leading to an energy imbalance that is causing, and will continue to cause, significant warming, increasing the urgency of reducing CO_2 emissions].)

The National Academy of Sciences (NAS) has expressed its expert opinion that the concentrations of carbon dioxide, the principal greenhouse gas, in the atmosphere have increased and continue to increase, due to human activity. (NAS, *Climate Change Science* (2001), Executive Summary at 2) The NAS cites the burning of fossil fuels as the "primary source" of anthropogenic carbon dioxide emissions. (*Id.*) The Nobel-Prize-winning International Panel on Climate Change (IPCC) has expressed its expert opinion that the observed increase in global average temperatures since the mid-20th century "is very likely due to the observed increase in anthropogenic greenhouse gas concentrations." (IPCC Working Group II Fourth Assessment Report, Summary for Policymakers (2007) ("IPCC 2007 II"), at 2-3.) It is the opinion of both the

---

[1] Greenhouse gases include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, water vapor, and sulfur hexaflouride.

NAS and the IPCC that a scientific consensus has formed that humans, largely through the ever-increasing burning of fossil fuels, are changing the world's climate.[2]

Petitioning states and local governments and their citizens are now suffering, and will continue to suffer, from these effects. Global warming accelerates sea level rise, which threatens coastal populations, vital infrastructure and property, and delicate ecosystems. http://yosemite.epa.gov/OAR/globalwarming.nsf/content/CoastalZones.html. Some of the Petitioning states, such as California and Connecticut, have significant coastlines and densely populated coastal areas, and Petitioners City of New York and District of Columbia are located where ocean rise may cause flooding. States on the East Coast below Cape Cod are particularly vulnerable to problems such as loss of coastal wetlands, erosion of beaches, saltwater intrusion of drinking water, and decreased longevity of low-lying infrastructure, because this part of the East Coast is low and sandy. (EPA, "Climate Change and Connecticut," (Sept. 1997) ("CT Impacts") at 3; Climate Change and Maryland" (Sept. 1998) ("MD Impacts") at 3; "Climate Change and Massachusetts" (Sept. 1997) ("MA Impacts") at 3; "Climate Change and New Jersey" (Sept. 1997) ("NJ Impacts") at 3; "Climate Change and New York" (Sept. 1997) ("NY Impacts") at 3; "Climate Change and Rhode Island" (Sept. 1997) ("RI Impacts") at 3.) One of the causes of sea level rise is ice melt, which is occurring far faster than scientists had previously thought. (Richard A. Kerr, "Is Battered Arctic Sea Ice Down For the Count?" Science, Oct. 5, 2007, at 33-34; Daniel Cressey, "Arctic Melt Opens Northwest Passage," Nature 449, 267 - 267 (19 Sep 2007); Andrew C. Revkin, "Arctic Melt Unnerves the Experts," N.Y. Times, Oct. 2, 2007 ("The pace of change has far exceeded what had been estimated by almost all simulations used to envision how the Arctic will respond to rising concentrations of greenhouse gases linked to global warming.").)

Of equal concern is the suggested link between increased global warming and the intensification of storms such as tropical cyclones, commonly called hurricanes. (P.J. Webster, et. al, "Changes in Tropical Cyclone Number, Duration, and Intensity in a Warming Environment," Science (Sept. 16, 2005) Vol. 309. no. 5742, at 1844-1846 (showing that in the last 35 years the number of category 4 and 5 hurricanes has almost doubled); Kerry Emanuel, "Increasing Destructiveness of Tropical Cyclones over the past 30 Years," Nature, July 31, 2005 (finding a similar increase in intensity in storms in the Atlantic and western North Pacific).) Because these weather events would be superimposed on a higher sea level they could cause damage over a larger area.

---

[2] *See*, also, the Brief of *Amici Curiae* Scientists filed in support of petitioners in *Massachusetts v. EPA*, USSC No. 05-1120, wherein a group of prominent and highly respected climate scientists expressed their expert opinion that the general causal link between anthropogenic greenhouse gas emissions and climate change is "*virtually certain.*" (Brief at A-8, emphasis in original.)

Heat waves have also become more prolonged and intense with global warming. (Center for Health and the Global Environment, Harvard Medical School, "Climate Change Futures: Health, Ecological and Economic Dimensions" (Nov. 2005) ("Climate Change Futures") at 53.) In the United States, heat waves are the most prominent cause of weather-related mortality, exceeding the mortality rates for all other weather events combined. (S. A. Changnon, et al., "Impacts and Responses to the 1995 Heat Wave: A Call to Action," Bull. Am. Meteorol. Soc. 77:1497-1506 (1996).) Many Mid-Atlantic and Midwestern states, with their irregular, intense heat waves, are particularly susceptible to heat-related deaths and illnesses. (CT Impacts at 3; "Climate Change and Illinois," (Sept. 1997) ("IL Impacts") at 3; MA Impacts at 3; MD Impacts at 2-3; NJ Impacts at 3: NY Impacts at 3; "Climate Change and Pennsylvania," (Sept. 1997) ("PA Impacts") at 3; RI Impacts at 3.)

Rising temperatures also lead to increased air pollution levels, with their attendant increases in respiratory illness and death. (http://yosemite.epa.gov/OAR/globalwarming.nsf/content/health.html.) The presence of ground-level ozone in concentrations above the national ambient air quality standards has significant adverse health affects in non-attainment areas, including increased hospitalizations and mortality risk for people with asthma and other respiratory diseases. (EPAWebsite/Impactshealth.html.) Several Petitioners have large areas within their jurisdictions that are in non-attainment for national ambient air quality standards for ozone. (*See, e.g.*, MA Impacts at 3; NY Impacts at 3; PA Impacts at 3.) In other cases, the entire state, or virtually the entire state, is in non-attainment for ozone. (*See, e.g.*, CT Impacts at 3; MD Impacts at 3; NJ Impacts at 3; RI Impacts at 3.)

A further effect of global warming is the alteration of forest character, including the loss of hardwood trees that give many Northeastern forests their brilliant fall colors, and support tourism and the maple syrup industry. (EPA, "Connecticut and Climate Change" at 4; MA Impacts at 4; ME Impacts at 4; VT Impacts at 4; Avi Salzman, "A Season A Tad Off Color, And Here's Why," N.Y. Times, October 16, 2005.)

