

CLIENT ALERT

EPA Makes Greenhouse Gas "Endangerment Finding" for the Aviation Sector

Jul.27.2016

On July 25, 2016, the Environmental Protection Agency (EPA) took an essential step in the process of regulating greenhouse gas (GHG) emissions from the aviation sector under section 231 of the Clean Air Act (CAA). EPA determined that (i) GHG concentrations in the atmosphere endanger the public health and welfare of current and future generations, and (ii) GHG emissions from certain classes of aircraft engines contribute to that endangerment. This is EPA's second formal "endangerment finding," following on EPA's 2009 endangerment finding for GHG emissions from new motor vehicles under CAA section 202(a). The endangerment finding has certain legal implications under the CAA:

- **The Endangerment Finding Triggers an Obligation for EPA to Propose Emission Standard(s).** The endangerment finding triggers EPA's legal duty under CAA § 231 to promulgate GHG emission standards applicable to classes of aircraft engines that were found to contribute to the GHG pollution.
- **The Endangerment Finding Triggers an Obligation for FAA to Propose Implementing Regulations.** The endangerment finding also obligates the Federal Aviation Administration (FAA), not EPA, to prescribe regulations to assure compliance with the future EPA emissions standards pursuant to CAA § 232.
- **Both EPA and FAA Rules will be Informed by International Regulatory Standards.** In accordance with U.S. obligations under the 1944 Convention on International Aviation (aka the "Chicago Convention"), any EPA proposal to set emission standards will be informed by and/or follow corresponding international standards currently being developed by the International Civil Aviation Organization (ICAO).

The scope of the endangerment finding includes GHG emissions from certain classes of engines used in U.S. "covered aircraft" which include subsonic jet aircraft with a maximum takeoff mass (MTOM) greater than 5,700 kilograms and subsonic propeller driven (*e.g.*, turboprop) aircraft with a MTOM greater than 8,618 kilograms. EPA excludes from the finding piston-engine aircraft, helicopters, and military aircraft, all classes that are also excluded by the ICAO standards.

The key issues and uncertainties going forward are whether EPA and FAA will develop standards and regulations that (a) are equivalent to or more stringent than the international standards, and (b) provide reasonable and cost-effective compliance flexibilities consistent with the ICAO regime.

The U.S. is a participating member state of ICAO under the Chicago Convention, and is actively involved in ICAO's Committee on Aviation Environmental Protection (CAEP). CAEP is charged with establishing "an international CO₂ emission standard which the EPA could then consider proposing for adoption." In February 2016, CAEP agreed upon a set of standards and additional compliance measures to reduce the aviation sector's climate impact.

These ICAO standards, which are set to be adopted by CAEP in October 2016, regulate "whole aircraft" CO₂ emissions (rather than just CO₂ emissions attributable to aircraft engines) and would only apply to "new" and "in-production" aircraft. EPA may

decide in the future to follow the ICAO delineation excluding emission standards for in-service aircraft, but such potential exclusion is not clear from the present action. The EPA endangerment finding explains the “whole aircraft” approach as follows:

“[S]everal factors are considered when addressing whole-aircraft CO₂ emissions, as CO₂ emissions are influenced by aerodynamics, weight, and engine technology. Since the aircraft-specific characteristics of aerodynamics and weight affect fuel consumption, they ultimately affect CO₂ engine exhaust emissions. Rather than viewing CO₂ as a measurable emission from the engine alone, ICAO addresses CO₂ emissions as an aircraft-specific characteristic based on fuel consumption.”

CAEP has also developed a suite of compliance measures to allow regulated entities to achieve emissions reductions in a variety of ways. Entities can reduce emissions through use of alternative fuels, improved design and operational efficiencies, and/or market-based measures (*e.g.*, purchase of international emissions offset credits). ICAO's current work to establish a market-based offset mechanism would allow aircraft operators the ability, for example, to invest in forest conservation instead of increasing the emissions performance efficiency of the aircraft themselves.

Given that only a few months remain in the Obama Administration, the actual task of proposing and promulgating the EPA and FAA rules will likely fall to the next administration. In the interim, companies that may be exposed to future EPA emissions standards and FAA compliance obligations should be assessing climate-related regulatory risks and cost-benefit pathways for different possible compliance options (*e.g.* efficiency upgrades, offset project investments).

For more information, please contact the professional(s) listed below, or your regular Crowell & Moring contact.

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