

How “Not” to Manage an Oil and Hazardous Substance Spill Prevention and Response Program

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Petroleum Partners Project Sites

Environmental Plans and Training



Objectives

- O&HS SPR Plans
- How “Not” to Manage an O&HS SPR Program
 - Common mistakes
 - Odds and ends
- Q&A



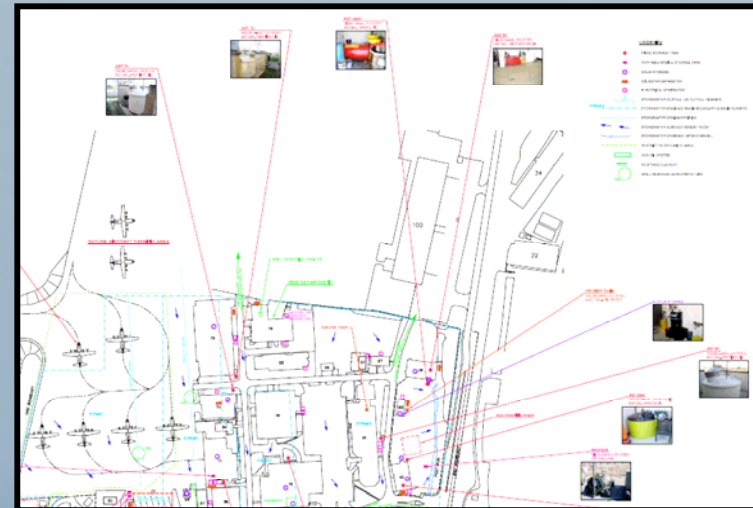
Oil Storage Inventory and Facility Diagram

ENSAFE
PCCI
Petroleum Partners

S/N Plan
McEntire Air National Guard Station - South Carolina Air National Guard
Eastover, South Carolina
January 2006

Table 3-1
McEntire Air National Guard Station - South Carolina Air National Guard
Facility Oil Storage Inventory and Hazard Identification
Aboveground Storage Tanks

Building No./Building Function	Product Stored	Container Capacity (gal)	Container/ Piping Material	Double-Walled Tank/Pipe	Year Installed	Good Engineering Practices	Type of Failure	Lighting/ Fencing*	CR1/CR2/ CR3/CA (gal)	FD/D/R	Containment or Diversion Structure
210/Vehicle Maintenance Shop	MOGAS	10,000	Steel/Steel	Y/UK	UK	Clock Gauge, Inside Fenced Area	Rupture	Y/Y	NA/NA/ 10,000/ > 30,000	Immediate Vicinity/Grass	Double-Walled (ISC)
210/Vehicle Maintenance Shop	Diesel	10,000	Steel/Steel	Y/UK	UK	Clock Gauge, Inside Fenced Area	Rupture	Y/Y	NA/NA/ 10,000/ > 30,000	Immediate Vicinity/Grass	Double-Walled (ISC)
210/Vehicle Maintenance Shop	Used Oil	400	Steel/NA	Y/NA	1995	Dip Stick, Labeled, Spill Bucket	Rupture	Y/Y	NA/NA/400/ > 400	Immediate Vicinity/Concrete Pad	Double-Walled (ISC)
251/Prepulsion	Used Oil	400	Steel/NA	Y/NA	UK	Labeled, Spill Bucket	Rupture	Y/Y	NA/NA/400/ > 400	Immediate Vicinity/Grass	Double-Walled (ISC) and Concrete Dike (337 gal)
253/Maintenance Hanger	Reclaimed JP-8	400	Steel/NA	Y/NA	1995	Labeled, Spill Bucket	Rupture	Y/Y	NA/NA/400/ > 400	Immediate Vicinity/Grass and Asphalt	Double-Walled (ISC)
253/Maintenance Hanger	Hydraulic Fluid	400	Steel/NA	Y/NA	1995	Labeled, Spill Bucket	Rupture	Y/Y	NA/NA/400/ > 400	Immediate Vicinity/Grass and Asphalt	Double-Walled (ISC)
254/Water/Fire Pumping Station	Diesel	2 @ 250	Steel/ Copper	N/N	UK	Inside Locked Building	Rupture	Y/Y	NA/NA/250/ None	Immediate Vicinity/Concrete Floor	Inside Building
345/Engine Test Cell	JP-8	2,500	Steel/Flex Hose	N/N	1991	Labeled, Sight Gauge	Rupture	Y/Y	2,750/ 4,000/NA/ 3,721	Immediate Vicinity/Concrete	Concrete Dike
858/Utility Vault	Diesel	500	Steel/ Copper	N/N	UK	Spill Bucket	Rupture	Y/Y	NA/NA/500/ 500	UK-40 w/Ditch	Steel Dike
961/Dining Hall and Joint Medical Facility	Used Cooking Oil	350	Steel/NA	N/NA	UK	None	Rupture	Y/Y	385UK/NA/ None	Southeast/ 50 ft Storm Drain Inlet	None



