

**Spill Response
Training &
Stormwater
Pollution Prevention**



**LANCASTER
AIRPORT**

TRAINING OBJECTIVES

- Spill Response Training
- EPA
- Importance of Preventing Stormwater Pollution
- Pollution Prevention
- Control Measures



SECTION ONE: Spill Response at Lancaster Airport

Lancaster Airport's Fuel Storage Areas & Mobile Fuelers

Fuel Farms:

- Alliance Aviation Fuel Farms have: 2-10,000 Jet-A tanks, 1-12,000 avgas tank connected to a self-serve pump.
- Alliance Aviation on Millport Road: 2-12,000 Jet-A tanks.
- Maintenance Fuel tank – 3,000 auto gas and diesel.

Mobile Fuelers:

100LL “New Truck”: Bravo 5
100LL “Old Truck”: Bravo 4
JET-A “New Truck”: Bravo 3
JET-A “Old Truck”: Bravo 2

Jet A Properties



Colorless to straw colored in appearance



Similar to Diesel or Kerosene



Largest Hazardous Material at all major airports



Floats on Water



Flash point of 100-140 Degrees F



Eye and Skin Irritant



More flammable when atomized



Slippery



Jet A-1 Symbol

AVGAS 100LL Properties



Similar to
Gasoline



Highly
Flammable



100LL Octane



Flash point at -43
Degrees F



Blue Tint
Additive



Fixed Based
Operators (FBOs)

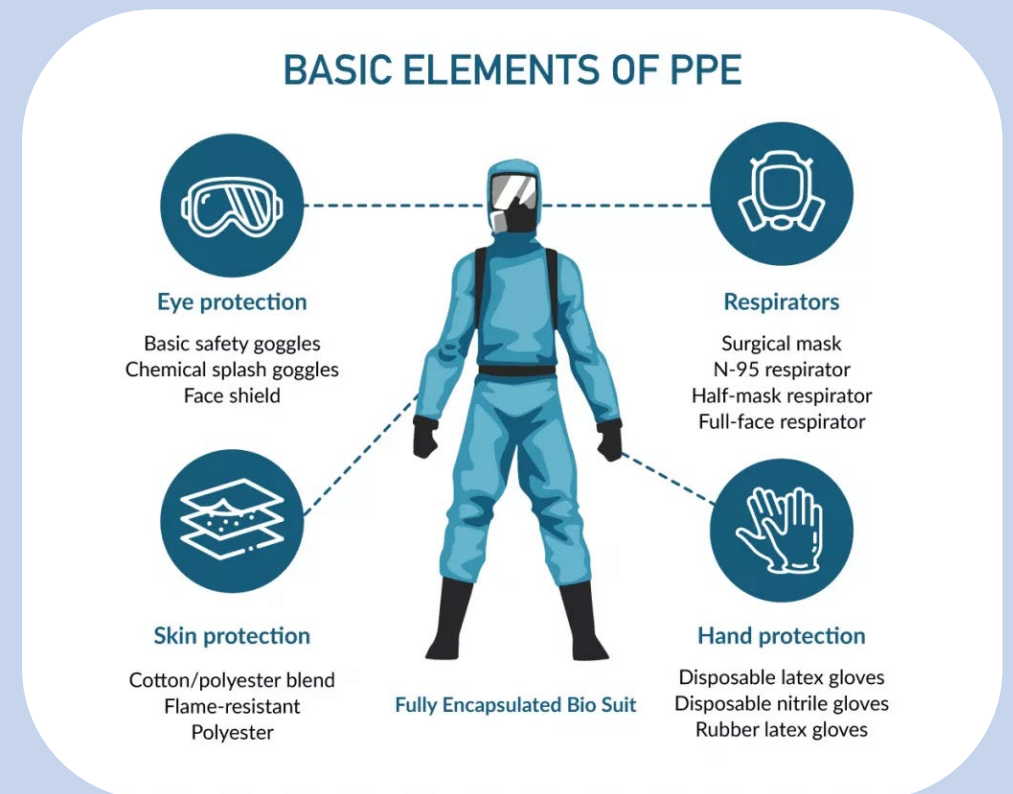
Fuel Spill Prevention

- Equipment is in acceptable operating condition.
- Fueling operations are performed in accordance with regulations and standards.
- Know where extinguishers, fire prevention systems, and SPILL KITS are located.
- Fire extinguisher training.



