

# AUS West Jet Fuel Storage Facility Overview



City of Austin Environmental Commission



Austin-Bergstrom  
International Airport



# AUS Campus and Facilities



- 4,242 acres owned by the City of Austin
- 2 wide spaced parallel runways simultaneous landings and takeoffs
  - 18L-36R Length of 9,000 ft. (CAT IIIb runway)
  - 18R-36L Length of 12,250 ft.
- 37 Aircraft Gates – 950,000+ s.f.
- 1.6M S.F. Car Rental Facility
- 18,250 Parking Spaces
- Two FBOs: 200+ based aircraft
- 25 acre cargo apron
- Hilton Hotel – 262 rooms
- Hyatt Hotel – 139 rooms
- 40 acre Texas national guard



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# Existing AUS Jet Fuel Storage Facility



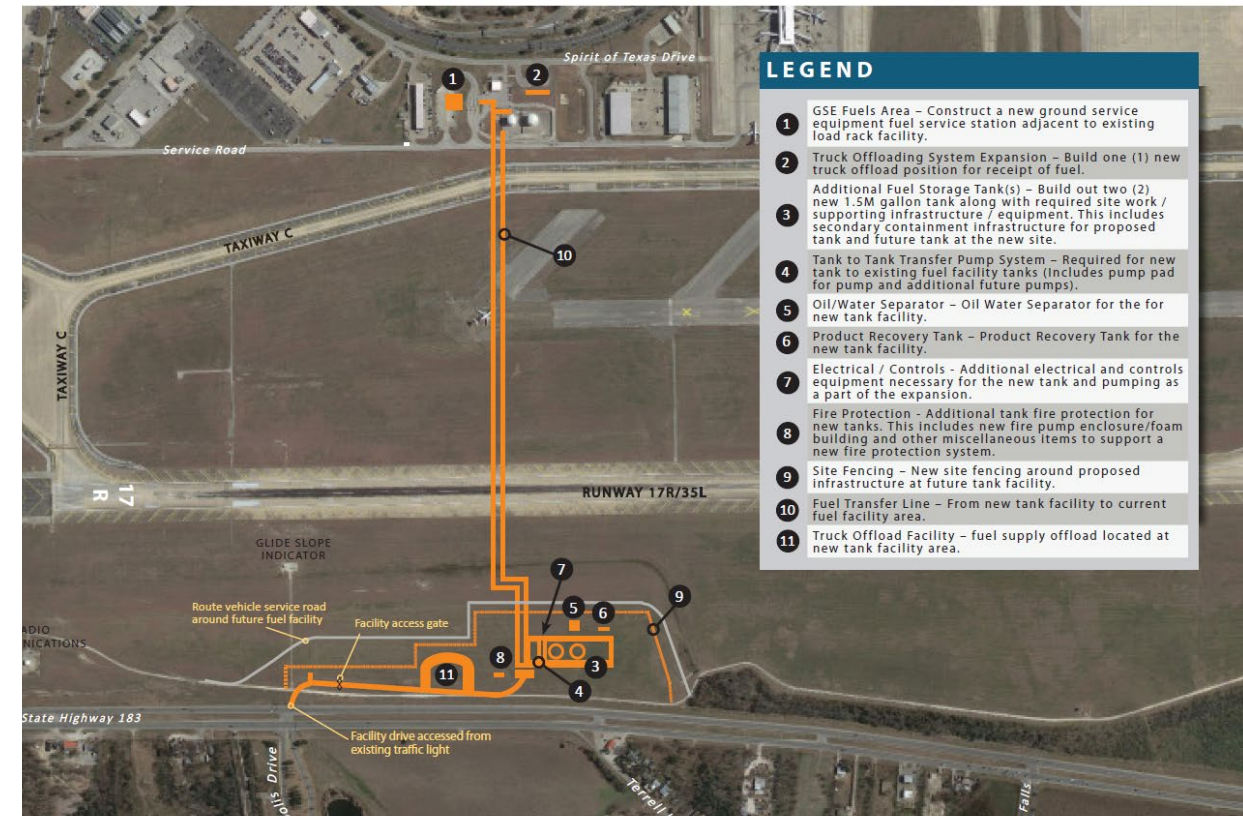
# West AUS Jet Fuel Storage Facility Overview