Inspection/Record-Keeping

API Standard 570 Inspection Report
and
API RP1110 Pressure Test Report
For Calendar Year 1999

in accordance with

State of Florida
Florida Administrative Code
Rule 62-761

Prepared for
Tyndall AFB

and

Defense Energy Support Center
DESC-FQ



Prepared by
Endress+Hauser
Coggins Systems, Inc

DEPARTMENT OF THE AIR FORCE
AIR FORCE CENTER FOR ENVIRONMENTAL EXCELLENCE
ENVIRONMENTAL RESTORATION DIVISION, BROOKS AFB, TEXAS

API 653 TANK INSPECTION – TANK 6047

Tyndall AFB, Panama City, Florida
AFCEE Prime Contract No. F41624-01-D-8549
Delivery Order No. 01

15 July 2002

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Used Cooking Oil

- A common oversight
 - Defined as a storage container
 - Inspections
 - Training



Used Cooking Oil – What “Not” To Do



Used Cooking Oil – What “Not” To Do



Used Cooking Oil – What To Do



Transformers, Substations, and Generators

- Oil-filled electrical equipment
 - General containment/diversion
 - Inspections
- Internal tank for generator
 - Specific containment
 - Inspections



Transformers, Substations, and Generators – What “Not” To Do



Transformers, Substations, and Generators – What “Not” To Do



Transformers, Substations, and Generators – What “Not” To Do



Transformers, Substations, and Generators – What To Do



Impermeable Containment

- Deteriorating or failed
 - Concrete surfaces
 - Expansion joint seals
 - External liners
 - Coatings



Impermeable Containment – What “Not” To Do



Impermeable Containment – What To Do



Mobile and Portable Containers

- Containment
- Placement
- Inspections



Mobile and Portable Containers – What “Not” To Do



Mobile and Portable Containers – What “Not” To Do



Mobile and Portable Containers – What To Do



Piping and Flex Hoses

Piping and flex hoses pose the second most significant risk of fuel release



Piping and Flex Hoses – What “Not” To Do



Piping and Flex Hoses – What “Not” To Do



Piping and Flex Hoses – What “Not” To Do



Piping and Flex Hoses – What “Not” To Do



Piping and Flex Hoses – What To Do



Piping and Flex Hoses – What To Do



Pipe Support Design

- Properly design pipe supports to:
 - Minimize abrasion and corrosion
 - Allow for expansion and contraction



Pipe Support Design – What “Not” To Do



Pipe Support Design – What “Not” To Do



Pipe Support Design – What “Not” To Do



Pipe Support Design – What To Do



Tank and Piping Protection

- Ensure oil storage and transfer elements are protected from vehicular activity
 - Traffic routing
 - Warning signage
 - Barriers
 - General placement



Tank and Piping Protection – What “Not” To Do



Tank and Piping Protection – What “Not” To Do



Tank and Piping Protection – What To Do



Tank and Piping Protection – What To Do



Hydrant Pits and Shop-Fabricated Fuel Tanks

- Surface and ground water intrusion
- Inspection
- Shop-fabricated fuel tank management



