



U.S. DEPARTMENT OF ENERGY
Strategic Petroleum Reserve
Project Management Office
New Orleans, Louisiana

**SHELL PIPELINE COMPANY LP
FY 2018 ANNUAL LEASE
PERFORMANCE EVALUATION OF THE
ST. JAMES (SUGARLAND) TERMINAL
(DE-RL96-97PO70010)**



October 24 & 25, 2018

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SECTION A - INTRODUCTION

In accordance with the lease agreement between the Department of Energy (DOE) and Shell Pipeline Company LP (Shell), the Annual Inspection of Lessee's activities at the St. James Terminal facilities was conducted on October 24 and 25, 2018. The purpose of the inspection was to assess the operation and maintenance condition of the facility to support the DOE Strategic Petroleum Reserve (SPR) program mission of readiness for drawdown, and to ensure Shell's compliance with the terms and conditions of the Lease Agreement.

The SPR normally utilizes a three-year lease evaluation matrix for determining the scope of areas to be assessed. But due to the nearing of the end of the lease period, (Note: lease extended 2 years until December 31, 2019) all item areas listed for all 3 years listed on the matrix were assessed. The assessment areas are listed below.

1. St. James Terminal

- Cathodic Protection Records
- Tank Inspection Records
- Inhibitor Injection Records
- Dock Inspection Records
- Documentation Repairs and Construction
- Environmental Records
- Security
- Fire Protection Systems
- Property/Facilities/Tank and Dock Inspections
- Inventory

This evaluation was conducted by a joint team of DOE and Fluor Federal Petroleum Operations Company (FFPO) personnel. The Lease Agreement was the principle document used to conduct this evaluation. Interviews were conducted with Lessee's personnel (see Appendix A), a Lease Evaluation Matrix is included as Appendix B, and Lessee's site documents were examined along with physical observations made by team members during the evaluation.

The following is the complete documentation of the findings of the evaluation team.

Findings that DOE recommends for corrective action by Shell are in bold font.

Per the Lease Agreement, Shell must respond to DOE with a corrective action plan within 30 working days from the date of receiving this report.

SECTION B - DESCRIPTION OF PROPERTY

2. ST. JAMES (SUGARLAND) TERMINAL

The St. James Terminal consists of two marine docks on the Mississippi River and main terminal with six storage tanks totaling 2 million barrels (MMB) capacity, crude oil pumping stations, metering stations, with control and maintenance facilities.

- The leased property includes:
 - 105-acre terminal with 2-acre road easements.

Background

- DOE construction of St. James Terminal: 1978 – 1980.
- Location: 105-acre terminal located approximately 45 miles west of New Orleans and 30 miles southeast of Baton Rouge; and approximately 160 miles upstream from the mouth of the Mississippi River.
- Storage tanks: 6 tanks totaling 2 MMB Shell capacity.
- Marine docks: 2 marine docks; #1 Tankers and Articulated Tug Barges (ATBs), #2 Tankers.
- Pipeline distribution connections: Capline, LOCAP, Acadian River Terminal and Placid.

Contract

- St. James Sugarland Terminal Contract with Shell – DE-RL96-97PO70010.
- January 1, 1997: Original Lease; 20 years, renewed annually. Renewed annually for first 5 years.
- January 1, 2003: Contract modified to a 10-year lease, from January 1, 2003 to December 31, 2012; with one 5-year option to December 31, 2017, exercised by Shell in 2012.
- May 9, 2017: Contract modified to extend lease for 2-years, ending December 31, 2019.

Distribution Capability

- 400,000 barrels per day (BPD) delivery to tankers across docks.
- 620,000 BPD combined delivery to third-party pipelines (Plains, Capline, and LOCAP).

Marine Terminal (Configuration)

- St. James Terminal has two marine docks on the Mississippi River, which are located approximately two miles southeast of the main terminal.
 - Marine Dock #1 is configured to load crude ATBs and tanker vessels >100 thousand barrels (MB), plus inland marine barges and vessels up to 940' in length and 123,000 dwt.
 - Marine Dock #2 is capable of loading crude/products on Panamax and Medium-Range vessels (>330 MB).
- There are 6 crude tanks with a storage capacity of 2 MMB on the 105-acre facility. The primary pump station is used to perform all crude oil movements from the terminal's six tanks, whether to the SPR storage site or the neighboring LOCAP, Plains, and Capline terminals.

SECTION C - EXECUTIVE SUMMARY

An in-briefing was held with Shell personnel at St. James Terminal at the beginning of the evaluation. Shell briefed the DOE Evaluation Team on their safety program. During the in-brief, each DOE evaluator briefly described the scope of their audit. At the completion of the evaluation, an out-briefing was held to discuss the evaluation findings and the status of any pending actions. DOE noted their appreciation of time and effort Shell expended working with DOE.

In addition, DOE and Shell briefly discussed the completion of corrective actions from the previous assessment along with 2016 Facility Condition Assessment findings and Shell status of restoration activities. Shell also provided DOE with a briefing on updated drawings being worked, particularly, drawings detailing pipeline tie-in points were shown and discussed.

Actions specific to the 2017 Lease Assessment continue to be addressed. Some of these are part of the disposition of the recommended maintenance action items identified in Facility Condition Assessment Report (FCAR), an independent assessment conducted in April 2016. It was to be used as both a baseline and support for Shell lease close-out. During the lease, DOE performed annual assessments and provided recommendations to Shell regarding maintenance deficiencies and condition of the St. James Terminal. Although DOE annual assessments provided valuable information, a more in-depth analysis of the facility by an independent concern regarding the condition of the facility was required and performed.

In May of 2018, DOE and Shell met to review progress on maintenance actions items identified in FCAR. Next meeting will be in February 2019.

2017 LEASE ASSESSMENT CORRECTIVE ACTIONS FROM PREVIOUS YEAR ADDRESSED BY SHELL

Section D.I.A: **Physical Inspection of Buildings and Equipment
Miscellaneous items relating to the maintenance of the
buildings.**

2017 Findings Status (Shell comments):

2. 702 Building(Administration)

a. Interior

- Room 102 has water damage on external perimeter wall (Damaged paint & texture was removed, Re-taped walls, textured & painted)
- Room 104 light fixture needs replacement (Re-hung light fixture)
- Room 105 replace water damaged ceiling tiles & buckling floor tiles (Ceiling tiles replaced, Floor Tiles are on Order 8 to 10 day delivery on floor tiles)
- Room 111 replace stained ceiling tiles (Ceiling tiles were replaced)
- Room 114 has water damage on east wall & floor tiles (Walls were mudded, re-textured & painted. Floor Tiles are on Order 8 to 10 day delivery on floor tiles)
- Room 115 has hole in wall behind door, replace floor tiles & replace ceiling tiles (Hole was patched, Textured, Re-painted, Ceiling tiles replaced. Floor Tiles are on Order 8 to 10 day delivery on floor tiles)
- Room 116 has wall, window & floor water damaged (Water damaged walls & window repaired, textured, mudded & re-painted. Floor Tiles are on Order 8 to 10 day delivery on floor tiles)
- Room 118 replace 4 water damage ceiling tiles (Ceiling tiles replaced)
- Room 119 replace 2 water damage ceiling tiles (Ceiling tiles replaced)
- Possible roof leaks (Roof was re-tared along all seams) Window over HVAC area cracked (Plexiglass installed)