# West Jet Fuel Storage Facility Overview

- Tank construction materials
  - Steel tank (7/16" to 1/4" thicknesses)
    - API 650 standard
    - Cathodic protection
  - Concrete ring foundation
  - Synthetic geomembrane liner under the tank
- Containment berms
  - Concrete w/geomembrane liner
  - Fuel resistant HDPE pipe for spill containment systems



# West Jet Fuel Storage Facility Overview

- Environmental Controls
  - Containment Berm System
    - 2,448,255 gallons of spill capacity
    - Synthetic fuel resistant geomembrane liner
  - Off-loading rack spill tank
    - 28,000 gallons
    - Fuel resistant HDPE piping
      - Tanker truck capacity <8,000 gallons
  - Oil & Water Separators
    - Containment berm rain water will be inspected and discharged to a 5,000 gallon separator
    - Loading rack spill tank rain water will be inspected and discharged to a 5,000 gallon separator
  - Vegetative filter strips and rain gardens provide additional water quality treatment



Photo 2 – Containment Dike Discharge Valves

# West Jet Fuel Storage Facility Overview

- **Tank venting system**
  - Two 12” vents per tank (4 vents total)
  - Tanks are designed as atmospheric tanks
    - Vents open when receiving or sending fuel
    - Closed 99% of time outside of these operational conditions
- **Tank to Tank Distances**
  - Fire code separation requirement is 27’
  - Actual separation will be 51’
- **Tank to property line**
  - Fire code requires  $\frac{1}{2}$  tank diameter or 40’
  - 123’ to property line



# West Jet Fuel Storage Facility Overview

- Fire Safety
  - Bonded tanks to ensure static electricity doesn't cause ignition
  - Foam fire suppression system
  - Tanks designed to deflect heat
  - Lightning protection - FAA airport protocols
  - AFD inspections every 3 months





# Jet Fuel Storage Facility Permits

- **Current Permitting Summary**

- National Environmental Policy Act (NEPA) approval
- City of Austin Site & Building Permits
- Texas Pollutant Discharge Elimination Systems (TPDES) Construction Storm Water Permit
- TXDOT 183 driveway permit
- FAA Part 77 approval (objects affecting air space)
- Texas Commission on Environmental Quality (TCEQ) Air Authorizations
- AFD Hazardous Materials Permit
- Nationwide Permit (wetland restoration)

- **Additional Permits or Plans Required to Operate**

- Spill Prevention Control and Countermeasures (SPCC) Plan
- Facility Response Plan that is registered with the EPA Region VI
- TPDES Industrial Storm Water Permit & Pollution Prevention Plan
- Waste disposal regulations
- Emergency Planning Community Right-to-Know submittals to TCEQ (Texas Tier II)
- City of Austin Watershed Department Storm Water Discharge Permit



# West Jet Fuel Storage Facility Overview

- **Leak detection**

- High level alarm w/auto shutdown systems
- Overfill protection w/plug valves
- Inventory control
- Transfer line pressure testing
- API 653 tank integrity inspections
- Cathodic protection
- Frequent visual inspections driven by federal, state and local regulations

- **Spill response**

- EPA registered response plan
- Spill Control and Countermeasures Plan
- On-site spill response supplies
- Aircraft Rescue & Fire Fighting (airport fire dept.)
- AFD HAZMAT
- Contracted emergency response teams



Photo 4 – Containment Dike Liner and Wall Interface



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# Facility Regulatory Oversight