Hydrant Pits and Organizational Fuel Tanks – What “Not” To Do



Hydrant Pits and Organizational Fuel Tanks – What “Not” To Do



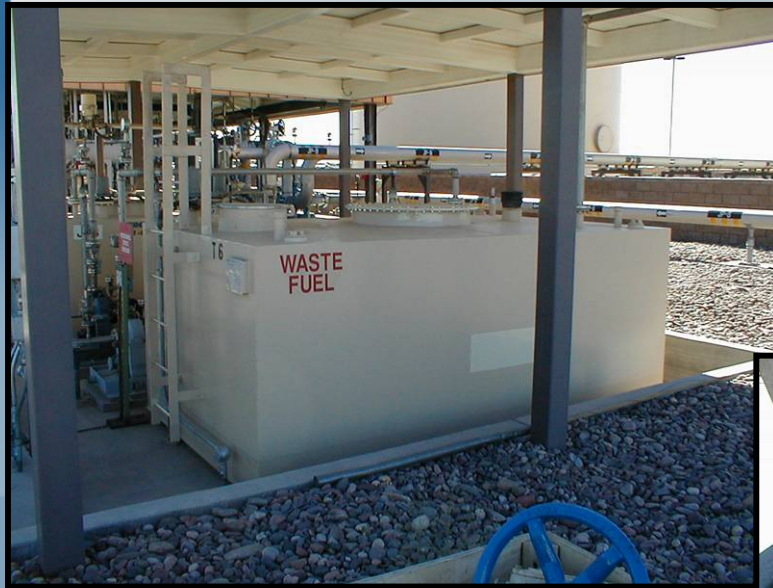
Hydrant Pits and Organizational Fuel Tanks – What “Not” To Do



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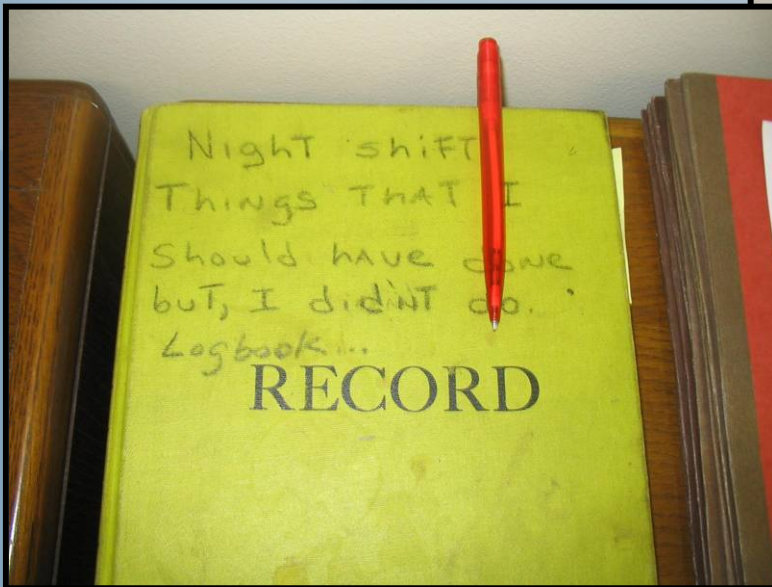