3. 703 Building ((Maintenance)

a. Interior

- Women's bathroom / locker needs an interior lock (Installed new dead bolts on both doors)
- Light Cover needed in Women's room (Needs to go to Fobb, Electrical)
- Wall tiles buckling in men's restroom / locker room (Glued, Reset & grouted – this was located in the women's restroom)
- Ceiling tiles along perimeter wall need replacing (Replaced Ceiling Tiles)
- Fobbs office needs ceiling tiles replaced (Replaced Ceiling Tiles)

- **Replace ceiling tiles in hallway near storage room (Replaced Ceiling Tiles)**

b. Exterior

- **Remove wasp nest from all exterior points of building (Nest sprayed & removed)**
- **4"x6" hole in cinder block on northeast side of building (Filled & grouted)**
- **Secure Lighting protection (Needs to go to Fobb, electrical)**
- **Secure exterior light , replace bulbs or light fixture (Needs to go to Fobb, electrical)**
- **Fix holes near foundation and repaint (Holes repaired, needs to be painted)**

Details of the 2018 observations and findings as well as recommended corrective actions are included in Section D of this report.

- Those findings with effective performance are not bolded.
- **Findings/Observations for issues that DOE recommends for corrective action by Shell are in bold font. Pictures, if available, are provided for reference.**

Per the lease agreement, Shell shall respond to DOE with a corrective action plan within 30 working days from the date of receiving this report.

1. Areas of Effective Performance:

- Rectifiers and other devices
- Cathodic Protection Records
- Inhibitor Injection Records
- Pressure Limiting Devices
- Security
- Environmental Reporting
- Operations and Maintenance Records Review
- Storage of DOE Assets & Inventory

2. **Areas Needing Improvement (recommended for corrective action):**

- Condition of Facility Buildings and Building Equipment
- Condition of Facility Parking lots and parking line striping
- Facility Retention pond, Storm water drainage equipment erosion
- Building 716 Foam pump housing
- Tank 5 excessive limestone over chime
- Fire Protection and Alarm systems
- RTU cabinets and piping equipment corrosion
- Bird droppings in fire water pump house
- Diesel tank in main fire water pump house
- Flammable materials in Building 708
- Dock equipment corrosion

Summary Listing of Items *Recommended for Corrective Action

- Section D.I.A: Physical Inspection of Buildings and Equipment**
- Miscellaneous items relating to the maintenance of the buildings, parking lots and parking spaces.
- Flammable materials in Building 708
[Pages 9 – 29]
- Section D.I.B: Physical Inspection of the Exterior of Tanks and Roofs**
- Excess Limestone on Chines
[Pages 30 - 33]
- Section D.I.C: Physical Inspection of the Fire Protection Systems**
- Building 716 foam pump housing
- General Fire protection and alarm system
- Roof issue in the Fire Water Pump House
- Diesel tank in the Fire Water Pump House
[Pages 34 - 39]
- Section D.I.D: Docks, Terminal Equipment & Systems**
- Retention pond, storm water drainage equipment
- RTU Cabinets and piping equipment
- Dock piping corrosion
[Pages 40 – 50]
- Section D.II.B: DOE Lease Agreement – Section 10, Installations, Alterations, and Removals**
- Continue repair and replacement as required to restore system as described in fire system ECP
[Pages 64 – 66]
- Section D.II.D: FIRE PROTECTION SYSTEM INSPECTION OF RECORDS**
- Continue repair and replacement as required to restore system as described in fire system ECP
[Pages 66 – 67]

SECTION D - SPECIFIC FINDINGS

Those findings with effective performance are not bolded.

Findings requiring corrective action by Shell are in bold font.

I. FACILITIES INSPECTION

A. PHYSICAL CONDITION INSPECTION OF BUILDINGS AND EQUIPMENT (ST. JAMES TERMINAL)

1. REQUIREMENTS:

Paragraph 40 of the St. James Terminal Lease Agreement states that items listed in Appendix F will be in “Caretaker Status” and will not be maintained by the LESSEE. The only buildings listed in Appendix F are the Paint Shed (Building 708) and Guard House (Building 709). Paragraph 12 of the St. James Terminal Lease Agreement requires the LESSEE, at its own expense, shall so protect, preserve, maintain, repair, and replace the leased property described in Appendix A, that the same will at all times be maintained in good repair and tenantable condition, subject, however, to ordinary wear and tear.

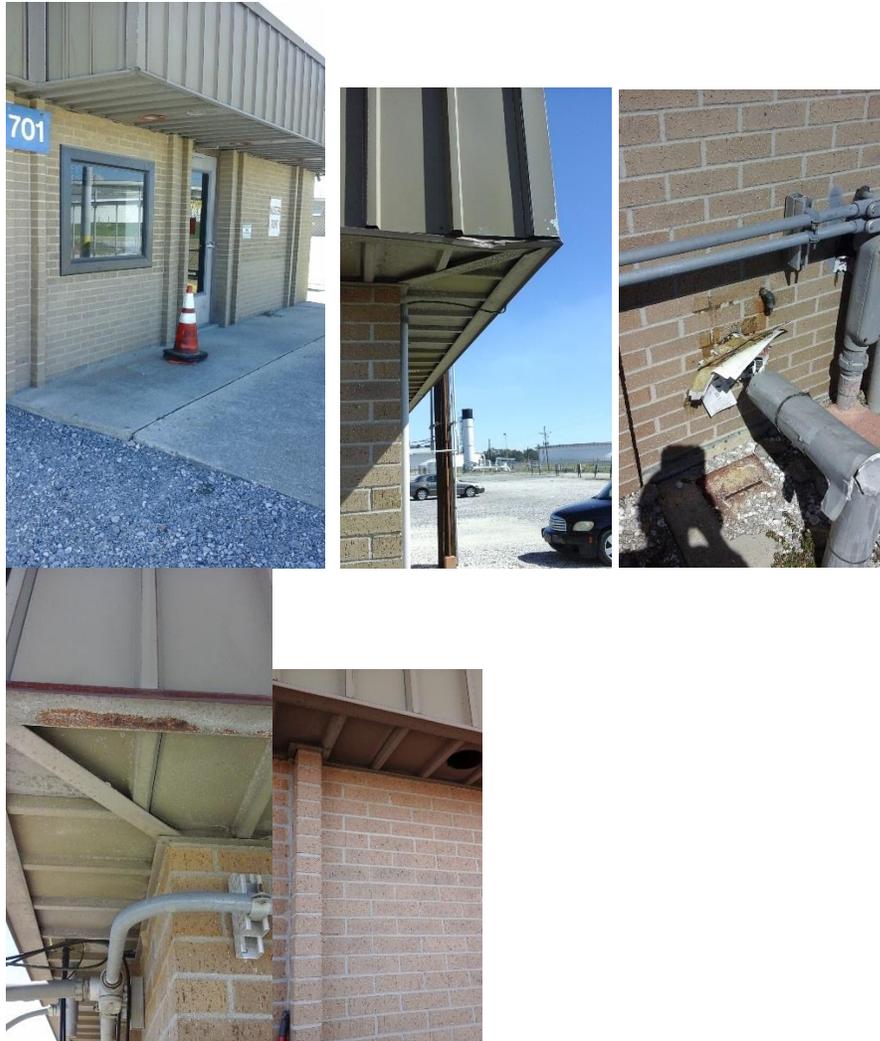
Findings:

St. James Facility Report 10/24 – 10/25 2018

1. Building 701 (Guardhouse)

Exterior:

- i. Damage to aluminum siding.**
- ii. Utility room insulation damaged.**
- iii. Eave vent missing.**



NOTE: Roof not accessed

1. Building 702 (Administration)

Interior

- i. Damaged tile at front entry**

Exterior

- i. Window over HVAC exterior door cracked.**
- ii. Building number extremely faded.**
- iii. Rust and oxidized paint on front entry door, frame, and adjoined windows.**

NOTE: Roof not accessed.



2. Building 703 (Maintenance)

Interior

- i. Spare office has water stains on floor.**
- ii. Light fixture has unsecured cover in hallway.**
- iii. Water intrusion through louver of HVAC system.**
- iv. Rust damage and cracked paint within HVAC utility area.**

Exterior

- i. Exterior walls and eaves have oxidized and peeling paint.**
- ii. Soil / gravel subsidence at rear of building.**
- iii. Rear vehicle parking area eroding.**
- iv. Oxidized paint on roll up doors.**
- v. Building parking lot and parking striping indicators eroding.**

NOTE: Roof not accessed.











3. Building 704 (Control Room)

Exterior

- i. Exterior walls and eaves have paint oxidized surfaces.**
- ii. Water barrier at foundation around the building cracking.**
- iii. Gravel/stone filled areas at the rear of building are eroding.**

NOTE: Roof not accessed.



4. Building 705 (Laboratory)

Exterior

- i. Awning, walls and metal eaves have peeling and faded paint.**

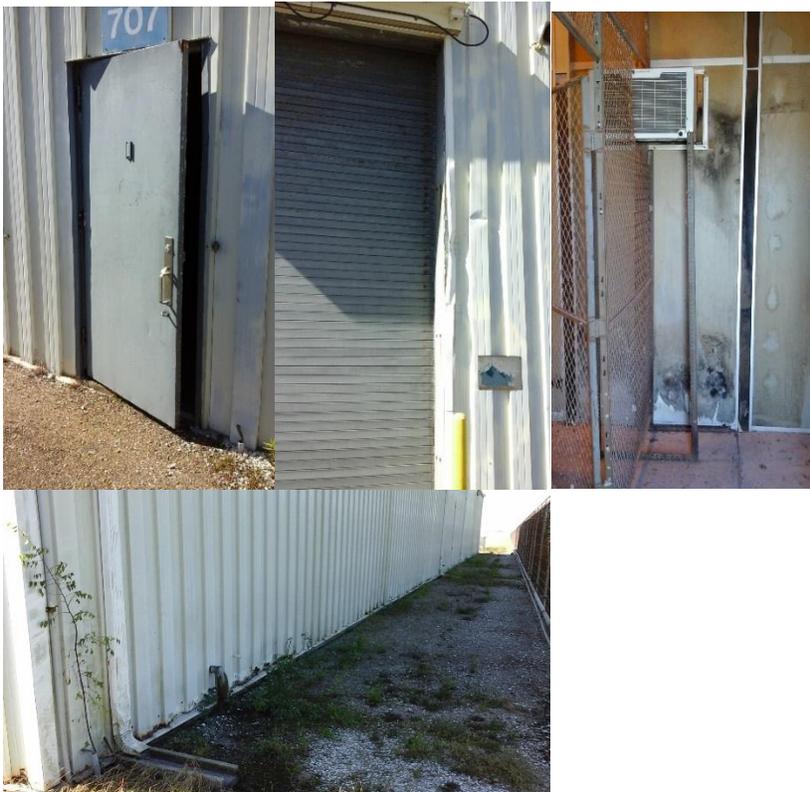
NOTE: Roof not accessed

5. Building 707 (Warehouse)

Exterior

- i. Rust at foundation and metal siding.**
- ii. North entry door not closing properly.**
- iii. Rust on metal roll up doors and frame.**
- iv. “stained area” of insulation on exterior wall near AC unit that requires investigation of cause and correction**

NOTE: Roof not accessed.





6. Building 710 (Operation Control Dock 1)

Interior

- i. Discolored ceiling tiles.

Exterior

- i. Rust on doors, door frames and window frames.
- ii. Mold on exterior surfaces.
- iii. Rust on dock railings.

NOTE: Roof not accessed.





7. Building 713 (Operation Control Dock 2)

Exterior

- i. Rust on exterior doors, door frames and window frames.**
- ii. Mold on exterior surfaces**
- iii. HVAC and positive pressure unit not working.**

NOTE: Roof not accessed.





8. Building 714 (Foam Deluge)

Interior

- i. Partially missing insulation.**
- ii. Residue of flood water inside building.**

Exterior

- i. Oxidized paint on exterior surfaces**
- ii. Building signage faded.**
- iii. Two holes in siding**

NOTE: Roof not accessed.



9. Building 715 (Foam Deluge)

Exterior

- i. Oxidized paint on exterior walls and gutters**

NOTE: Roof not accessed.



10. Building 716 (Foam Pump housing)

Interior

- i. Pump's packing leaking water.**

Exterior

- i. Rust at foundation.**
- ii. Oxidized paint on exterior stairs to fuel intake.**
- iii. Rust and oxidized paint on wall, window frames and gutter.**

NOTE: Roof not accessed.





11. Building 717 (Foam Deluge)

Exterior

- i. Oxidized paint on exterior walls and gutters.**
- ii. Building number signage faded.**

NOTE: Roof not accessed.



12. Building 718 (Foam Deluge)

Exterior

- i. Oxidized paint on exterior walls and gutters**
- ii. Building number signage faded.**

NOTE: Roof not accessed.