Compliance Program / Task	Program Administrator	Inspection Frequency	Inspector Affiliation	Program Summary
Storm Water Program / Annual Compliance Inspection	State of Texas	Annually	AUS Staff	Identify storm water pollution sources and implement practices to reduce and eliminate the source; inspections; State permit issued; spill prevention; spill response; training; and ABIA SWP3 member.
Storm Water Program / Facility Inspection	City of Austin Watershed Dept.	Annually	Watershed Staff	Implementing measures to protection storm water; confirm waste disposal practices; spill response; and training.
Storm Water Program / Storm Water Outfall Monitoring	State of Texas	Quarterly	AUS Staff	Monitoring outfalls during storm events to confirm that airport activities are not impacting water quality (sheens, odors, debris, sediment, etc.)
Part 139 / Inspections	Austin Fire Department / Aircraft Rescue	Quarterly	City of Austin Fire Department	Inspect fuel farm, tanker trucks, piping leaks, emergency fuel stoggage systems, bonding cables, etc.
Tank Farm Liner Inspection / Secondary Containment System Integrity Inspection	City of Austin Department of Aviation	10 years	Third Party Liner Company (TRI Environmental)	Inspected liner to confirm integrity
Tank Farm Air Emissions Authorization / Third Party Validation	City of Austin Department of Aviation	Future Frequency To be determined	Third Party Engineering Firm (AECOM)	Validated air emissions from existing facility and methodology used by the fuel farm operator to calculate emissions. Validated permit compliance.
General Environmental Compliance Audit / Audit	City of Austin Department of Aviation	Future Frequency To be determined	Third Party Environmental Engineer (ECM)	Audit confirmed facility compliance with environmental laws and industry standard practices.



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# Hazard to Aircraft Approvals



- FAA regulates all potential hazards to aircraft within these overlays.
- Federal Regulation 49 CFR Part 77 establishes standards and notification requirements for objects affecting navigable airspace.



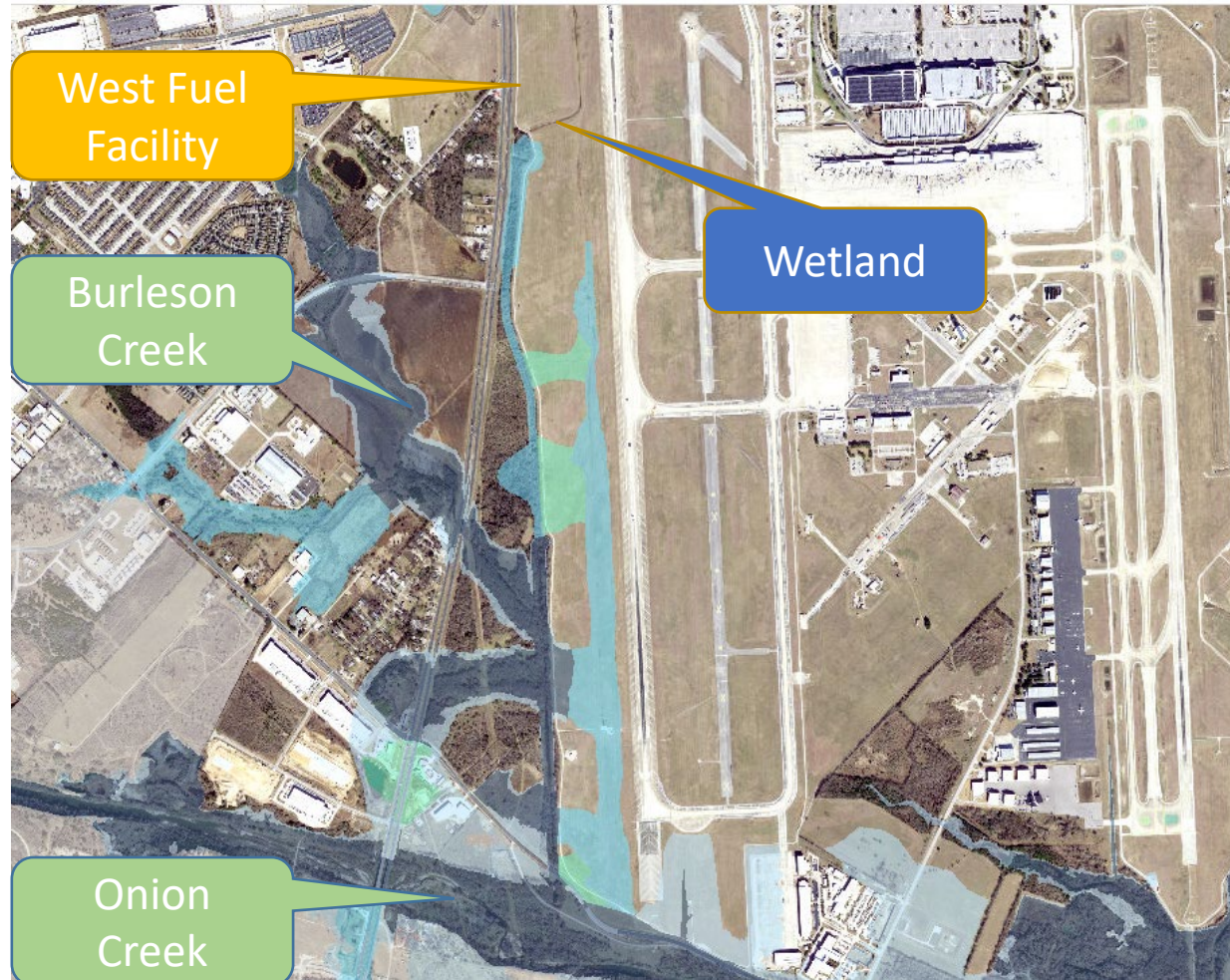
# Natural Features & Airport Infrastructure

