

regulate certain greenhouse gas (GHG) emissions from new motor vehicles and engines under section 202(a)(1) of the Clean Air Act (CAA). Specifically, petitioners seek EPA regulation of carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), and hydrofluorocarbon (HFCs) emissions from new motor vehicles and engines. Petitioners claim these emissions are significantly contributing to global climate change.

EPA is authorized to regulate air pollutants from motor vehicles under title II of the CAA. In particular, section 202(a)(1) provides that "the Administrator [of EPA] shall by regulation prescribe \* \* \* in accordance with the provisions of [section 202], standards applicable to the emission of any air pollutant from any class or classes of new motor vehicle \* \* \*, which in his judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare."

## II. Summary of the Petition

Petitioners contend the test for regulating motor vehicle emissions under CAA section 202(a)(1) has been met for CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O and HFCs. They claim statements made on EPA's Web site and in other documents constitute an Agency finding that the four GHGs may reasonably be anticipated to endanger public health or welfare. They also assert that motor vehicle emissions of the GHGs could be significantly reduced by increasing the fuel economy of vehicles, eliminating tailpipe emissions altogether, or using other current and developing technologies. Based on their analysis, they argue that EPA has a mandatory duty under section 202(a)(1) to regulate emissions of GHGs from motor vehicles.

Petitioners present their case for why EPA should, and even must, regulate motor vehicle GHG emissions under section 202(a)(1) in four parts. First, they assert that anthropogenic emissions of CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, and HFCs meet the CAA section 302(g) definition of "air pollutant," which is "any air pollution agent or combination of such agents, including any physical, chemical, biological, radioactive \* \* \* substance or matter which is emitted into or otherwise enters ambient air. Such term includes any precursors to the formation of any air pollutant \* \* \*." Citing international and national reports, petitioners contend that anthropogenic emissions of CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, and HFCs

are accelerating global warming, and that motor vehicle emissions of these GHGs, particularly CO<sub>2</sub>, significantly contribute to the U.S. GHG inventory. Petitioners argue that the contribution of motor vehicle GHG emissions to global climate change qualify them as "air pollutants" under the CAA.

Petitioners also claim that EPA has already determined CO<sub>2</sub> to be an air pollutant. They cite an April 10, 1998, memorandum from Jonathan Z. Cannon, then General Counsel of EPA, to Carol Browner, then Administrator of EPA, entitled "EPA's Authority to Regulate Pollutants Emitted by Electric Power Generation Sources" (hereinafter "Cannon Memorandum"). The memorandum states that sulfur dioxide, nitrogen oxides, mercury, and CO<sub>2</sub> emitted from electric power generating units fall within the definition of "air pollutant" under CAA section 302(g). According to petitioners, it follows from the memorandum that the other three GHGs meet the CAA definition of "air pollutant," too.

Second, petitioners argue that GHG emissions contribute to pollution that "may reasonably be anticipated to endanger public health or welfare," a key criterion for regulation under section 202(a)(1). Petitioners state that the CAA does not require proof of actual harm, but allows the Administrator to make a precautionary decision to regulate an air pollutant if it "may reasonably be anticipated" to endanger public health or welfare. The petitioners point to statements made by the United Nations Intergovernmental Panel on Climate Change (IPCC), EPA and others about the potential effects of global climate change on public health and welfare as establishing that global climate change "may reasonably be anticipated to endanger public health and welfare." Based on these statements, the petitioners allege numerous threats to public health and welfare.

Third, petitioners argue that it is technically feasible to reduce GHG emissions from new motor vehicles and engines. In particular, they note that CO<sub>2</sub> emissions can be reduced by increasing the fuel economy of passenger cars and light trucks, and that a number of currently available gasoline-powered cars get significantly better fuel economy than the 27.5 mpg corporate average fuel economy (CAFE) standard currently applicable to cars under Federal law. They also point to a congressional report identifying other technologies for further improving the fuel economy of gasoline-powered cars that have yet to be fully employed. In addition, petitioners note that several

foreign and domestic car manufacturers are already marketing or developing hybrid-electric vehicles that get significantly better fuel mileage than the most fuel-efficient gasoline-powered car. Looking ahead to the next generation of vehicle technology, petitioners describe the potential for electric and hydrogen-celled vehicles to eliminate tailpipe emissions altogether. Petitioners recommend that EPA set a "corporate average fuel-economy based standard" under CAA section 202 that would result in the rapid market introduction of more fuel-efficient and zero-emission vehicles.

Petitioners suggest other potential ways of reducing CO<sub>2</sub> emissions such as setting a declining fleet average NO<sub>x</sub> emission standard that would require manufacturers to add zero-emission vehicles to their fleets. They also note the availability of tire efficiency standards. Petitioners do not, however, address the potential for reducing motor vehicle emissions of the other three GHGs.

Finally, petitioners maintain that the Administrator has a mandatory duty to regulate motor vehicle GHG emissions under CAA section 202(a)(1). They contend that EPA has "already made formal findings" that motor vehicle GHG emissions "pose[] actual or potential harmful effects [on] the public health and welfare." Noting that section 202(a)(1) provides the Administrator "shall" prescribe motor vehicle standards, petitioners argue that the use of "shall" creates a mandatory duty to promulgate standards when the requisite findings are made. They accordingly claim that the Administrator must establish motor vehicle standards for the four GHGs.

Petitioners further argue that "the precautionary purpose of the CAA supports" regulating these gases even if the Agency believes there is some scientific uncertainty regarding the actual impacts of global climate change. Petitioners cite several court cases recognizing the Administrator's authority to err on the side of caution in making decisions in areas of scientific uncertainty. They also assert that scientific uncertainty does not excuse a mandatory duty to regulate.

## III. Request for Comment

On January 23, 2001, EPA requested public comment on the petition (*see* 66 FR 7486). The public comment period ended May 23, 2001.

EPA requested comment on all the issues raised in ICTA's petition. In particular, EPA requested comment on any scientific, technical, legal, economic or other aspect of these issues that may