Minor Spill Control and Clean Up

- Stop the fuel safely.
- Use a metal container and not plastic (Static electricity).
- Use Personal Protective Equipment (PPE)
 - ✓ Gloves
 - ✓ Eyewear
 - ✓ Footwear
 - ✓ Safety Goggles
- Dispose of all rags, absorbent, etc. in a fireproof/oily can.
- Follow Company Safety Protocol.
- Notify your Supervisor & LAA Operations.



Moderate to Major Fuel Spill Assessment & Immediate Action plan

1. Shut down ignition sources (motors, electrical circuits, open flames etc.)
2. Stop flow of product only when it is safe to do. (Use emergency shut-offs when available.)
3. Determine if there is any immediate threat to human life and environment; evacuate personnel and citizens as necessary. Keep safety area secure. Close off any storm drains in the area. Conserve property.

Notification Process:

1. Fire and Police as necessary
2. Lancaster Airport Authority
 - I. Operations Director (717) 538 1601
 - II. Maintenance Supervisor (717) 892-0175
 - III. Lancaster Airport Authority Office 8AM-4:30PM Monday-Friday (717) 569-1221
3. DEP for large scale spills
 - I. 24/7 DEP Emergency Line: 1 (800) 541-2050
 - II. Southcentral Regional Office: (717) 705-4700

For small spills, where contacting fire and police is not necessary, contacting only the Lancaster Airport Authority will be sufficient.



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Containment and Control Procedures:

1. After flow of fuel has been stopped, place fire extinguishers upwind of the spill.
2. Clear fuel spill area of all personnel.
3. Retrieve absorption materials from either fuel spill trailer or Alliance aircraft refuelers while someone else monitors fuel spill site at a safe distance.
4. After clean up materials are retrieved, clean up can begin.
 1. While one person monitors fuel spill with extinguishers in hand, others may start clean up. Commence clean up by working on the outside of the fuel spill inward. **At no time should personnel enter the fuel spill area.**
 2. After clean up is complete, proper disposal of fuel spill material shall be coordinated with LAA staff.



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Procedure for DEP Contact

- If necessary and after contacting immediate authorities; relay the following to the DEP:
 - Location of the spill
 - Material spilled
 - Whether the release has been contained
 - Approximate size of the spill
 - Aircraft and/or equipment involved
 - Whether employees are capable of clean up