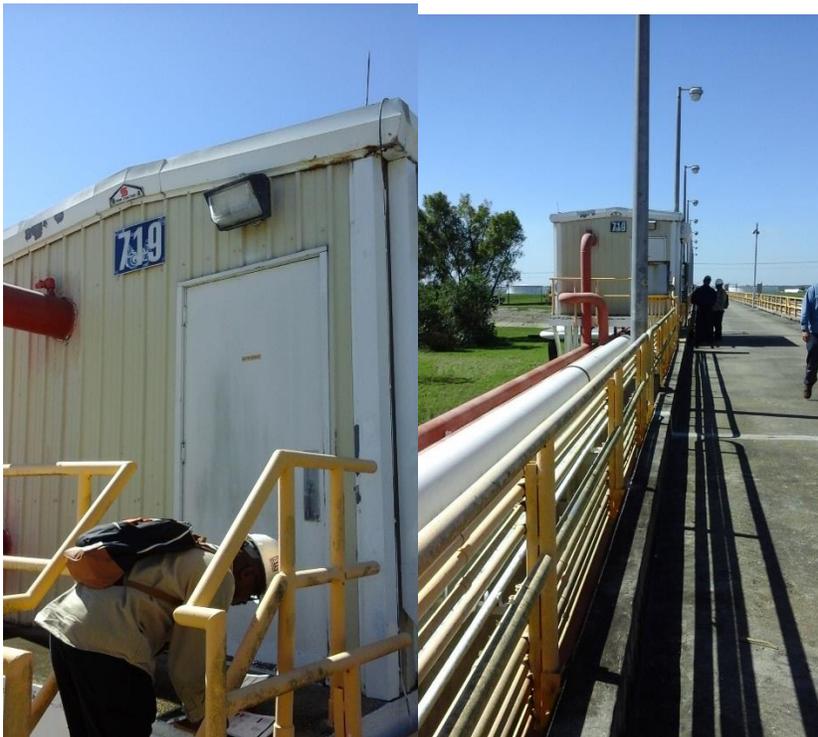


13. Building 719 (Foam pump on Dock 1)

Exterior

- i. Oxidized paint on exterior walls and gutters**
- ii. Rust and green algae/moss on railings located on docks 1 and 2.**

NOTE: Roof not accessed.



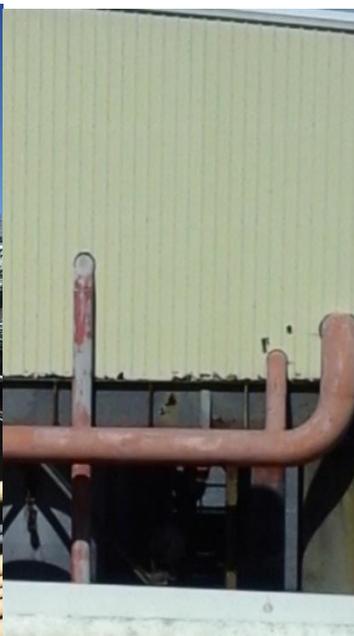


14. Building 720 (Fire Water Pump House on Dock 1)

Exterior

- i. 1 to 3 inches of rust around the metal foundation.**
- ii. Rust on the doors and door frame, metal foundation, support beams, and metal catwalks.**
- iii. Oxidized paint exterior walls, doors, and frames.**

NOTE: Roof not accessed.



15. Building 721 (Foam pump on Dock 2)

Exterior

- i. Rust on siding and foundation.**
- ii. Oxidized paint on exterior walls.**

NOTE: Roof not accessed.



16. Building 722 (5KV Switchgear)

Exterior

- i. Rust on foundation.**

NOTE: Roof not accessed.

B. PHYSICAL INSPECTION OF THE EXTERIOR OF TANKS AND ROOFS

1. Requirement:

Physical Inspection of the site Crude Oil Tanks #1 - 6.

Findings:

Positive Finding:

- 1) All tank chimes were caulked and painted to approximately one foot high on side of tank. This prevents water from seeping under the chime and causing rust. The chimes needed repainting and Shell performed this on all six tanks.



Chimes caulked and painted on all tanks

2) The foam dam on tank 5 has been reinstalled.

Findings Recommended for Corrective Action:

- 1) Tank 5 has excessive limestone over chime and ring wall preventing any type of evaluation and water to be trapped against tank shell causing corrosion. Gravel needs to be sloped away from tank to allow drainage. Discussed with site who stated they were waiting till after the fire protection work is completed and estimated this would be done in January/February 2019 timeframe.



Actions being tracked:

The repaired chain wall area of tank 2 was measured in 2017 at 15.5 inches out from the tank wall. This is being tracked in case the concrete repaired area starts pushing out. This was measured in 2018 as the same 15.5 inches (see photo). This shows no pushing out for last year period but this will continue to be tracked in future audits.



Shell stated they had budgeted recoating of tank roofs 1, 4 and 6 in the next year. This will be included in the next inspection.

C. PHYSICAL INSPECTION OF FIRE PROTECTION SYSTEMS

1. **Requirement: Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems**

NFPA 25 Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems (2014 ed.), requires that the owner, or designated representative (lessee), properly maintain fire protection systems:

- 4.1 Responsibility of Property Owner or Designated Representative.
 - 4.1.1* Responsibility for Inspection, Testing, Maintenance, and Impairment. The property owner or designated representative shall be responsible for properly maintaining a water-based fire protection system.
 - 4.1.1.4 Where a designated representative has received the authority for inspecting, testing, maintenance, and the managing of impairments, the designated representative shall comply with the requirements identified for the property owner or designated representative throughout this standard.

Findings Recommended for Corrective Action:

Multiple fire protection systems remain out-of-service, and are not available for emergency use. To date, Shell Pipeline Company LP (Shell) has been working with DOE and FFPO personnel to identify requirements, and restore required out-of-service fire protections systems. On the second day of this assessment (10/25/18) Shell delivered a presentation describing their plans for fire protection system restoration.

2. Requirement: Inspection, Testing, and Maintenance of Fire Alarm Systems

NFPA 72 National Fire Alarm and Signaling Code (2013 ed.), requires that the owner, or designated representative (lessee), properly maintain fire alarm systems.

- 14.2.3 Responsibilities.
 - 14.2.3.1* The property or building or system owner or the owner's designated representative shall be responsible for inspection, testing, and maintenance of the system and for alterations or additions to this system.
 - 14.2.3.2 Where the property owner is not the occupant, the property owner shall be permitted to delegate the authority and responsibility for inspecting, testing, and maintaining the fire protection systems to the occupant, management firm, or managing individual through specific provisions in the lease, written use agreement, or management contract.

Findings Recommended for Corrective Action:

All facility fire detection, notification, and alarm systems remain out-of-service, and are not available for emergency use. To date, Shell Pipeline Company LP (Shell) has been working with DOE and FFPO personnel to identify requirements, and restore required out-of-service fire alarm systems. On the second day of this assessment (10/25/18) Shell delivered a presentation describing future plans for replacement of the existing fire alarm system.

3. Requirement: Inspection, Testing, and Maintenance of Dry Chemical Extinguishing Systems

NFPA 17 Standard for Dry Chemical Extinguishing Systems (2013 ed.), requires that the owner, or designated representative (lessee), properly maintain dry chemical extinguishing systems.

- 11.1 General Requirements. The responsibility for inspection, testing, maintenance, and recharge of the fire protection system shall ultimately be that of the owner of the system, provided that this responsibility has not been transferred in written form to a management company, tenant, or other party.
 - 11.2.1 Monthly, inspection shall be conducted in accordance with the manufacturer’s design, installation, and maintenance manual or the owner’s manual.
 - 11.2.2 If any deficiencies are found, appropriate corrective action shall be taken immediately.