In short, our past and current greenhouse gas emissions have pushed us to a climatic "tipping point" that is now causing significant harm to the States and local governments that have joined in this Petition. They are concerned for their economies and their residents' health now, but even more concerned for the future. If we continue our business-as-usual emissions trajectory, dangerous climate change will become unavoidable. According to NASA's James Hansen, proceeding at the emissions rate of the past decade will result in "disastrous effects, including increasingly rapid sea level rise, increased frequency of droughts and floods, and increased stress on wildlife and plants due to rapidly shifting climate zones."[3] And, the experts

---

[3] (http://www.giss.nasa.gov/research/news/20070530/; see also *Hansen et al., Dangerous Human-Made Interference with Climate* (2007) 7 Atmos. Chem. Phys. 2287–2312 http://pubs.giss.nasa.gov/docs/2007/2007_Hansen_etal_1.pdf.)

tell us, we have very little time to take decisive action.[4] Rajendra Pachauri, Chairman of the United Nations Intergovernmental Panel on Climate Change ("IPCC") recently declared: "If there's no action before 2012, that's too late. What we do in the next two to three years will determine our future."[5]

B. The Environmental Effects of Climate Change Will Be Severe

Evidence of climate change resulting from anthropogenic CO2 emissions is substantial and has been increasing over time. As stated above, impacts that have occurred, are occurring, and will occur, include: temperature increases, heat waves, loss of Arctic ice and habitat, loss of Antarctic ice, melting of glaciers and related glacial lake outburst flows, loss of snowpack in California and elsewhere, changes in precipitation patterns, increased hurricane intensity, sea level rise and coastal flooding, public health harms such as increased heat-related illness and smog, harm to habitats, and the potential for substantial social upheaval resulting from significant environmental changes. Further, due to the thermal inertia of the oceans and ice sheets, the climate will continue to warm over the next decades, even if greenhouse gas emissions are held constant. (*See, e.g.,* Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, Technical Summary (2007) (IPCC 2007 I) at 35-58, 68, 82-85, 89; World Meteorological Organization (WMO) Statement on the Status of the Global Climate in 2004, WMO-No. 983 (2005 Geneva) at 12; *Climate Change 2001: Synthesis Report* ("IPCC 2001") at 12-13; ACIA, Impacts of a Warming Arctic: Arctic Climate Impacts assessment, Cambridge University Press (2004) at 22; *Recent Warming of Arctic May Affect Worldwide Climate*, Goddard Institute for Space Studies (Oct. 23, 2003) (connecting global warming with melting arctic ice cap); http://www.gsfc.nasa.gov/topstory/2003/1023esuice.html#addlinf; Arctic Ice Cap Will Melt Completely in 100 Years, http://www.greenhousenet.org/news/AUG-03/arctic-ice.html (Norwegian expert links melting of arctic ice cap to carbon dioxide emissions that cause global warming); A. J. Cook, A. J. Fox, D. G. Vaughan, J. G. Ferrigno, *Retreating Glacier Fronts on the Antarctic Peninsula over the Past Half-Century,* Science, Vol 308, Issue 5721, 541-544 , 22 April 2005; http://www.nrmsc.usgs.gov/research/glaciers.htm; K. Hayhoe, *et al.*, *Emissions Pathways, Climate Change, and Impacts on California*, Proceedings of the National Academy of Sciences, vol. 101, no. 34 (August 24, 2004), at 12426; United States Global Climate Research Program (USGCRP), *Preparing for a Changing Climate: California* (2002) at 4-1-34 and 4-1-35; Paul R. Epstein, *Is Global Warming Harmful to Health?*, Scientific American (Aug. 2000) at 50-51. http://www.med.harvard.edu/chge/sciam.pdf; Thomas R. Karl & Kevin E. Trenberth, *Modern Global Climate Change*, 302 Science 1719, 1720-21 (Dec. 5 2003) ("Basic theory, climate model simulations and empirical evidence all confirm that warmer climates, owing to

---

[4] (*Id.*) For further discussion of dangerous climate change, see IPCC 4th, WG III, Ch. 1 at 6-7 http://www.mnp.nl/ipcc/pages_media/FAR4docs/chapters/CH1Introduction.pdf.

[5] Rosenthal, *U.N. Chief Seeks More Leadership on Climate Change*, N.Y. Times (November 18, 2007).

increased water vapor, lead to more intense precipitation events, even when total precipitation remains constant, and with prospects for even stronger events when precipitation amounts increase"); http://yosemite.epa.gov/oar/globalwarming; *See* Peter H. Gleick and Edwin P. Maurer, "Assessing the Costs of Adapting to Sea Level Rise" (Pacific Institute, 1990) at 5 (a one meter sea level rise threatens $48 billion of commercial, industrial and residential structures in the San Francisco Bay); http://www.pacinst.org/reports/sea_level_rise/sea_level_rise_report.pdf; C. Rosenzweig and W. Solecki, eds., *Climate Change and a Global City* (2001) at 33; C.D. Thomas et al., *Extinction Risk from Climate Change: the Potential Consequences of Climate Variability and Change* (Metro East Coast Contribution to the National Assessment of the Potential Consequences of Climate Variability and Change for the United States) (July 2001) at ix-xiv, available at http://metroeast_climate.ciesincolumbia.edu; K. Emmanuel, 436 Nature 686-688 (Aug. 2005) (increase in hurricane intensity related to climate change); P.J. Webster, et al., *Changes in Tropical Cyclone Number, Duration, and Intensity in a Warming Environment*, 309 Science, 5742, 1844-1846 (Sept. 16, 2005).)