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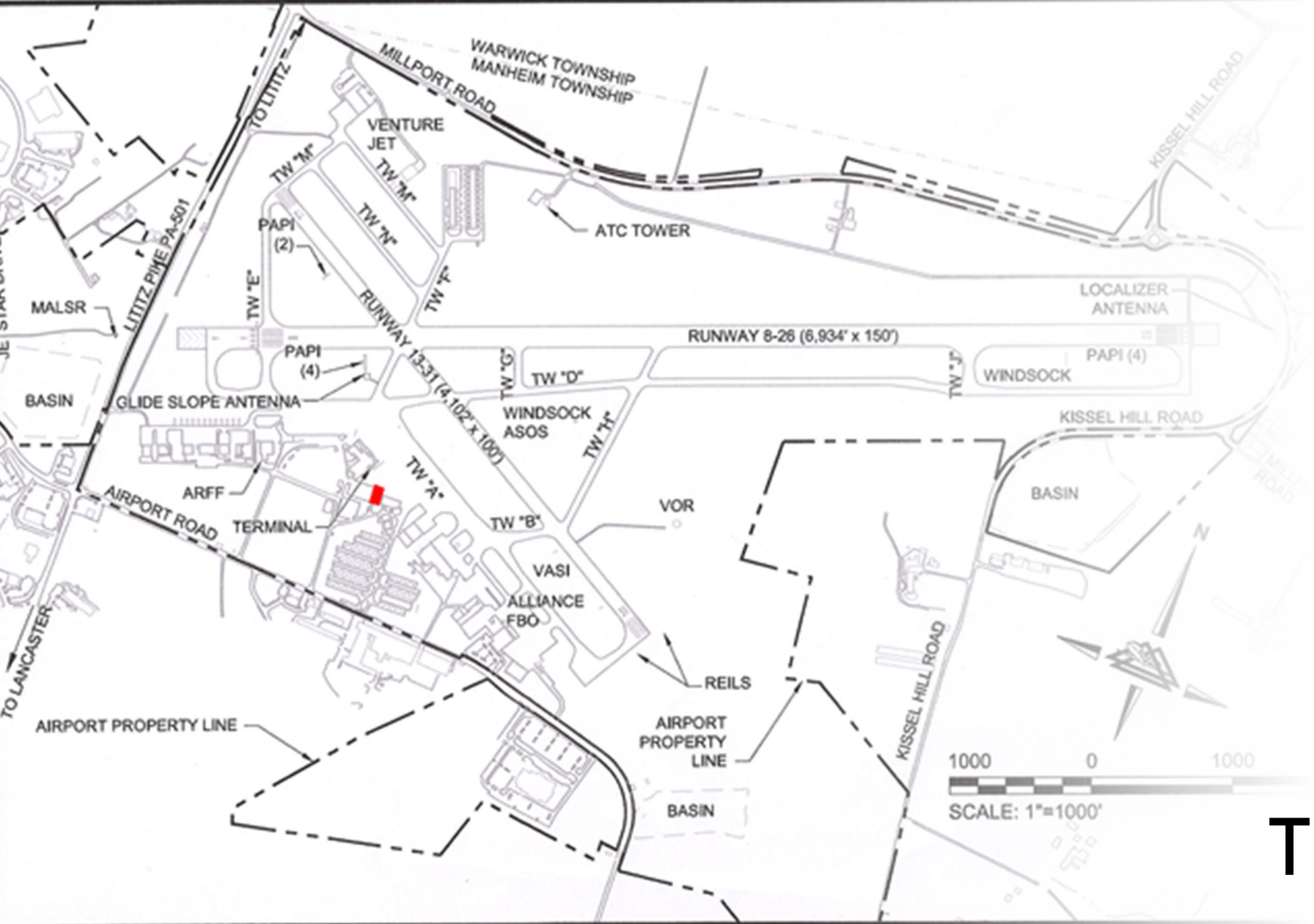
Resources Available:

- Spill kits are paramount for initial spill.
- Absorbent which can be quickly dispatched to the scene. Early notification is the key.
 - *Sphag Sorb*
 - Pig blankets
 - Containment walls
 - Shovels for absorbent and possibly sand/dirt
 - Brooms
 - Sweepers
 - Additional personnel