Findings Recommended for Corrective Action:

At the time of the assessment, Laboratory Building 705, had two chemical hood systems installed. While the Ansul dry chemical extinguishing systems for these systems were marked out-of-service, product containers in the area indicated that the chemical glove box under the hoods was still possibly being used to evaluate oil samples. If the area under the chemical hoods are being used to evaluate flammable liquids, both fire suppression systems need to be maintained as per requirements found in NFPA 17 Standard for Dry Chemical Extinguishing Systems (2013 ed.). On the second day of this assessment (10/25/18) Shell delivered a presentation describing future plans for replacement of the existing dry chemical extinguishing system.

4. Requirement: Alternate Power Required for Stationary Fire Pumps

NFPA 20 Standard for the Installation of Stationary Pumps for Fire Protection (2016 ed.), , requires that the owner, or designated representative (lessee), properly maintain an alternate power source for stationary fire pumps.

- 9.3 Alternate Power.

- 9.3.2* Other Sources. Except for an arrangement described in 9.3.3, at least one alternate source of power shall be provided where the normal source is not reliable.
- 9.3.3 An alternate source of power for the primary fire pump shall not be required where a backup engine-driven fire pump, backup steam turbine-driven fire pump, or backup electric motor–driven fire pump with independent power source meeting 9.2.2 is installed in accordance with this standard.
- 9.3.4 Where provided, the alternate source of power shall be supplied from one of the following sources:
 - (1) A generator installed in accordance with Section 9.6.
 - (2) One of the sources identified in 9.2.2(1), 9.2.2(2), 9.2.2(3), or 9.2.2(5) where the power is provided independent of the normal source of power.
- 9.3.5 Where provided, the alternate supply shall be arranged so that the power to the fire pump is not disrupted when overhead lines are de-energized for fire department operations.

Findings Recommended for Corrective Action:

In the event that firefighting demand exceeds the capacity of the 400,000 site fire water tank, an alternate source of supply is provided by pumping water from Dock 1. The primary fire pump used at Dock 1 is a 10,000 gpm electric pump. The back-up for this unit is a 10,000 gpm diesel pump that is currently “Out-of-Service”. . NFPA 20, Chapter 9, requires that electric driven fire pumps be provided with either a back-up fuel driven fire pump, or a source of alternate power independent of the primary private utility service. On the second day of this assessment (10/25/18) Shell delivered a presentation describing future plans for

replacement of the existing engine on the 10,000 gpm diesel fire pump.

5. Requirement: Proper Signage on Water-Based Fire Protection Systems

NFPA 13 Standard for the Installation of Sprinkler Systems (2013 ed.), requires that the owner, or designated representative (lessee), properly install and maintain signage for fire suppression system control valves.

- 8.16 Piping Installation.
 - 8.16.1.1.8 Control Valve Identification. Identification signs shall be provided at each valve to indicate its function and what it controls.

NFPA® 11 Standard for Low-, Medium-, and High-Expansion Foam (2016 ed.), properly install and maintain signage for foam suppression system control valves.

- 4.9.3 Manually Actuated Systems
 - 4.9.3.1 Controls for manually actuated systems shall be located in a place removed from the hazard zone to permit them to be operated in an emergency, yet close enough to ensure operator knowledge of fire conditions.
 - 4.9.3.2 The location and purposes of the controls shall be indicated and shall be related to the operating instructions.

NFPA 25 Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems (2014 ed.):

- 15.3 Tag Impairment System.
 - 15.3.1* A tag shall be used to indicate that a system, or part thereof, has been removed from service.
 - 15.3.2* The tag shall be posted at each fire department connection and the system control valve, and other locations

required by the authority having jurisdiction, indicating which system, or part thereof, has been removed from service.

Findings Recommended for Corrective Action:

Multiple fire protection systems are out-of-service, and have not been maintained for several years. While some systems were visibly identified as being out-of-service, others were not clearly marked. In addition, several control valves for systems currently in-service had no markings, or signage, indicating what systems they served. This could lead to inadvertent activation or disruption of systems during an emergency event. The Assessor recommends clearly marking all: Fire Department Connections (FDC), System Control Valves, and Control Panels, associated with fire protection systems.

D. DOCKS, TERMINAL EQUIPMENT & SYSTEMS

1. Requirement:

Lease Agreement

Section #12 – Lessee Operations, Maintenance, Repairs

Visual field tour of terminal equipment and terminal systems.

Findings Recommended for Corrective Action:

- **Foam/fire house for FPU#5 is out-of-service with broken connection supply. Needs to be reconnected or removed.**



- **Retention pond has civil erosion on dike area. Walkway to oil spill detector unit may have structural foundation issues.**

Needs fill material added under concrete structure to prevent collapse.



- **Storm water sludge gate near oily water separator south side of terminal has civil erosion around bulkhead rendering the gate operation ineffective. Area needs to be backfilled with material.**



- **Red stick pipeline surge relief cabinet has failed paint coating at bottom. Requires coating repair.**



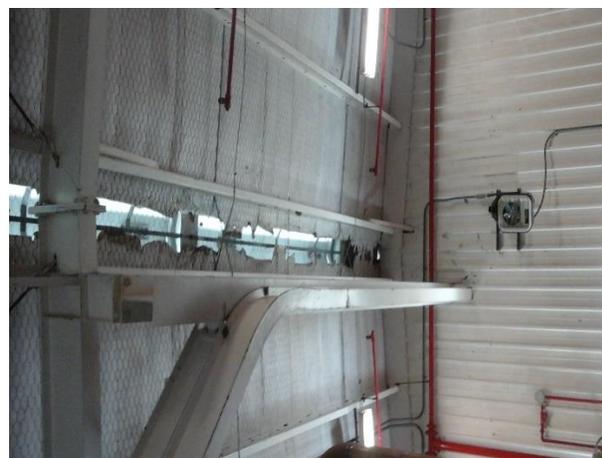
- **RTU 7 shows signs of failed paint coating at top and bottom of cabinet and support components.**



- **MOV K20BC1 shows failed paint coating (rusted bolts/nuts) on stem/bonnet area.**



- **Significant bird dropping inside fire water pump house. Appears to be caused by nesting birds due to opening in varmit screen near roof. Repair hole in screen and wash down area.**



- **Diesel tank inside main fire water pump house has improper (tape & paper) device inserted in tank vent hole at top of tank. Screen previously existed.**



- **Several local pressure gauges on fire system inside fire water pump house are broken/inoperable.**



- **Stripper line connection riser inside Tk3 dike shows signs of paint failure.**



- **Ground/civil erosion outside front of foam building #715**



- **Equillion (circa 2002) pipeline records stored in flammable materials building (Non environmentally controlled) # 708.**



- **Civil/ground erosion near culvert between #708 flammable building and warehouse area.**



- Dock #2 loading arm purge pump base and arm drain valves need paint coating.