The most recent IPCC report confirms the impacts of global warming, predicting with high or very high confidence that ice and frozen ground, lakes and rivers, the oceans, and the biological systems both in the earth's waters and on its land are already being affected. (IPCC 2007 II at 2-4.) Eleven of the last 12 years have been among the warmest since temperatures have been recorded. (IPCC 2007 I, at 5.) Glaciers are melting at accelerated rates, sea-levels are rising, plants are flowering earlier, the oceans are becoming more acidic, and animals are shifting their ranges, all in response to worldwide changes in the climate. As anthropogenic gases force greater climate change, drought-affected areas will likely increase in their extent, ice-bound water supplies will decrease or run off early, flooding will increase, the oceans will continue to acidify (harming coral-forming organisms), and an increasing number of plant and animal species will be at risk of extinction. (IPCC 2007 II, at 7-8; IPCC 2007 I at 7-8, 16-17, Frequently Asked Questions Nos. 3.1, 3.2, 3.3, 4.1, 5.1, 10.1.) The greatest burdens of climate change and the floods, heat waves, droughts, shortages in food and water, and increased ranges for disease vectors that it will cause[6], will likely fall on those nations and populations least able to adapt or cope.

Even more alarming, we are quickly approaching what some scientists have termed a "tipping-point," a situation where feedback mechanisms in the climate system accelerate the rate of change to the point that the earth can no longer accommodate it, and irreversible cataclysmic environmental change results. (*See, e.g.,* Center for Health and the Global Environment, Harvard Medical School, *Climate Change Futures: Health, Ecological and Economic Dimensions* (November 2005) at 26-27; IPCC (2001) at 14-16; IPCC 2007 I, Frequently Asked Question No. 10.2.) Recent data indicate that greenhouse gas emissions place the earth perilously close to such

---

[6] Insurers, who survive in business by predicting harms and risks, are increasingly predicting, and modifying their business practices to compensate for the costs of, global warming. See e.g., www.abi.org.uk/climate change; Peter H. Stone, Feeling Storm-Tossed, National Journal July 7, 2007.

cataclysmic changes due to possible large-scale disintegration of the West Antarctic and Greenland ice sheets. (Hansen *et al.*, *Climate change and trace gases*, Phil. Trans. R. Soc. A (2007) 1925 (2007).)

Brief examples of the current and reasonably foreseeable effects on petitioning States are set out below. Although, for purposes of brevity, only California and the City of New York are discussed here, the effects of global warming are felt by all petitioning States and local governments.

C. Effects on California and Actions by California to Reduce Greenhouse Gas Emissions

In California, the state government has acknowledged the environmental impacts of greenhouse gas emissions on climate change. Governor Schwarzenegger, in his Executive Order S-3-05 issued on June 1, 2005, recognized the significance of the impacts of climate change on the State of California, noting that "California is particularly vulnerable to the impacts of climate change." The Executive Order goes on to itemize a litany of the direct impacts that climate change and the increased temperatures resulting from the increased presence of greenhouse gases in the atmosphere, will have on the state:

- "[I]ncreased temperatures threaten to greatly reduce the Sierra snowpack, one of the State's primary sources of water;"
- "[I]ncreased temperatures also threaten to further exacerbate California's air quality problems and adversely impact human health by increasing heat stress and related deaths;"
- "[R]ising sea levels threaten California's 1,100 miles of valuable coastal real estate and natural habitats;" and
- "[T]he combined effects of an increase in temperatures and diminished water supply and quality threaten to alter micro-climates within the state, affect the abundance and distribution of pests and pathogens, and result in variations in crop quality and yield."

(Executive Order S-3-05, June 1, 2005.)

The California legislature also recognized all of these severe impacts resulting from climate change, as well as a "projected doubling of catastrophic wildfires due to faster and more intense burning associated with drying vegetation." (Cal. Stats. 2002, ch, 200, Section 1, subd.

(c)(4), enacting California Health & Saf. Code § 43018.5.) The state is already suffering from increasing rates of wildfires and indications of drought. Further, it experiences trends toward warmer winter and spring temperatures, less snow because warmer temperatures cause more precipitation to fall as rain instead, earlier spring snowmelt, and earlier spring flower blooms. (CalEPA, Climate Action Team Report to Governor Schwarzenegger and the Legislature (2006), at 19-20.) A decrease in vital water supplies, an increase in wildfires, threats to agricultural output in a state that leads the nation in production of fresh vegetables and specialty crops, a decrease in the tourism that depends on snowpack and healthy forests, more frequent and more intense heat waves and the ozone whose amount and effects they exacerbate – all these are serious threats to public health and welfare that have already begun to be felt in California and are expected to grow more and more serious throughout this century. California faces an immediate and growing threat from global warming, and has an immediate and vital interest in the expeditious and effective control of all sources of greenhouse gases.

Most important, California has adopted the ground-breaking statute, California Global Warming Solutions Act of 2006, commonly known as AB 32. Carrying out AB 32 will reduce California's greenhouse gas emissions to 1990 levels by 2020.[7] This emissions cap is equal to a 25% reduction from current levels.[8] The bill directs the California Air Resources Board ("CARB") to publish a list of discrete early action greenhouse gas emission reduction measures that will be implemented by 2010.[9] CARB must then adopt comprehensive regulations that will go into effect in 2012 to require the actions necessary to achieve the greenhouse gas emissions cap by 2020.[10] The legislation also encourages entities to voluntarily reduce greenhouse gas emissions prior to 2012 by offering credits for early voluntary reductions.[11]

In response to the threat, California is taking ground-breaking steps to reduce its own contribution to global warming through very aggressive regulations to reduce greenhouse gas emissions. The Governor recently issued Executive Order S-01-07, establishing a Low Carbon Fuel Standard (LCFS) for transportation fuels sold in California. By 2020 the standard will reduce the carbon intensity of California's passenger vehicle fuels by at least 10 percent. CARB is currently considering or actively working on such additional "early action" greenhouse gas reduction measures as reduction of refrigerant losses from motor vehicle air conditioning systems, increased methane capture from landfills, cooler auto paints, and tire inflation

---

[7] California Health & Safety Code § 38550.

[8] 9/27/2006 Press Release from the Office of the Governor, available at http://gov.ca.gov/index.php?/print-version/press-release/4111.

[9] California Health & Safety Code § 38560.5.

[10] California Health & Safety Code § 38562.

[11] California Health & Safety Code §§ 38562(b)(3), 38563.

requirements for motorists. (CARB, Proposed Early Actions to Mitigate Climate Change in California (2007).)