Fuel Spill Containment Trailer





Fuel Spill Containment Trailer Location

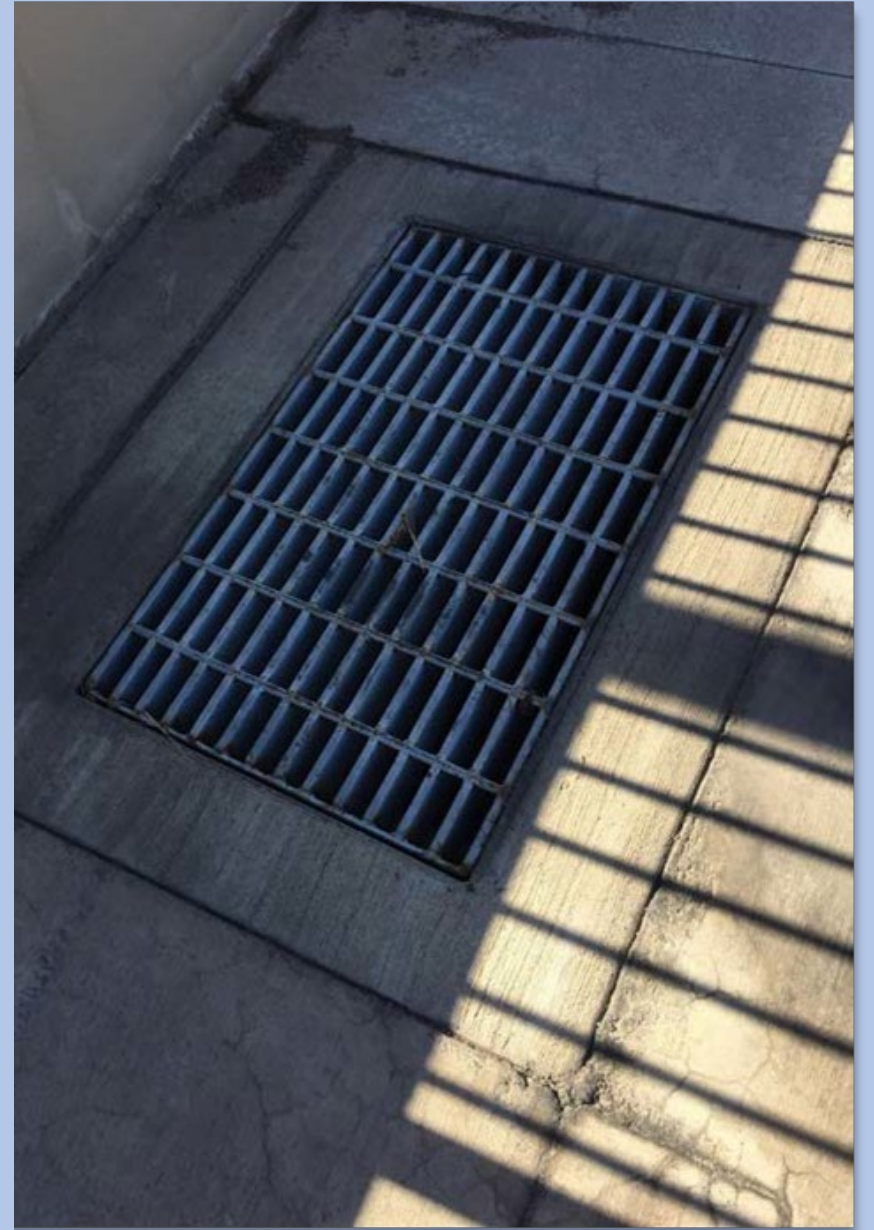
1 Gallon of Water



20 Gallons of Water



Where should fuel never go?



SECTION TWO: Stormwater

WHAT IS STORMWATER?

- Surface runoff from rain or snow melt that enters streams and rivers via storm drains or open drainage ways **WITHOUT** treatment



WHY STORMWATER QUALITY MATTERS!

- **Healthy waterways:** Polluted stormwater harms aquatic life, impacting recreational activities and ecosystems.
- **Clean drinking water:** Contaminated runoff can seep into groundwater sources, affecting the quality of our drinking water.
- **Flood protection:** Poorly managed stormwater increases flood risk, damaging property and infrastructure.
- **Economic benefits:** Clean water attracts businesses and residents, boosting local economies.
- **Community health:** Waterborne illnesses can spread through polluted waterways, affecting public health.



