

#24-0672

TO: Honorable Mayor & Members of the Fort Lauderdale City Commission

FROM: Susan Grant, Acting City Manager

DATE: July 2, 2024

TITLE: Resolution Approving a Plan to Reduce Lead Emissions at the Fort

Lauderdale Executive Airport - (Commission District 1)

Recommendation

Staff recommends that the City Commission adopt a resolution approving a plan to reduce lead emissions at the Fort Lauderdale Executive Airport (FXE).

Background

FXE was identified in a U.S. Environmental Protection Agency (USEPA) study as potentially generating lead emissions from aircraft with piston engines that operate at the Airport. As a result of the USEPA study, residents adjacent to the Airport raised concerns about aviation gas (AVGAS) contaminating soil and air quality.

FXE contracted with GHD Services, Inc. (GHD) to screen soil at specific Airport locations for the potential presence of lead contamination from aircraft fuel emissions, deliver a technical report evaluating screening data against State levels, and provide recommendations for a path forward.

GHD has completed the screening by collecting soil samples from four sites on the Airport. Soil samples were collected at 76 locations within the four sites, which were identified as potentially having the highest level of fuel emission deposit in the aircraft runup areas. The four sites are where pre-flight checks are performed before takeoff (Exhibit 1).

The data from the report indicated lead concentration does exist in the soil samples within the four sites at FXE. However, the soil screening data collected indicates that the soil lead concentrations do not exceed regulatory levels established by the Florida Department of Environmental Protection (FDEP). Additionally, the data from the report is read in parts per million (ppm), which is equivalent to the milligrams per kilogram (mg/kg) units used in the FDEP standard.

The Florida Administrative Code (FAC) established Soil Clean Up Target Level (SCTL) for commercial properties at 1400 mg/kg and residential properties at 400 mg/kg. FXE

does operate as a commercial/industrial property, however data from the soil samples collected indicated FXE is below the residential SCTL. More specifically, the range of lead concentration measured a minimum of 4.2 ppm to 43 ppm in 66 samples, and 86 samples listed as Not Detected (ND), or do not have a lead concentration quantifiable above the sample specific detection limit.

FXE consistently promotes a "Fly Neighborly" campaign and completely understands the concerns of residents regarding AVGAS fuel emissions, air quality, and soil contamination. GHD is preparing a Task Order which will further expand soil screening and air quality testing in neighboring communities adjacent to the Airport. The Federal Aviation Administration (FAA) does not have direct regulatory responsibility for aviation fuels, but they are working with critical government and industry partners to develop a multi-layered strategy through the Eliminate Aviation Gasoline Lead Emissions (EAGLE) initiative for piston-engine aircraft by 2030.

The Airport is actively working to promote the safe transition from AVGAS to aircraft unleaded fuel by implementing several initiatives, which include an Airport-wide survey of all piston aircraft owners and operators that use AVGAS, and their process for transitioning to aircraft unleaded fuel. Airport staff have also reached out to the Fixed Base Operators (FBO) with a recommendation to consider the installation of an unleaded fuel tank for their piston aircraft customers. Staff communicated with the Florida Department of Transportation (FDOT) on the possibility of receiving grant funding for the purchase of a fuel truck to store aircraft unleaded fuel. Airport staff is preparing a comprehensive aircraft unleaded fuel educational and promotional program for Airport tenants so that they are aware of the 2030 mandate to ban AVGAS. In addition, staff is also analyzing an incentive program to possibly assist piston engine-based aircraft owners with the Supplemental Type Certificate (STC) conversion.

FXE continually strives to be neighborly and is at the forefront of making the Airport operations safe, secure and sustainable. The Airport tenants are committed to taking steps to reduce its environmental impact, which supports the City of Fort Lauderdale's Sustainability and Vision Plan goals of being a sustainable and resilient community that promotes energy efficiency and renewable energy sources. Sustainability initiatives have included the following:

Airport

- 2011 Gold Leadership in Energy and Environmental Design (LEED) of the Airport Maintenance Building. First LEED development in the City
- 2015 Silver Leadership in Energy and Environmental Design (LEED) of the Airport U.S. Customs and Border Protection Facility (CBP) First LEED CBP facility development in the state
- 2019 Certificate Leadership in Energy and Environmental Design (LEED) of the Airport Administration Building
- Sustainable cleaning supplies for all Airport owned facilities
- Airport fleet vehicles transition to Hybrid and full electric (Toyota Camry, Ford F-150 Lightning, Electric Forklift, Electric Lift, and Electric Golf Carts)

Tenants

- Replacement of golf carts, aircraft tugs, ground power units and pickup trucks with zero-emissions electric equipment and vehicles
- Replacement of hangar halogen lighting with LED lighting
- Promotion and delivery of Sustainable Aviation Fuel (SAF)
- Elimination of Stage 2 aircraft from fleet
- Hangar renovation modernization project

Staff will encourage the implementation of sustainable practices at the Fort Lauderdale Executive Airport that will support the Eliminate Aviation Gasoline Lead Emissions initiative and promote programs for a safe transition to aircraft unleaded fuel for piston engine aircraft prior to 2030.

Resource Impact

There is no fiscal impact associated with this item.

Strategic Connections

This item supports the *Press Play Fort Lauderdale 2029* Strategic Plan, specifically advancing:

- The Infrastructure and Resilience Focus Area
- Goal 4: Facilitate an efficient, multimodal transportation network
- The Business Growth and Support Focus Area
- Goal 6: Build a diverse and attractive economy

This item advances the Fast-Forward Fort Lauderdale Vision Plan 2035: We are Prosperous.

This item supports the Advance Fort Lauderdale 2040 Comprehensive Plan specifically advancing:

- The Business Development Focus Area
- The Economic Development Area
- Goal 3: Recognize and include in economic development planning the role of Port Everglades and the Fort Lauderdale-Hollywood International Airport and Fort Lauderdale Executive Airports.

Attachments

Exhibit 1 – Soil Screening Report

Exhibit 2 - Resolution

Prepared by: Rufus A. James, Airport Director

Charter Officer: Susan Grant, Acting City Manager