- Dock #2 MOV's 205, 203 need paint coating.



- **Dock #2 FW4720-1 fire water valve insulation to be resecured or replaced.**



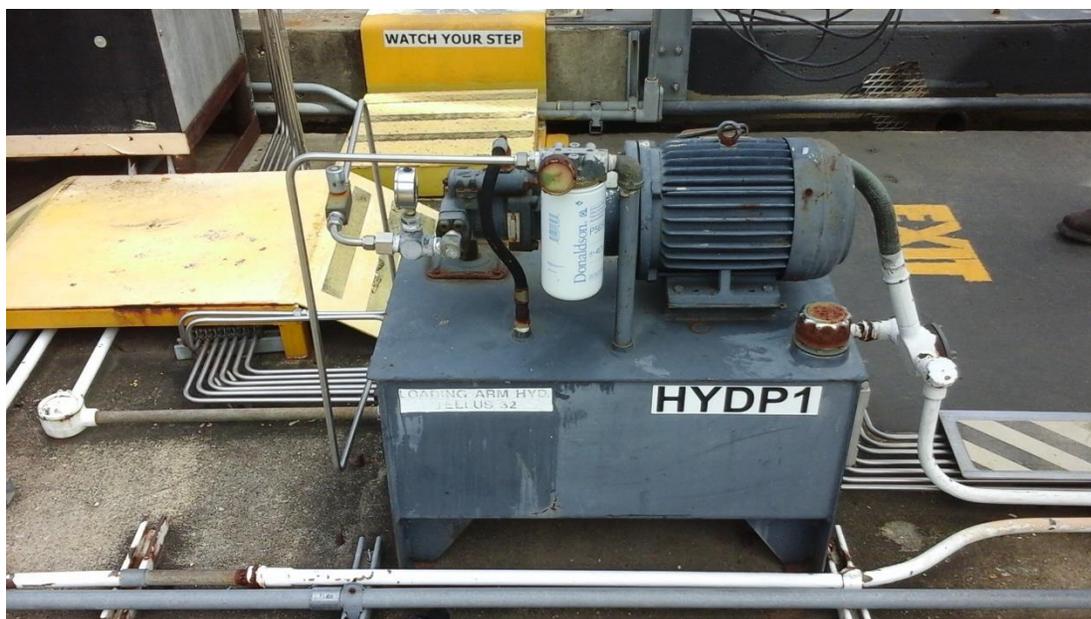
- **Dock #1 2" potable water line on north side of control building is completely severed/corroded in two. Needs repair or replacement.**



- Dock #1 electrical conduit on north side of control building is significantly rusted/corroded.



- Dock #1 loading arm hydraulic unit HYDPI has inoperable psi gauge.



- Dock #1 control cabinet for smoke alarm inside control room has failed paint coating.



II. OPERATIONS

A. RECTIFIER AND OTHER DEVICES (DOT 195-573 c)

1. Requirement:

c) Rectifiers and other devices. You must electrically check for proper performance each device in the first column at the frequency stated in the second column.

Device	Check Frequency
Rectifier	At least six times each calendar year, but with intervals not exceeding 2½ months.
Reverse current switch	
Diode	
Interference bond whose failure would jeopardize structural protection	
Other interference bond	At least once each calendar year, but with intervals not exceeding 15 months.

Findings:

Positive Findings:

- (1) Shell has installed Watchdog Remote Monitoring Units (RMU) on their rectifiers but since 2014 has been slowly replacing those with the new Abriox Remote Monitoring Units as the older Watchdog failed. This allows them to review readings twice per month, in addition to annual inspections. Rectifier tests were conducted in accordance with the stated regulations. Twelve rectifiers are maintained on the sites and docks. A new rectifier was installed at Tank 5 in July 2013.

Findings Recommended for Corrective Action: None.

B. REFERENCE: ANNUAL CATHODIC PROTECTION SURVEY RESULTS (DOT 195-573 a)

1. Requirement:

Each operator shall conduct tests on the protected pipeline at least once each calendar year, but with intervals not exceeding 15 months. However, if tests at those intervals are impractical for separately protected short sections of bare or ineffectively coated pipelines, testing may be done at least once every 3 calendar years, but with intervals not exceeding 39 months.

Findings:

Positive Findings:

- (1) Tests were conducted in accordance with the regulation during the past year to determine the level of cathodic protection on the site piping and the St. James Docks by performing pipe to soil potential surveys. Yearly inspections were reviewed for year 2017 and 2018. All site readings completed in July 2018 were acceptable. Results indicated that the site piping is properly protected with no exceptions.
- (2) Cathodic protection readings for the tanks were reviewed in detail. Each tank has several test leads around the perimeter of the tank, and a permanent reference cell with a test lead to measure the potential under the center of the tank. All readings for each tank indicated adequate cathodic protection. New groundbed on Tank 3 and 4 were replaced in June, 2108.

Findings Recommended for Corrective Action: None.

C. MITIGATION OF INTERNAL CORROSION (DOT 195-579 b)

1. **Requirement:**

Pipeline Pigging Frequencies (DOT 195-579 Guidance and DOT 195-452) Corrective Action (DOT 195-585)

If you use corrosion inhibitors to mitigate internal corrosion, you must:

- Use inhibitors in sufficient quantity to protect the entire part of the pipeline system that the inhibitors are designed to protect;
- Use coupons or other monitoring equipment to determine the effectiveness of the inhibitors in mitigating internal corrosion; and
- Examine the coupons or other monitoring equipment at least twice each calendar year, but with intervals not exceeding 7½ months.

Findings:

Positive Findings:

- (1) Shell utilizes Multi-Chem Inhibitor MX6-1110, a water soluble, oil dispersible corrosion inhibitor. Chemical data sheet indicates it should be utilized at 3 to 5 ppm. Most recent report (September 2018) indicated an injection rate of 3.16 ppm. To determine if inhibitors are utilized in sufficient quantities the operator performs tests on any water samples that are removed from the pipeline. Residual water levels above 100 ppm indicate that sufficient quantities of inhibitor are being injected. Shell recently changed their water sample and coupon analysis contract to Enhance Co. and has not performed water samples. Coupon readings detailed below indicated inhibitors were effective in mitigating the internal corrosion.
- (2) Coupons are utilized and evaluated every 6 months at the Placid facility. Readings are taken at Placid because it is at the end of the pipeline and any levels would provide insight to the condition of the Redstick pipeline along with the Placid line. Acceptable level of corrosion generated from

coupon testing in crude oil pipelines is 1 mil per year (MPY) per Multi-Chem. Coupon analysis revealed corrosion rates of 0.10 MPY between 1/10/2018 to 7/23/18. The coupon was taken at a drop out station located in Placid facility. The station is intended to be a worst-case situation where the water would drop out and cause the highest amount of corrosion similar to a low spot in the pipeline. These readings were very good and indicated virtually no corrosion.