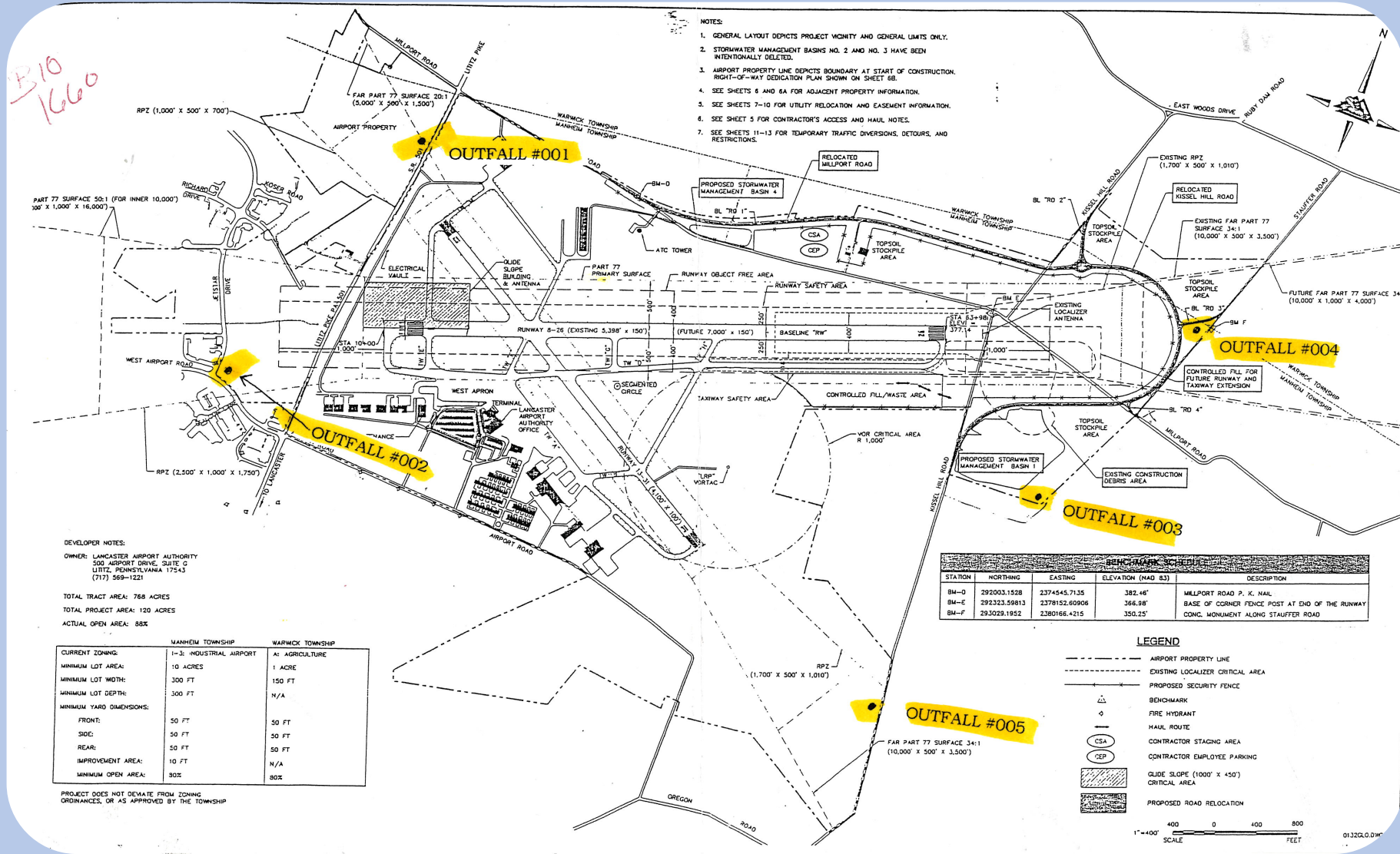


COMMON AIRPORT POLLUTION SOURCES

- Aircraft Maintenance, Fueling, and Storage
- Material Storage Areas
- Airport Fuel Systems and Fueling Areas
- Waste Handling and Disposal
- Facility Structural Improvements
- Aircraft Deicing
- Construction



LANCASTER AIRPORT OUTFALL MAP



CONTROL MEASURES

Techniques, processes, activities, or structures used to reduce the number of pollutants released into the stormwater system.

Categories of Control Measures

- Structural
- Non-structural



CONTROL MEASURES

- **STRUCTURAL** - Physical device designed and constructed to delay, capture, store, filter, or treat stormwater runoff either at the point of generation or at the point of discharge. Example: Oil water separator.
- **NON-STRUCTURAL** - Dependent upon behaviors and are typically intended to reduce rather than eliminate stormwater pollution sources.



Lancaster Airport Facility Wide Control Measures

Targeted Activities

- Generally applicable to all industrial operations with potential to impact stormwater.