Hydrant Pits and Organizational Fuel Tanks – What To Do

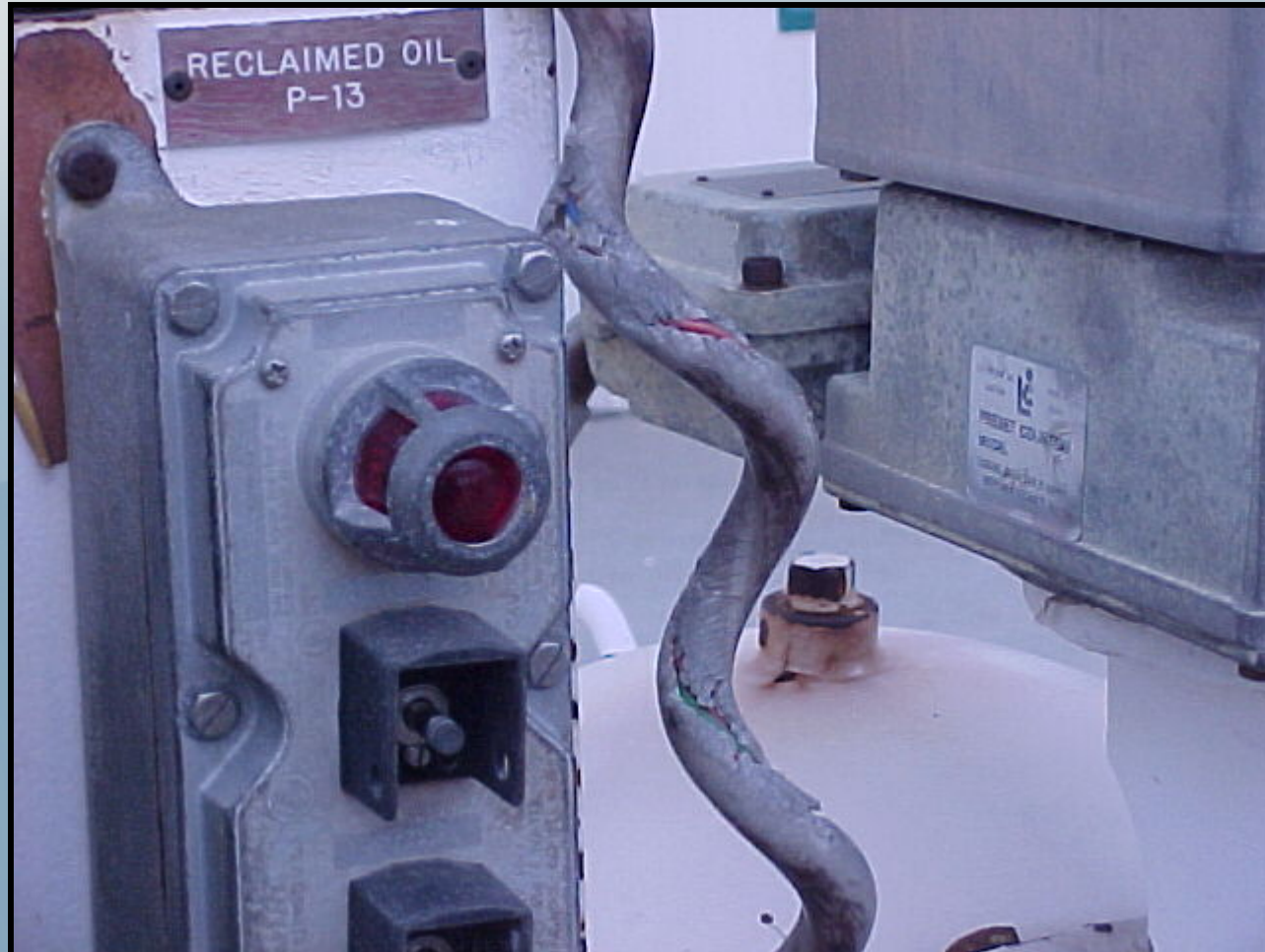


Odds and Ends

- A grab bag of what "not" to do
- A grab bag of what to do



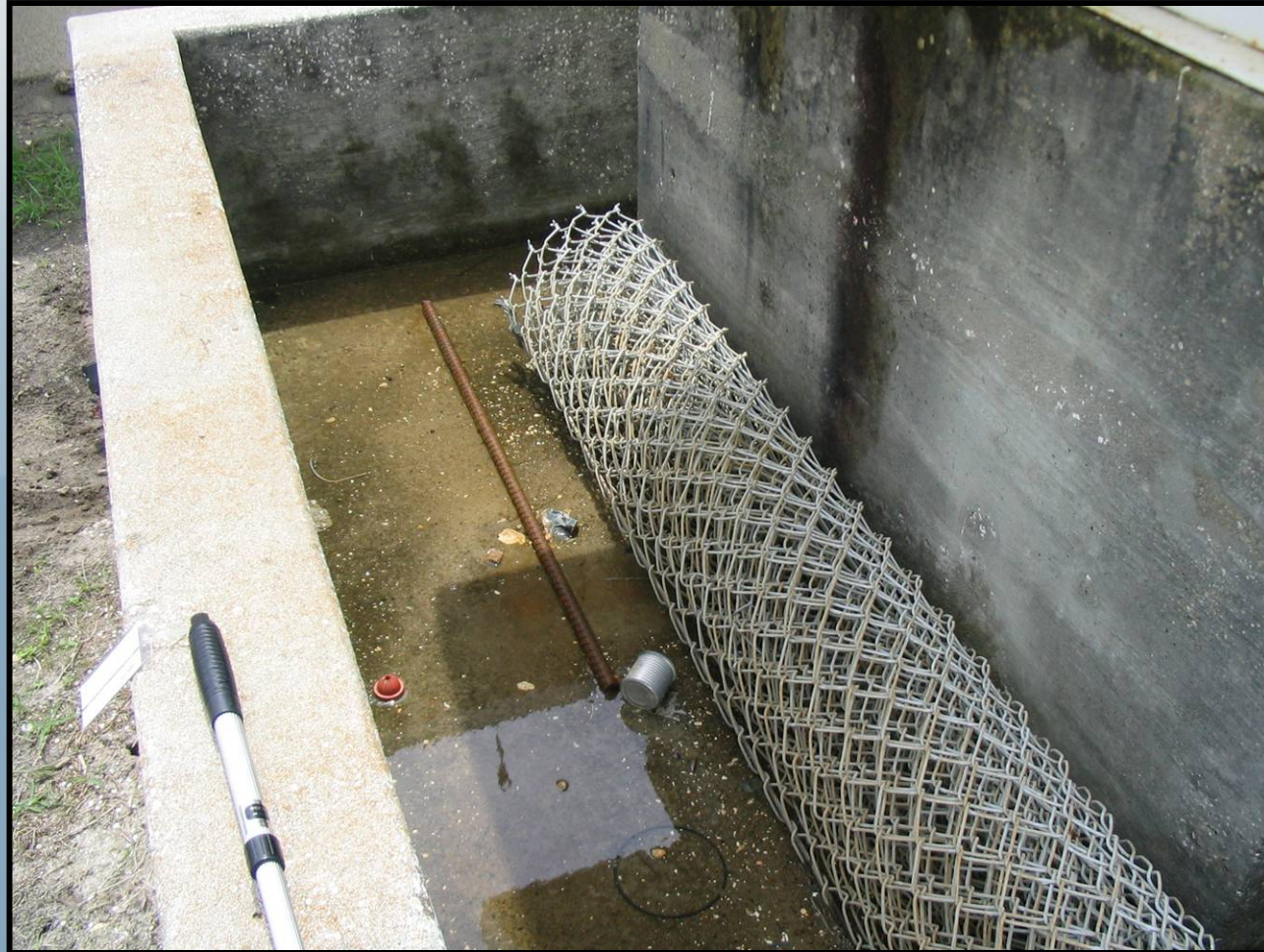
Odds and Ends – What “Not” To Do



Odds and Ends – What “Not” To Do



Odds and Ends – What “Not” To Do



Odds and Ends – What “Not” To Do



