



## Memorandum

**Memorandum No: 24-075**

**Date:** May 3, 2024

**To:** Honorable Mayor, Vice Mayor, and Commissioners

**From:** Greg Chavarria, City Manager   
Greg Chavarria (May 6, 2024 10:28 EDT)

**Re:** **Lead Soil Screening Report**

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The Fort Lauderdale Executive Airport (FXE) was identified in a U.S. Environmental Protection Agency (USEPA) study as potentially impacted by lead due to the use of aviation gasoline (AVGAS) by aircraft at the Airport. As a result of the USEPA study, residents adjacent to the Airport raised concerns about aircraft fuel emissions deposit 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 at 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 run-up areas. The four sites are where pre-flight checks are performed at 75% engine power settings for a minimum of one minute before takeoff.

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.

GHD indicated it should be noted that the distribution of lead in the built environment is due to many factors including past use of lead additives, in vehicular fuels, paints, waste incineration, lead solder in pipes, and other manufacturing processes.

As a result of the soil screening and evaluation performed, GHD does not recommend additional soil sampling at this time.

For additional information, please contact Rufus James, Airport Director at [RJames@fortlauderdale.gov](mailto:RJJames@fortlauderdale.gov)

Attachment: Soil Screening Report

c: Anthony G. Fajardo, Assistant City Manager  
Susan Grant, Assistant City Manager  
Thomas J. Ansbro, City Attorney  
David R. Soloman, City Clerk  
Patrick Reilly, City Auditor  
Department Directors  
CMO Managers