Targeted Pollutants

- Fuel
- Oils
- Solvents
- Cleaning
- Solutions
- Paint

Key Approaches

- Keep outside areas maintained
- Conduct regular inspections
- Train employees/ contractors in stormwater pollution prevention techniques
- Maintain Spill Response Equipment

Aircraft, Vehicle, And Equipment Maintenance Control Measures

Targeted Activities

- Vehicle maintenance
- Aircraft maintenance
- Equipment maintenance

Targeted Pollutants

- Fuels
- Oils
- Grease
- Solvents
- Soaps
- Detergents
- Battery Acid
- Antifreeze
- Paint

Key Approaches

- Conduct maintenance indoors, or in covered area
- Using drip pans with leaky equipment
- Drain fluids if prolonged storage is anticipated
- Collect and properly dispose of all fluids
- Conduct Preventative Maintenance

Vehicle Equipment Cleaning Control Measures

Targeted Activities

- Vehicle equipment washing
- Equipment degreasing

Targeted Pollutants

- Fuels
- Oil
- Grease
- Solvents
- Soaps
- Detergents
- Vehicle fluids

Key Approaches

- Use designated area
- Use dry washing techniques
- Recycle washwater or discharge appropriately
- Cover catch basins

Aircraft, Vehicle, And Equipment Storage Control Measures

Targeted Activities

- Fuel, chemical, and equipment storage
- Cargo handling

Targeted Pollutants

- Fuel
- Oil
- Solvents
- Hydraulic Fluid

Key Approaches

- Store materials indoors or under cover
- Provide berming or secondary containment
- Drain fluids before long- term storage
- Perform and document periodic inspections
- Designate storage areas away from storm drains

Material Storage Areas Control Measures

Targeted Activities

- Material Storage
- Chemical Storage
- Cargo Handling

Targeted Pollutants

- Fuels, oils, grease
- Solvents
- Soaps, detergents
- Battery acid
- Deicing chemicals
- Paint
- Pesticides
- Miscellaneous cargo

Key Approaches

- Conduct loading and unloading under cover whenever possible
- Store materials indoors or under cover
- Transfer materials in paved areas, away from storm drain inlets
- Contain and absorb leaks/spills that occur during material transfer
- Provide berming or secondary containment
- Perform and document periodic inspections

Airport Fueling Systems And Fuel Areas Control Measures

Targeted Activities

- Aircraft, vehicle, and equip fueling
- Fuel Storage

Targeted Pollutants

Petroleum hydrocarbons

- Jet A
- AVGAS 100LL
- Diesel/Biodiesel
- Blended Ethanol
- Unleaded Gas

Key Approaches

- Provide Cover and Berms or Secondary Containment for Fueling Areas
- Install and Maintain Proper Equipment for Fuel Dispensing and Tank Monitoring
- Perform and Document Periodic Inspections

Building and Grounds Maintenance Control Measures

Targeted Activities

- Building and grounds maintenance

Targeted Pollutants

- Pesticides
- Herbicides
- Fertilizers
- Sediment
- Landscape waste

Key Approaches

- Limit use of pesticides, herbicides, and fertilizers
- Follow manufacturer's directions for use
- Contain and dispose of all landscape wastes
- Keep paved surfaces cleaned and swept – dry methods
- Eliminate building wash down
- Eliminate pavement wash down
- Clean storm drain catch basins regularly

Waste Handling and Disposal Control Measures

Targeted Activities

- Waste Handling

Targeted Pollutants

- Fats Oils Grease
- Floatable Debris Battery Acid Paint
- Solvents Trash Juice

Key Approaches

- Keep Outside Areas Clean & Free of Litter, Garbage, and Floatable Debris
- Dispose of Materials in a Timely Fashion
- Keep Dumpster and Trash Lids Closed
- Provide an Adequate Number of Trash Receptacles Throughout the Facility
- Comply with Regulatory Requirements for Handling, Storage and Disposal of Hazardous Wastes

Facility Structural Improvements Control Measures

Targeted Activities

- Construction

Targeted Pollutants

- Fuels/Oils/Grease
- Floatable Debris
- Soaps/Detergents
- Paint
- Solvents
- Sediment

Key Approaches

- Comply with Regulatory Requirements
- Obtain Approval through the LAA and Permitting/Zoning regulators.



Training Concluded

[Submit Form Here](#)