D. Effects on the City of New York

Greenhouse gas emissions from aircraft that contribute to climate change are also adversely affecting New York City and its upstate watershed. (*See* PlaNYC: A Greener, Greater New York, http://www.nyc.gov/html/planyc2030/html/downloads/download.shtml (April 2007) ("PlaNYC"), at 133.) Ever rising temperatures, sea levels, and the incidence of drought and extreme weather events lead to flooding of City infrastructure, in particular stormwater and sewer systems, declines in the quantity and quality of drinking water supply, and deaths and illness caused by intensifying heat waves and lowered air quality. (PlaNYC at 134-139.) The City is expending tremendous resources to respond to these impacts and to mitigate and adapt to climate change. *Id.*

Over the past 100 years, temperature in the New York City metropolitan region has increased nearly two degrees Fahrenheit. (*See* Columbia Earth Institute, Climate Change and A Global City: The Potential Consequences of Climate Variability and Change (July 2001), Executive Summary and Recommendations, http://metroeast_climate.ciesin.columbia.edu/, ("Executive Summary") at 2. By the 2050s, the average temperature of the New York City metropolitan region is projected to increase in the range of 3.3 to 5.6 degrees Fahrenheit in the winter and in the range of 2.7 to 7.6 degrees Fahrenheit in the summer. (Executive Summary at 4.) Similarly, the sea level has risen 0.09 to 0.15 inches per year in the metropolitan East Coast region — 0.11 inches per year in New York City — over the last 100 years, and is expected to increase substantially as global warming continues. (*See* Executive Summary at 4; Vivien Gornitz, Climate Change and a Global City: An Assessment of the Metropolitan East Coast (MEC) Region, Coastal Zone Sector Report: Sea Level Rise and Coastal Hazards (""Sea Level Rise Chapter"") at 4, 35-36.) Finally, climate change has brought more frequent and intense storms as well as intensified and prolonged periods of drought.

Temperature changes will have important impacts on the operation of the City's upstate water supply. The City depends on an unfiltered surface water supply to provide 9 million consumers with approximately 1.3 billion gallons of water per day. The supply consists of nineteen cascading reservoirs and three controlled lakes located in the Catskill-Delaware and Croton catchments. Winter warming causes early snowmelt in the Catskills region, leading to reservoir depletion earlier in the summer. Continued increases in winter temperatures and the greater risk of more frequent and prolonged droughts will strain the City's drinking water supply. In addition, temperature can affect the survival and distribution of many microorganisms, their hosts, and their predators, which can complicate the New York City Department of Environmental Protection''s ("NYCDEP") watershed management and treatment activities. Finally, intensified and prolonged summer heat waves from rising temperatures increase the already high demands on the City's water supply during summer months.

More severe heat waves have resulted and will continue to result in additional deaths and hospitalizations of City residents, especially among the elderly and poor. (*See* Patrick L. Kinney, et al., Climate Change and Public Health: Impact Assessment for the NYC Metropolitan Region (MEC Public Health Chapter), at 10, 11-15.) Moreover, worsening summertime smog from greater global warming is expected to increase incidence of, and susceptibility to, respiratory illnesses such as asthma, pneumonia, and bronchitis. (*Op.Cit.* at 25-26.) Regarding asthma, the hospitalization rate for children ages 0 to 14 in the City is nearly twice the national rate, and over three times the rate in the rest of New York State. (New York City Department of Mental Health and Hygiene, Asthma Facts 10 (2d ed. May 2003), at http://home2.nyc.gov/html/doh/downloads/pdf/asthma/facts.pdf.) Finally, the warmer temperatures will raise the overall demand for electricity within the City, especially during warmer months. The increased need for summer cooling will outweigh the decreased need for energy during winter. (Executive Summary at 6.)

Rising sea levels threaten the City's extensive low-lying and underground infrastructure, including its sewer system, wastewater treatment plants, and transportation system. The City treats an average of 1.5 billion gallons of wastewater daily, discharging the treated water into New York harbor and other local water bodies. Maintaining the integrity of this system is vital to protecting the health and welfare of millions of New Yorkers. Even a sea level rise of a lower magnitude than has been predicted could have potentially catastrophic consequences for the City because of the increased risk of flooding during coastal storms that accompany higher sea levels. (*See* Sea Level Rise Chapter at 36-38.) Elevated sea levels in combination with the unusually high tidal elevations that can occur during coastal storms will disrupt the City's stormwater and combined sewer systems by causing system back-ups, blocking the discharge of treated sewage from wastewater treatment plants into waterways, interfering with sewage treatment operations, and causing release of inadequately treated sewage due to combined sewer overflow events.

Lastly, changes in precipitation patterns and storm intensities associated with global climate change pose serious challenges for the City's drinking water supply, including increased turbidity, a federally regulated water quality indicator. Turbidity is a measure of water clarity related to the amount of suspended matter present in the water. While turbidity itself has no human health effects, it can interfere with disinfection and provide a medium for microbial growth.

E. Actions by the City of New York to Reduce Greenhouse Gas Emissions

The City has devoted significant resources to both mitigate climate change and adapt to its predicted effects. A key element of Mayor Michael R. Bloomberg's sustainability plan is to reduce by 2017 the volume of carbon dioxide and other greenhouse gases discharged as a result of the City government operations to levels 30 percent below 2006 levels. (PlaNYC, at 106.) Reduction strategies are based on an inventory of greenhouse gas emissions that the City completed earlier this year. (Inventory of New York City Greenhouse Gas Emissions,

at http://www.nyc.gov/html/planyc2030/downloads/pdf/emissions_inventory.pdf (April 2007).) Strategies include various clean fuel and energy-savings measures such as requiring ultra-low sulfur diesel fuels and employment of best availability technologies for City school buses, off-road vehicles used in City construction projects, City-licensed sight-seeing buses, City solid-waste vehicles, and City agency vehicles, as well as installing solar panels on City buildings, converting traffic lights to energy-efficient light-emitting diodes, requiring that City buildings be 20 to 30 percent more energy efficient than the New York State energy conservation code requires, increasing street tree planting, and undertaking various solid waste and landfill initiatives.