- (3) Corrosion coupons have also been installed in the 42-inch shipline to Dock 2 and the 20-inch barge line to Dock 1. These coupons are checked every 6 months and indicated no significant corrosion on these lines. Annual corrosion rate from corrosion coupon is 0.71 MPY.
- (4) Shell has established a target for running cleaning pigs through the Redstick pipeline once per month (schedule permitting) with a minimum frequency of once per quarter. No debris was found during any pigging operations over the last year.
- (5) An inline inspection (smart pig) is schedule to run on 10/25/18 on the 42-inch shipline from the terminal to Dock.
- (6) An inline inspection (smart pig) was run in September 2018 on the Redstick pipeline. No locations requiring immediate repairs were identified by the inspection. Final Report expected in mid-November. Next smart pig inspection is planned for 2023.
- (7) No corrective actions due to corrosion were required other than typical maintenance painting.

Findings Recommended for Corrective Action: None.

D. PRESSURE LIMITING DEVICE TEST REPORT (DOT 195-428 a, d)

1. Requirement:

Section 195.426 Scraper and sphere facilities. No operator may use a launcher or receiver that is not equipped with a relief device capable of safely relieving pressure in the barrel before insertion or removal of scrapers or spheres. The operator must use a suitable device to indicate that pressure has been relieved in the barrel or must provide a means to prevent insertion or removal of scrapers or spheres if pressure has not been relieved in the barrel.

- a) Except as provided in paragraph (b) of this section, each operator shall, at intervals not exceeding 15 months, but at least once each calendar year, or in the case of pipelines used to carry highly volatile liquids, at intervals not to exceed 7 ½ months, but at least twice each calendar year, inspect and test each pressure limiting device, relief valve, pressure regulator, or other item of pressure control equipment to determine that it is functioning properly, is in good mechanical condition, and is adequate from the standpoint of capacity and reliability of operation for the service in which it is used.
- b) After October 2, 2000, the requirements of paragraphs (a) and (b) of this section for inspection and testing of pressure control equipment apply to the inspection and testing of overfill protection systems.

Findings:

Positive Findings:

- (1) Operator performs tests on the relevant pressure limiting devices at least once each calendar year. All devices, including the surge relief valve system were tested in November 2017 and November 2018. All tests indicated that devices were set at the correct pressures and were functioning properly.

Findings Recommended for Corrective Action: None.

E. SUGARLAND TERMINAL SECURITY ASSESSMENT

1. Requirement:

Security requirements are derived from 33 CFR Part 105. The CFR requires a Facility Security Plan (FSP) to be developed by the plant. The FSP mirrors the CFR in layout and guidance.

Overview:

FFPO security reviewed the St. James Facility physical security posture in accordance with the United States Coast Guard guidance (33 CFR, part 105.220) provided by the Facility Security Officer (FSO).

Findings:

Positive Finding:

- (1) The Facility Security Plan (FSP) is well written and follows the format dictated within the CFR. It clearly addresses specific security responses in the three facility operating conditions. It also directs training and testing of the unarmed (24/7) security contractor.
- (2) The perimeter fences, cameras and lighting meet the requirements for the facilities operating condition and security condition levels. Some fences have been repaired with new fabric, but most areas show signs of extreme weathering and disrepair. The cameras (assessment) were not functioning as designed because the data management server was out of service. The FSO is expecting a total replacement of the assessment system early next year. The lighting on the site is more interior on roads and buildings as opposed to on the perimeter. The lighting appeared to be adequate for safety and response by mutual aid during emergencies.
- (3) The FSO provided lesson plans, training records and testing data of the security officers to support the requirement in the CFR. The records were up to date, thorough and contained

- good notes and recommendations. Post and general orders were also reviewed and no discrepancies were noted.
- (4) The small, unarmed security force was well versed in their duties and responsibilities during normal and emergency conditions. All armed response, fire, medical and emergency management is provided by the local law enforcement agency and parish resources. Officers' duties are primarily access control and reporting.
 - (5) The facility meets the requirements stipulated in the CFR.

Findings Recommended for Corrective Action: None.

III. PHYSICAL INSPECTION OF RECORDS

A. ENVIRONMENTAL REPORTING (ST. JAMES TERMINAL)

1. Requirement: LAC 33:III.5 – Air Permits, LAC 33:IX.3 – Water Permits

Environmental Permits - Facilities in Louisiana that are sources of air emissions and water discharges are required to obtain air and water permits from the Louisiana Department of Environmental Quality (LDEQ).

Findings:

Positive Findings:

- (1) The previous St. James site Title V air operating permit, LDEQ Permit No. 2560-00034-V7 was issued to the Shell Sugarland Terminal on 3/19/15 and expires on 3/19/20.

Shell submitted a permit modification application to LDEQ on 8/5/16 to delete Tanks 107 and 108 (non-DOE tanks) from the permit because the two tanks were added to Shell's Acadian River Terminal air permit. LDEQ issued Permit No. 2560-00034-V8 to Shell on 11/3/16, which expires on 3/19/20.

Shell submitted another permit modification application to LDEQ on 2/24/17 to request the use of temperature in lieu of oxygen in order to demonstrate compliance with the VCU monitoring required by 40 CFR 64. LDEQ issued Permit No. 2560-00034-V9 to Shell on 8/16/17, which expires on 3/19/20.

The current St. James site water discharge permit LPDES General Sanitary Class I Permit LAG534797 was issued on 2/21/18.

Findings Recommended for Corrective Action: None.

2. Requirement: 40 CFR 110 – Discharge of Oil

Spill Releases – The discharge of oil in quantities harmful to the public health or welfare or to the environment is prohibited if it violates an applicable water quality standard or causes a film, sheen, sludge, or emulsion to form on the water surface.

Findings:

Positive Findings:

- (1) There have been no spills or notifications for the Shell Sugarland Terminal.

Findings Recommended for Corrective Action: None.

3. Requirement: LAC 33:III.2108 – Marine Vapor Recovery

Dock Air Emissions – Marine loading facilities serving ships and/or barge loading of crude oil with uncontrolled emissions of 100 tons/year or greater of volatile organic compounds (VOCs) require marine vapor recovery. Emissions from VOC with a true vapor pressure less than 1.5 psia at loading temperature of the crude oil are exempt.

Findings:

Positive Findings:

- (1) The Shell dock air emissions are included in the site's current Title V air operating permit, LDEQ Permit No. 2560-00034-V9. Crude Oil Loading Dock 1 (Source 7-78) is permitted for 37.75 tons/year of uncontrolled emissions of VOC's. The Marine Vapor Combustion Unit (Source VCU) is used to control the Dock 1 emissions and is permitted for 3.15 tons per year of VOC emissions.
- (2) Crude Oil Loading Dock 2 (Source 8-78) is a low vapor pressure loading dock (materials less than 1.5 psia at loading

temperature) and is permitted for 1.90 tons/year of VOC emissions.

Findings Requiring Corrective Action: None.