## Creek Setbacks

- Burleson Creek 1 mile south
- Onion Creek 2 miles south

## Groundwater

- 25' to 40' below ground surface
- **Not** used for drinking water near airport



# Third Party Compliance Monitoring

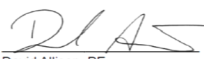
- AUS hires environmental consultant
  - Audit all compliance records
  - Permits
  - Comprehensive facility inspection
  - Final report with conclusions and recommendations
- *Annual Frequency*
- *Community Engagement*


Prepared for:  
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**Environmental Compliance Audit Report**  
**AUS Fuel Facility**  
Austin-Bergstrom International Airport  
Austin, Texas

May 2020  
Prepared By:

**ECM**  
Consultants

  
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Date: May 15, 2020

  
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# Baseline Air Monitoring

- **EPA Method 325 – Passive Samplers (PS)**
  - Used by refineries / bulk storage facilities to screen emissions
  - Effects Screening Levels (ESLs) are used to evaluate the potential exposures to air contaminants
  - Based off health effects, nuisance odors and effects on vegetation
  - Identify issues in order to take corrective action
  - Plan will be presented to west side airport neighbors



# Drilling Mud Background

- September 12, 2022 – Developer accidentally released mud/water mixture
- Covered about .02 acres of a wetland area (<1,000 sq ft.)
- Mud-water does not contain any chemicals that would cause harm to the wetland
- Developer placed temporary protective barrier around the mud-water
- No impacts to people, Onion Creek or any downstream tributaries





# Drilling Mud Event Outline

- AUS was notified immediately
- The wetland was inspected by AUS and WPD
- FAA was notified for authorization to restore wetland
- FAA & USACE provided authorization
- Developer, AUS and WPD developed restoration plan
- WPD approved restoration plan
- Site is monitored and updates posted on: <https://publicinput.com/ausfuel>





# Mud Release Restoration Plan

- **Started: Spring 2023**
  - Plan: Developer
    - Physically remove the dried mud
    - Haul mud off-site for proper disposal
    - Excavate, fill and grade affected areas
    - Plant native wetland plants and seed mix
- **Complete: Late Spring 2023**
- **Restoration Team:** AUS Environmental Affairs, Watershed Protection, AUS Wildlife Management, FAA & Army Corps of Engineers and Developer – AUS Fuel LLC.



# Thank You!

Follow progress of  
the program at  
[AustinTexas.gov/AEDP](https://AustinTexas.gov/AEDP)

AEDP Contracting &  
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