On the adaptation front, NYCDEP has been working closely with the Columbia Earth Institute to downscale existing models for assessing the impacts of climate change on the City's water supply, sewer, and wastewater treatment systems. The downscaled models will generate data to enable the City to evaluate necessary changes in the configuration of these systems. The City is also expanding this assessment beyond these systems to include all essential infrastructure. (PlaNYC at 138-139.)

Apart from its own initiatives, the City is also working with other cities at a national and international level to combat global climate change. In 2005, the City joined the Large Cities Climate Leadership Group, a group of more than twenty major cities from across the world working to exercise leadership in reducing greenhouse gas emissions and to develop adaptations to the effects of climate change. Domestically, the City has made similar commitments by signing the U.S. Mayors Climate Protection Agreement.

However, despite all of these initiatives, without federal government regulation of greenhouse gas emissions from sources such as aircraft, the City's mitigation and adaptation efforts will be undermined.

II. GREENHOUSE GAS EMISSIONS FROM AIRCRAFT

Aircraft emit gases and particles into the upper troposphere and lower stratosphere, where the gases and particles alter the concentration of greenhouse gases. The principal greenhouse gas emissions of aircraft are carbon dioxide, water vapor and NOx. (*Aviation and the Global Atmosphere, Special Report of IPCC Working Groups I and III* (1999), at. 3.) Aircraft engine emissions are approximately 70 percent carbon dioxide, as well as 30 percent water vapor, and under one percent oxides of nitrogen ("NOx"). (FAA, Office of Environment and Energy, *Aviation and Emission: A Primer* (Jan. 2005) ("FAA Report") at 1.) In 2005, aircraft contributed three percent of the United States' total carbon dioxide emissions, which are the primary greenhouse gas caused by anthropogenic activities, and 12 percent of the transportation sector emissions. (EPA, *Inventory of U.S. Greenhouse Gas Emissions and Sinks* (April 15, 2007) ("EPA Inventory") at 3-8.e, Table 3-7.) This is more than the emissions attributable to almost

any individual nation in the world. [12] We note that the Supreme Court, in *Massachusetts v. EPA*, __ U.S. __; 127 S. Ct. 1438, 1458 (2007), found that the contribution of the U.S. transportation sector to worldwide greenhouse gas emissions, which is about 6% of the world's greenhouse gas inventory, was by itself "enormous" and "a meaningful contribution to greenhouse gas concentrations." Judged by the standards of *Massachusetts v. EPA*, a source category that is, by itself, equal to the emissions of all but a handful of nations (and greater than all emissions from petitioning State California), and that emits about 12% of the U.S. transportation sector's "enormous" emissions, is a source that it is vital to regulate.

In addition, the impact of aviation on global warming is greater than the CO_2 contribution alone would suggest. NOx emissions contribute to the formation of ozone, which is a greenhouse gas. However, NOx emissions in the upper levels of the atmosphere, where the aircraft emissions occur, are more potent ozone precursors than ground-level NOx emissions. (IPCC, *Special Report -- Aviation and the Global Atmosphere, Summary for Policymakers* (1999) ("IPCC Special Report"), at 6.) Aircraft also emit water vapor, which alters cloud cover patterns by forming condensation trails or "contrails" that induce cirrus cloud formation, thus adding to cloud cover and contributing to global warming. (*Id.*, at 8.) The radiative forcing potential of contrail and cirrus cloud-inducing effects from aircraft exceed the radiative forcing potential of CO_2 from the aircraft by three to four times. (Stern Review, The Economics of Climate Change at 342.) The 1999 IPCC report estimates that, per unit of fuel burned, radiative forcing from aircraft is double that of land-based use of fossil fuels, and that aviation was responsible for 3.5% of the "anthropogenic forcing of the climate in 1992." (IPCC Special Report, at 8.) By 2050, taking into account both CO_2 emissions and the non-CO_2 effects of aviation, aviation will account for around 5% of the radiative forcing in 2050. (Stern Review at 342.)

While aircraft emissions per passenger mile have declined over time, total emissions have increased because of the growth in air travel. (FAA Report at 5.) Because of the anticipated increase in air traffic, greenhouse gas emissions from aircraft are expected to increase 60 percent over current levels by 2025. (FAA Report at 10.) The IPCC Aviation Report estimates that over the next 50 years there will be a doubling in aircraft CO emissions (with a possible increase of up to ten times current emissions levels), a 13 percent increase in ozone, and a four-fold increase in cirrus cloud cover. (IPCC Special Report at 6, 8.)

---

[12] United Nations, Department of Economic and Social Affairs, Statistics Division, *Carbon Dioxide Emissions, Thousands of Metric Tons,* available at http://mdgs.un.org/unsd/mdg/SeriesDetail.aspx?srid=749 (August 1, 2007); based on 2004 data from Carbon Dioxide Information Analysis Center, *available at* http://cdiac.ornl.gov/trends/emis/tre_tp20.htm.

Further, aircraft are subject to only limited emissions controls for some conventional pollutants, and no controls whatever for greenhouse gas emissions. National action by EPA has great potential for greenhouse gas emissions reduction.

III. LEGAL BASIS FOR ACTION BY EPA

A. EPA Has Previously, and Repeatedly, Found That Aircraft Emissions Contribute Significantly to Air Pollution Which May Reasonably Be Anticipated to Endanger Public Health or Welfare. It Has Authority to Regulate Aircraft Greenhouse Gas Emissions.

In Section 231 of the Clean Air Act, 42 U.S.C. section 7571, subdivision (a)(1), Congress ordered EPA to undertake a study of air pollutants from aircraft "to determine (A) the extent to which such emissions affect air quality in air quality control regions throughout the United States, and (B) the technological feasibility of controlling such emissions." Under subdivision (a)(2), if EPA finds that emissions from aircraft and aircraft engines cause or contribute to "air pollution which may reasonably be anticipated to endanger public health or welfare," it "shall" adopt emissions controls on such emissions.