Odds and Ends – What “Not” To Do



Odds and Ends – What “Not” To Do



Odds and Ends – What “Not” To Do



Odds and Ends – What To Do



Odds and Ends – What To Do



Odds and Ends – What To Do



Odds and Ends – What To Do

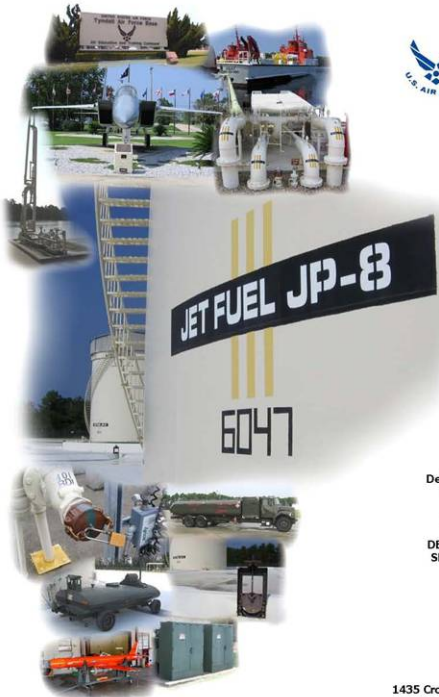





Closing

Q & A


SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN

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