

Environmental Protection at Miami International Airport.



- Environmental remediation statistics:
 - ◆ Number of Active Treatment Systems = 10
 - ◆ Total Volume of Water Treated = > 5 Billion Gallons
 - ◆ Free Product Recovered = > 100,000 Gallons
 - ◆ Total Volume of Soil Handled = > 1 Million Tons
 - ◆ Underground Storage Tanks Removed or Replaced = > 200



- The MIA utilities system is comprised of:
 - ◆ 60 miles of Storm Sewer, 1800 Structures & 20 acre pond
 - ◆ 16 miles of Sanitary sewer force mains, 8 miles of gravity sewer with 60 pump stations
 - ◆ 38 miles of potable water supply mains
 - ◆ 25 miles of underground jet fuel piping, delivering 2.6 MGD of jet fuel.
 - ◆ 1010 acres of regulated airside pavement.



- A reduction in the number of fuel storage tanks at MIA.



- Avoid the use of underground storage tanks as much as practically possible.

- Secondly contained aboveground tanks have been installed for fuel storage.





- Reduce the size of the IW System at MIA by installing smaller IW treatment systems closer to specific sources.

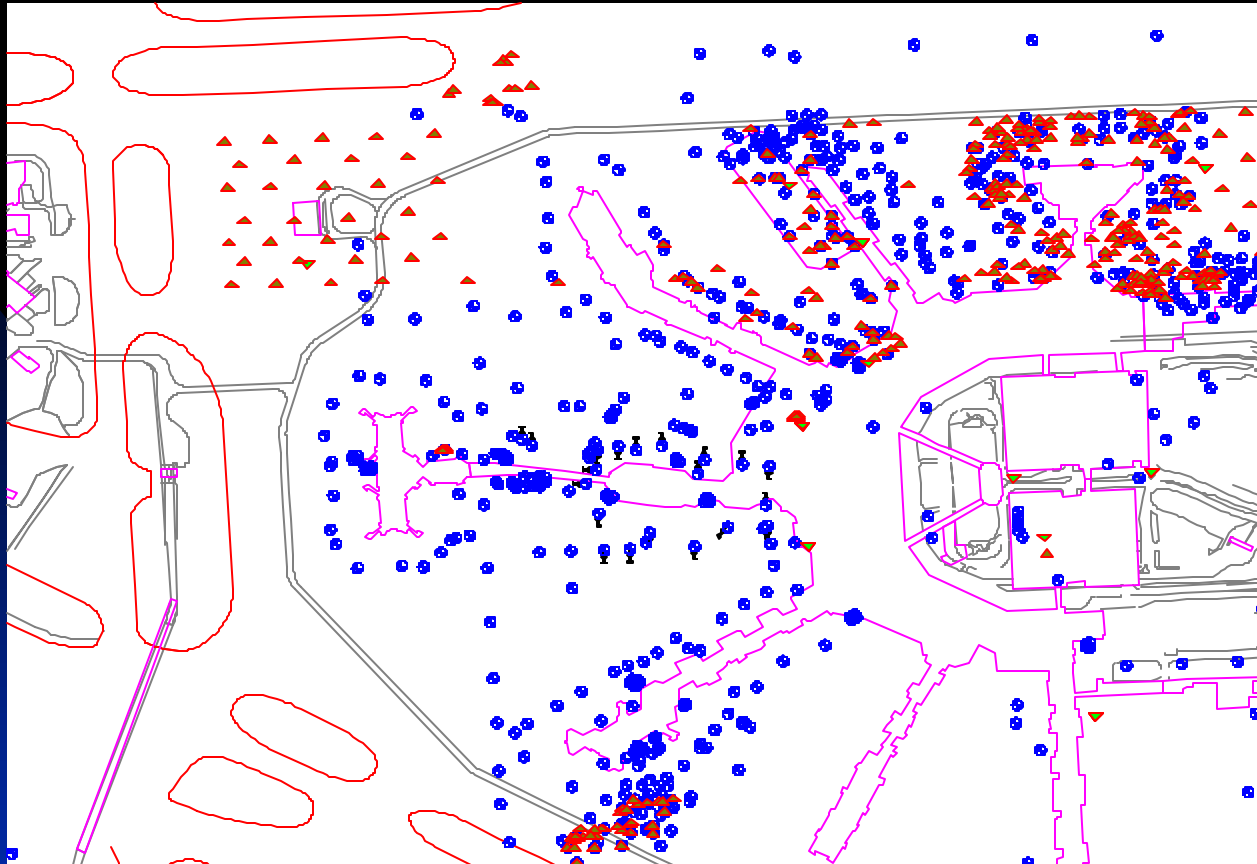




- Implemented a fuel line testing procedure to prove the integrity of the fuel hydrant system and extend the useful life of the existing lines beyond 2010.



- Develop/implement a computerized fuel management system for domestic/bonded fuel that is acceptable to US Customs and/or has been successfully implemented at other airports.
- MIA currently dispenses > 2 Million gallons of jet fuel through 25 miles of underground fuel piping.



- Develop a graphical database system (GIS) that will allow for immediate evaluation of the existing and historical environmental condition of a site.



- Develop a state of the art fire suppression system for the fuel tank farm.



- Develop an airport wide Risk Based Corrective Action Plan (RBCA) for MIA.



- Identified the need to reduce the amount of soil handled by MDAD.
- Negotiated three disposal deals for soil with the Department of Solid Waste Management.



- Develop specification P-160 so the contractor can continue working through a contaminated site.



- Petroleum cleanup at sites within Concourses “E”, “F”, “C” and future “J” have been implemented without major interruption of service.
- These efforts are being done ahead of the CIP to reduce the impact of the contamination on the construction of the facilities.



- Developed dewatering master plans and Storm Water Pollution Prevention Plan (SWPPP) to control erosion & turbidity during construction.
- This plan is designed to control the contamination plumes while permitting development.



- To prevent future environmental damages MIA has implemented a Tenant Environmental Auditing Program



- Because accidents and mother nature can cause unexpected spills the MIA has implemented spill prevention and response plans to deal with these situations.



- Preconstruction assessments are performed to determine the environmental condition of the site prior to design and construction.



- Baseline and Exit audits are performed to establish the existing environmental condition of a lease hold before the tenant takes over and after the tenant leaves.



- A discovery period was developed at Miami International Airport to allow a tenant to amend their baseline audit during initial construction of a third party development.

THE NEXT STEP

The Miami International Airport is currently improving its Environmental Management System to obtain ISO 14001 Certification.

This will allow the Environmental Engineering Division to manage the environmental risk associated with an active airport.