EPA first studied the effects of conventional pollutants from aircraft in 1972 (EPA, Aircraft Emissions: Impact on Air Quality and Feasibility of Control (1972)), and the Administrator determined in 1973 that "the public health and welfare is endangered by violations of one or more of the national ambient air quality standards for carbon monoxide, hydrocarbons, nitrogen oxides, and photochemical oxidants" and further determined that "emissions from aircraft and aircraft engines be subject to a program of control compatible with their significance as pollution sources." (38 Fed. Reg. at 19089.) In 1973, EPA enacted regulations to control smoke, venting of fuel, and emissions of hydrocarbons, carbon monoxide, and NOx from various jet engines and aircraft. (38 Fed. Reg. 19088, 19090 (July 17, 1973).) It is noteworthy that in that first set of aircraft emissions regulations, over thirty years ago, EPA acknowledged the possible effects of emissions from subsonic and supersonic aircraft on the upper atmosphere and on the climate. (*Id.*, at 19088.)

A further study of the effects of aircraft emissions of conventional pollutants was done in 1980. (EPA, Airport Air Quality Report (May 13, 1980.)) Since 1980, EPA has continued to adopt limited regulations to control emissions of NOx and other conventional pollutants from aircraft, usually adopting the International Civil Aviation Organization ("ICAO") standards, standards that were sometimes voluntary or already being met by all or most of the aircraft to which they applied. (E.g., 62 Fed. Reg. 25356 (May 8, 1997.)) In 1997, EPA made another finding that emissions of NOx and carbon monoxide from aircraft contribute to violations of federal air quality standards, including the standard for ozone, in several nonattainment areas, thereby contributing to air pollution that damages the public health and welfare. (62 Fed. Reg at 25357.) EPA has also been concerned about the effects of aircraft emissions on the federal air quality standard for particulate matter. (68 Fed. Reg. 56226 (September 30, 2003.)) The 1997

Federal Register notice also observed that "NOx at cruise altitudes from subsonic aircraft is considered to be a precursor of tropospheric ozone and a contributor to greenhouse gas", citing the IPCC's 1994 report, "Radiative Forcing of Climate Change," and the United Nations Environment Programme/World Organization's 1994 report, "Scientific Assessment of Ozone Depletion." (*See* 62 Fed. Reg. at 25358.)

Since the IPCC's 1994 report, as set out more fully above, evidence has become even clearer that emissions from subsonic aircraft at cruising altitudes have a potent radiative forcing effect, both because of aircraft NOx emissions' contribution to ozone, and because of aircraft emissions of water vapor. (IPCC Special Report, at 6.) The EPA has already made and re-made findings that NOx emissions from aircraft, and the ozone to which these emissions contribute, endangers public health and welfare. EPA has also recognized that the ozone formed in the troposphere contributes to greenhouse gas concentrations. On that basis, as well as on the basis of the information contained in this petition, petitioning States believe that EPA can and must make a formal finding that aircraft emissions of global warming gases contribute to air pollution that is reasonably anticipated to endanger public health and welfare, and that EPA can and must adopt regulations controlling emissions of all emissions from aircraft that contribute to global warming.

Section 231's grant of authority for EPA to regulate aircraft emissions extends to control of greenhouse gases, because these gases contribute significantly to changes in climate, and effects on climate is by itself one of the factors Congress included in the definition of "welfare." (Clean Air Act, section 302(h); *Massachusetts v. EPA*, __ U.S. __; 127 S.Ct. at 1460.) In addition, as discussed earlier in this petition, the global warming to which aircraft emissions contribute will result in serious, lasting, and adverse effects on climate in many parts of the U.S., including petitioning States, with subsequent adverse effects on public health from such factors as increased heat waves and greater production of ozone. These reasonably foreseeable adverse effects on climate and public health place emissions of greenhouse gases squarely within the ambit of Section 231, and authorize regulation. Global warming and climate change will also cause adverse effects on water supplies, vegetation, wildlife, and many other factors Congress included in the definition of "welfare." (*See* Clean Air Act, Section 302(h).) Given the range and severity of effects on public health and welfare to which greenhouse gas emissions from aircraft can be reasonably anticipated to contribute, regulatory control of greenhouse gas emissions from aircraft is fully within EPA's authority.

B. Section 231's Language is Substantively Identical to the Language Construed by the Supreme Court in *Massachusetts v. EPA*, and Should be Interpreted by EPA as Applying to Greenhouse Gas Emissions.

It is useful here to compare the language in Section 202 that the Supreme Court construed earlier this year in *Massachusetts v. EPA*, with the language of Section 231. Section 202 provides, in pertinent part:

> The [EPA] Administrator shall by regulation prescribe (and from time to time revise) in accordance with the provisions of this section, standards applicable to the emission of any air pollutant from any class or classes or new motor vehicles or new motor vehicle engines, which in his [*sic*] judgment *cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare.*

(Emphasis added.) In the *Massachusetts v. EPA* case, the Supreme Court read the term "pollutant" in Section 202 as "sweeping" in its definition by Congress, and fully broad enough to encompass not only the traditional, criteria pollutants[13] such as ozone and particulate matter, but "all airborne compounds of whatever stripe," and certainly broad enough to cover greenhouse gases as well, if they endanger public health or welfare. (127 S.Ct. at 1460.)

Section 231 of the CAA contains virtually identical language to Section 202 (emphasis added):

> The [EPA] Administrator shall, from time to time, issue proposed emission standards applicable to the emission of any air pollutant from any class or classes of aircraft engines which in his judgment *causes or contributes to, air pollution which may reasonably be anticipated to endanger public health or welfare.*

There appears to be no substantive difference between these two sections. Both require EPA to adopt emissions control regulations for emissions that are reasonably anticipated to endanger public health or welfare. As petitioning States have shown, emissions from aircraft, including NOx and water vapor, will do just that. The broad interpretation of a "pollutant" employed by the Supreme Court in *Massachusetts v. EPA* should also apply with equal force here. Greenhouse gases, while not traditional pollutants (although NOx and the ozone to which it is a precursor are traditional criteria pollutants)[14], are nonetheless "pollutants" under the Clean Air Act's "sweeping" definition, and the Administrator has authority to regulate them under Section 231, just as he has that authority under Section 202. He also has the mandatory duty to regulate these pollutants under Section 231, just as he does under Section 202.

