Environmental Matters

Environmental Regulation

The airline industry is subject to various laws and government regulations concerning environmental matters in the U.S. and other countries. U.S. federal laws that have a particular impact on our operations include the Airport Noise and Capacity Act of 1990, the Clean Air Act, the Resource Conservation and Recovery Act, the Clean Water Act, the Safe Drinking Water Act and the Comprehensive Environmental Response, Compensation and Liability Act (Superfund Act). The U.S. Environmental Protection Agency (EPA) and other federal agencies have been authorized to promulgate regulations that have an impact on our operations. In addition to these federal activities, various states have been delegated certain authorities under the aforementioned federal statutes. Many state and local governments have adopted environmental laws and regulations which are similar to or stricter than federal requirements.

Revised underground storage tank regulations issued by the EPA in 2015 have affected certain airport fuel hydrant systems, with modifications of such systems needed in order to comply with applicable portions of the revised regulations. In addition, related to the EPA and state regulations pertaining to storm water management, several U.S. airport authorities are actively engaged in efforts to limit discharges of deicing fluid into the environment, often by requiring airlines to participate in the building or reconfiguring of airport deicing facilities.

The environmental laws to which we are subject include those related to responsibility for potential soil and groundwater contamination. We are conducting investigation and remediation activities to address soil and groundwater conditions at several sites, including airports and maintenance bases. We presently anticipate that the ongoing costs of such activities will not have a material impact on our operations. In addition, we have been named as a potentially responsible party (PRP) at certain Superfund sites. Our alleged volumetric contributions at such sites are relatively small in comparison to total contributions of all PRPs. Accordingly, we presently anticipate that any future payments of costs at such sites will not have a material impact on our operations.

We employ an environmental management system that provides a systematic approach for compliance with environmental regulations and management of a broad range of issues including air emissions, hazardous waste disposal, underground tanks, and aircraft water quality.

Aircraft Emissions and Climate Change Requirements

Many aspects of our operations are subject to a number of increasingly stringent environmental regulations and concerns about climate change and greenhouse gas (GHG) emissions, including carbon dioxide (CO_2) emissions. In particular, the International Civil Aviation Organization (ICAO) is in the process of adopting rules that will require us to limit the CO_2 emissions of a significant majority of our international flights to a baseline level equal to our 2019-2020 average emissions from such flights. In 2016, ICAO passed a resolution adopting the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), an international, market-based emissions offset program intended to achieve carbon-neutral growth in the international aviation sector after 2020. CORSIA is expected to be implemented in three phases: the Pilot Phase (from 2021 to 2023); the First Phase (from 2024 to 2027); and the Second Phase (from 2027 to 2035). American and the majority of other U.S. airlines currently report their CO_2 emissions to the FAA in accordance with CORSIA requirements. It is expected that the FAA (with the support of Congress) will implement regulations to establish a carbon offset credit surrender mechanism and to provide for the oversight and compliance auditing of the CORSIA obligations of U.S. carriers, including American.

To meet their obligations under CORSIA, airlines will have the option to increase the efficiency of their fleet, use sustainable or lower carbon aircraft fuel, or purchase carbon offset credits. At this time, the costs of complying with our future obligations under CORSIA are uncertain and cannot be fully predicted. For example, we will not directly control our CORSIA compliance costs during the CORSIA Pilot and First Phases because such phases include a sharing mechanism for the growth in emissions for the global aviation sector. In addition, and with respect to all phases of CORSIA including after 2027, there is uncertainty with respect to the future supply, demand and price of sustainable or lower carbon aircraft fuel, carbon offset credits and technologies that could allow airlines to reduce their emissions of CO₂.