---

[13] "Criteria" pollutants are so named because a document setting out the criteria for setting ambient standards for these pollutants must be prepared for EPA before EPA sets such standards. (CAA, section 108(a)(2); 42 U.S. section 7408(a)(2).)

[14] We note that greenhouse gases contribute indirectly – and potentially substantially -- to nonattainment of the ozone NAAQS, since the hotter weather to which they contribute helps to form more ozone.

EPA has not yet made a specific finding that greenhouse gas emissions from aircrafts "cause, or significantly contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare," although the language from the July 17, 1973 and the September 30, 2003 Federal Registers cited above could be construed as such findings. Petitioning States believe that EPA can and should now make that finding, specifically, unambiguously, and on an expedited basis. We presume that EPA is already carrying out research to comply with the Supreme Court's interpretation of EPA's duties under Section 202, as set out in *Massachusetts v. EPA*. That research will inevitably show that greenhouse gas emissions from motor vehicles pose a danger to public health and welfare; on that basis, EPA could and should make a finding, as it has done in the past for criteria pollutants, that the same types of emissions from aircraft pose a similar danger. Emissions of water vapor and contrail formation should be the subjects of a similar finding.

IV. INTERNATIONAL LAW IS NOT A BAR TO REGULATION OF GREENHOUSE GAS EMISSIONS FROM AIRCRAFT BY EPA

It is clear that EPA has authority to adopt emissions standards for U.S.-flagged aircraft. Since U.S. aircraft accounted for 97% of the air operations in this country in 1999 (U.S. EPA, Emissions Standards and Test Procedures for Aircraft and Aircraft Engineers, Summary and Analysis of Comments (Nov. 2005) EPA420-R-05-004, at 10), the exercise of that authority will have an impact on nearly the totality of greenhouse gas emissions from aircraft that operate in this country. As to foreign-flagged aircraft, even assuming, for purposes of argument, that the United States cannot decline to permit such foreign aircraft to operate in this country if they carry Certificates of Airworthiness issued by a nation that is a Member of the Chicago Convention on International Civil Aviation Treaty, such aircraft are not immune from EPA regulation. EPA could impose on-the-ground operational controls, such as powering aircraft ventilation and cooling systems from ground-supplied electricity, could impose economic controls upon both domestic and foreign aircraft, or could impose a levy or set up a cap-and-trade system for greenhouse gas emissions. EPA would, of course, need to impose such controls uniformly, and to notify the ICAO of such regulations. However, the Chicago Convention does not bar imposition of more stringent emissions controls on domestic aircraft than ICAO imposes, nor does it bar operational controls or cap-and-trade systems for foreign-flagged aircraft.[15] Petitioning States note that the European Union is now planning to include aircraft greenhouse gas emissions within the overall cap-and-trade system imposed on major stationary sources in the EU.

In short, petitioning States believe it is clear that EPA has authority to impose more stringent emissions controls on United States airlines; such controls would reach the overwhelming majority of the major aircraft operations in this country. Further, petitioning States believe that EPA also has authority under the Clean Air Act, and the U.S. has authority under international law, to impose greenhouse gas emissions standards on foreign aircraft as

---

[15] See Richard Smithies, Regulatory Convergence – Extending the Reach of EU Aviation Law, 72 J. Air L. & Com. 3, at 18-19 (2007).

well. Such standards could allow compliance through technological controls, operational controls, emissions fees, or a cap-and-trade program.

V. TECHNOLOGY IS AVAILABLE TO REDUCE GREENHOUSE GAS EMISSIONS FROM AIRCRAFT

A wide range of technology and a variety of operational options are available to reduce greenhouse gas emissions from aircraft. Congress intended the Clean Air Act to be a technology-forcing statute – as held in *Train* v. *Natural Resources Defense Council*, 421 U.S. 60 (1975) – and EPA can and should consider control measures that force the development of new technology. EPA acknowledges that it has authority to adopt technology-forcing standards ("the Agency is not limited to in identifying what is 'technologically feasible' as what is already technologically achieved." (70 Fed. Reg. at 69677.))[16] Here, because aircraft engines are almost completely uncontrolled for greenhouse gas emissions, the opportunities for emissions reduction are wide-open and very substantial.[17]

We also note that EPA has long possessed and exercised the authority to regulate in-use aircraft. The first aircraft emissions controls EPA adopted included retrofit standards for in-use aircraft engines. (38 Fed. Reg. 19087; *see also*, 40 C.F.R. Part 87, §§ 87.10-11, 87.30-31.) This exercise of authority rests on a firm statutory basis. While Section 202 and Section 213 of the Clean Air Act limit EPA's standard-setting authority to "new" engines and vehicles, Section 231 has no such limitation. Since Congress is presumed to intend the inclusion or omission of such a key word as "new" in this context (*Bates v. United States*, 522 U.S.23, 29-30 (1997)), Section 231 authorizes EPA to regulate in-use, not just new, engines and aircraft. EPA has always interpreted Section 231 in this way. We note that many, if not all, of the technologies identified above can be applied to in-use aircraft.

---

[16] Nor has EPA ever agreed that the ICAO standard-setting process "is the exclusive appropriate process for setting aircraft emissions reduction goals or for encouraging the development of better performing technology." (70 Fed. Reg. at 69677.)

[17] We note that advances in technologies will somewhat reduce greenhouse gas emissions per passenger kilometer traveled. Thus, for example, today's aircraft are about 70% more fuel efficient per passenger-km than those of 40 years ago due to engine improvements and airframe design improvement. In 1999, the IPCC Working Groups projected a 20% fuel efficiency improvement by 2015 and a 40 to 50% improvement by 2050. (IPCC 1999 Report at 10.) EPA regulations should exceed these expected reductions.

In the interim period, the following operational steps, outlined in Aviation and the Environment Report to the United States Congress, could be taken to reduce emissions:

> - Use of continuous rather than stepped descents to reduce fuel burn and emissions;
>
> - Increase in the number of landing operations per hour during weather with low clouds, which decreases the need for aircraft circling while waiting for landing clearance
>
> - Reduction of auxiliary power unit usage, probably through plugging into ground-side power supplied by the airport;
>
> - Use of single engine taxiing;
>
> - Coordination with air traffic control centers to select more fuel-efficient routes and speeds;
>
> - Reduction in levels of excess fuel carried, and more regular maintenance and cleaning of engines and airframes.

(Aviation and the Environment at 34.)[18] We urge EPA to work with the FAA to implement these operational restrictions as quickly as practicable.

RELIEF REQUESTED

Petitioning States and local governments respectfully request that the Administrator:

(1) Make an explicit finding that greenhouse gas emissions from aircraft significantly contribute to air pollution that may reasonably be anticipated to endanger public health and welfare;

(2) Propose and adopt emissions standards for greenhouse gas emissions from new and in-use aircraft pursuant to Section 231 of the Clean Air Act, 42 U.S.C. § 7571, with such standards being structured so as to require greenhouse gas reductions with all possible speed; and

(3) Propose and adopt such regulations as are necessary to achieve and enforce the emissions standards requested above. These regulations could

---

[18] See also IPCC 1999 Report at 11, discussing other operational factors such as increasing load factors (carrying more passengers or freight per flight), eliminating non-essential weight, optimizing aircraft speed, limiting the use of auxiliary power, and reducing taxiing.

allow compliance through, and should consider, emissions limitations, work or operational practices, and/or emissions fees or a cap-and-trade system. Petitioning States ask that EPA consider adoption of some measures, such as reduced taxi time or use of ground-side electricity, immediately, or as soon as practical considerations permit.

Petitioning States and local governments request that the Administrator take initial action within six months of receipt of this petition.

Dated: December 4, 2007

Respectfully submitted,

EDMUND G. BROWN JR.
Attorney General of the
State of California
JANET GAARD
Acting Chief Assistant Attorney General
THEODORA BERGER
Special Assistant Attorney General
CLIFF RECHTSCHAFFEN
Special Assistant Attorney General
KEN ALEX
Supervising Deputy Attorney General
SUSAN DURBIN
SUSAN FIERING
Deputy Attorneys General
1300 I Street
P.O. 944255
Sacramento, CA 94244-2550
Telephone: (916) 324-5475
Facsimile: (916) 327-2319

KURT R. WIESE
District Counsel
BARBARA BAIRD
Principal Deputy District Counsel
SOUTH COAST AIR QUALITY
MANAGEMENT DISTRICT
21865 Copley Drive
Diamond Bar, CA 91765
Telephone: (909) 396-2302
Facsimile: (909) 396-2961

LINDA SINGER
Attorney General for the
District of Columbia
BENNETT RUSHKOFF
Deputy Attorney General
Public Advocacy Division
BERNICE CORMAN
General Counsel
District Department of the Environment
KIMBERLY KATZENBARGER
Assistant Attorney General
District Department of the Environment
51 N Street, NE - 6th Floor
Washington, D.C. 20002
Telephone: (202) 535-2608

GARY K. KING
Attorney General for the
State of New Mexico
STEPHEN R. FARRIS
JUDITH ANN MOORE
Assistant Attorneys General
408 Galisteo Street
Villagra Building
Santa Fe, New Mexico 87501
Telephone: (505) 827-6000
Facsimile: (505) 827-5826

For The Commonwealth of Pennsylvania
Department of Environmental Protection
SUSAN SHINKMAN
Chief Counsel
KRISTEN M. CAMPFIELD
Associate Counsel
RICHARD P. MATHER, SR.
Deputy Chief Counsel
400 Market Street, 9th Floor
Carson State Office Building
P.O. Box 8464
Harrisburg, PA 17105-8464
Telephone: (717) 787-1956
Facsimile: (717) 787-9378

MICHAEL A. CARDOZO
Corporation Counsel of the
City of New York
SUSAN KATH
Division Chief
SCOTT PASTERNACK
Senior Counsel
New York City Law Department
100 Church Street, Room 6-145
New York, New York 10007-2601
Telephone: (212) 676-8517
Facsimile: (212) 788-1619

For the State of New Jersey
ANNE MILGRAM
ATTORNEY GENERAL
Lisa Morelli
Deputy Attorney General
Richard J. Hughes Justice Complex
25 Market Street, P.O. Box 093
Trenton, New Jersey 08625-09312
Telephone: (609) 633-8713

For the State of Connecticut
RICHARD BLUMENTHAL
Attorney General
KIMBERLY MASSICOTTE
JOSE A. SUAREZ
Assistant Attorneys General
55 Elm Street
P.O. Box 120
Hartford, CT 06106
Telephone: (860) 808-5250

By: 

SUSAN L. DURBIN
Attorneys for Petitioners

DECLARATION OF SERVICE BY OVERNIGHT COURIER

Case Name: The States of California, Connecticut, New Jersey, and New Mexico, the Commonwealth of Pennsylvania, the City of New York, The District of Columbia, and the South Coast Air Quality Management District v. Honorable Stephen Johnson, In His Official Capacity As Administrator, United States Environmental Protection Agency

No.:

I declare:

I am employed in the Office of the Attorney General, which is the office of a member of the California State Bar, at which member's direction this service is made. I am 18 years of age or older and not a party to this matter; my business address is: 1300 I Street, Suite 125, P.O. Box 944255, Sacramento, CA 94244-2550.

On December 4, 2007, I served the attached **PETITION FOR RULE MAKING SEEKING THE REGULATION OF GREENHOUSE GAS EMISSIONS FROM AIRCRAFT** by placing a true copy thereof enclosed in a sealed envelope with **FEDERAL EXPRESS**, addressed as follows:

Hon. Stephen L. Johnson, Administrator
United States Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue, NW
Mail Code 1101A
Washington, D.C. 20460

Margo T. Oge
U.S. Environmental Protection Agency
Office of Transportation and Air Quality
1200 Pennsylvania Avenue, NW
Mail Code 6401A
Washington, D.C. 20460

I declare under penalty of perjury under the law of the State of California the foregoing is true and correct and that this declaration was executed on December 4, 2007, at Sacramento, California.

Bessie Wong
Declarant

Bessie Wong
Signature