4. Requirement: LAC 33:III.919 – Emissions Inventory.

Emissions Inventory – Facilities with a Title V air operating permit are required to submit an annual emissions inventory to LDEQ.

Annual Compliance Certification - Facilities with a Title V air operating permit are required to submit an annual compliance certification to LDEQ.

Findings:

Positive Findings:

- (1) The St. James site Emissions Reporting and Inventory Center (ERIC) report was submitted electronically to LDEQ by Shell on April 25, 2018. The site also kept a copy on file.

The St. James site Annual Compliance Certification report was submitted electronically to LDEQ by Shell on 3/13/18. The site also kept a copy on file.

Findings Recommended for Corrective Action: None.

5. Requirement: LAC 33:III.2103 – Volatile Organic Liquid Tanks, and 40 CFR 60, Subparts Ka and Kb – Petroleum Liquid Storage Tanks.

Storage Tanks – Tanks storing more than 40,000 gallons of volatile organic (petroleum) liquids with a maximum true vapor pressure of 1.5 psia or greater must be equipped with a control device (floating roof with primary and secondary seals). Primary seals must be inspected for gaps every 5 years, with secondary seals inspected annually.

Findings:

Positive Findings:

- (1) The six crude oil storage tanks at the St. James site are equipped with floating roofs and primary/secondary tank seals. Shell performed the scheduled tank seal gap inspection of all six crude oil storage tanks on 12/12/17 and 12/13/17.

Findings Recommended for Corrective Action: None.

6. **Requirement:** LAC 33:III.507 – Air Permits, Specific Requirement 238 for Permit No. 2560-00034-V9.

Specific Requirement 238 – Submit the calculated VOC emissions based on the throughput (material, vapor pressure, etc.) of each tank, number of tanks cleaned, and number of roof landing incidences for the preceding calendar year to the Office of Environmental Compliance annually.

Findings:

Positive Findings:

- (1) The St. James site TANKCAP Annual Emission was submitted electronically to LDEQ on 4/26/18 and a copy was provided for review.

Findings Recommended for Corrective Action: None.

7. **Requirement:** 40 CFR 63 - ZZZZ.

40 CFR 63 - ZZZZ– Change oil and filter on Fire Pump Engine (EQT 0022) and Generator Engine (EQT0021) every 500 hours of annually. Keep all run time hours and maintenance records..

Findings:

Positive Findings:

- (1) The St. James site provided a run time hours and maintenance records for the fire pump engine and generator engine.

Findings Recommended for Corrective Action: None.

8. Requirement: LAC 33:IX.2701 – Discharge Monitoring Reports.

DMRs – Monitoring results shall be reported at the intervals specified elsewhere in this permit and shall be submitted through a department-approved electronic document receiving system (NetDMR) in accordance with LAC 33:I.Chapter 21 unless the state administrative authority gives written authorization to the permittee to submit monitoring results in an alternative format.

Findings:

Positive Findings:

- (1) The St. James site submitted NetDMRs electronically to LDEQ for the last years on time and a copy was provided at the site.

Findings Recommended for Corrective Action: None.

9. Requirement: LAC 33:IX.901 – Spill Prevention and Control.

SPCC – Establishes requirements for contingency planning and implementation of operating procedures and best management practices to prevent and control the discharge of pollutants resulting from spill events. For the purpose of this Chapter, spill event means the accidental or unauthorized leaking or releasing of a substance from its intended container or conveyance structure that has the potential to be discharged or results in a discharge to the waters of the state. Discharges resulting from circumstances identified, reviewed, and made part of the public record with respect to a valid LPDES permit are not considered spill events.

Findings:

Positive Findings:

- (1) The St. James site provided a current SPCC plan. Site map, monthly inspections, and training logs were reviewed.

Findings Recommended for Corrective Action: None.

B. LEASE AGREEMENT GENERAL PURPOSE LEASE, GENERAL PROVISIONS, PART II, PARAGRAPH E, INSTALLATIONS, ALTERATIONS, AND REMOVALS

1. **Requirement:** DOE Lease Agreement – Section 10, Installations, Alterations, and Removals.

Lease agreement requires lessee to obtain written approval from the government to make permanent alterations, additions, or betterments to or installations upon Lease property. “Any changes to the Terminal, systems, piping, or components (except replacement in kind and routine maintenance) shall be submitted for Government approval. The Lessee shall use the SPR Engineering Change Proposal (ECP) process to obtain Government approval.”

Finding:

EC-2018-000045 St. James Terminal Fire Safety Repairs

Several components of the fire safety system at St. James (Sugarland) Terminal and Dock facility were out of service and inoperable. Shell Pipeline Co. (SPLC) is to repair the system to equivalency when first taking over the facility lease from the Department of Energy (DOE). Immediately following is a

summary of the issues previously identified. SPLC acknowledged these items and is in the process of repairing. Most of the 2018 scope will replace inoperable equipment that is beyond repair in the same general configuration as it is today. The current state of the equipment in the defined scope is as follows: (1) Cooling water rings TK 1 thru TK 6. (1a) Tanks 1 thru 6 currently have a fixed cooling water ring around the top of the tanks. Cooling rings are currently out of service and are have leaking issues and internal corrosion. Cooling water is typically not used in SPLC facilities for tank protection. (2) Foam piping TK 1 thru TK 6. (2a) Tanks 1 thru 6 currently have fixed foam rings and foam chambers along the top of each storage tank. Foam rings and chambers are currently out of service and of questionable integrity. (3) TK 5 foam dam. (3a) All tanks other than TK 5 have a foam dam installed around the top of the tank. TK 5 was removed by SPLC due to issues with the tank's floating roof. Continue (4) Foam Proportioner Buildings 714, 715, and 717. (4a) Foam buildings 714, 715, and 717 currently feed the foam rings on the 6 storage tanks as well as the deluge systems on the pump and metering skids. Foam skids are manually activated from each building to distribute foam to various areas of the facility. All foam skids are currently placed out of service. Several components of the foam skids are obsolete and of questionable integrity including the bladder tanks, valves, and other soft goods. (5) Foam Proportioner Buildings 718 (5a) Foam building 718 feeds header along the north side of TK 1 thru 6 in the terminal side of the facility. The foam skid is currently placed out of service. Several components of the foam skid are obsolete and of questionable integrity including the bladder tank, valves, and other soft goods. (6) Deluge and meter skid foam piping. (6a) The foam proportioner buildings 714, 715, and 717 also feed deluge systems on several of the pump and metering skids. All deluge skids are currently out of service. Deluge piping is of questionable integrity. One of the underground lines feeding one of the deluge rings failed a hydrostatic test performed in 2017. (7) Lab building dry chemical (7a) The lab building 705 has a dry chemical suppressions system that is currently out of service. System was placed out of service by SPLC after multiple inadvertent discharges.

Findings Recommended for Corrective Action:

Continue repair and replacement as required to restore system as described in fire system ECP.

C. DOCK INSPECTION RECORDS

1. **Requirement:** DOE Lease Agreement – Section 12, Lessee Operations, Maintenance and Repairs

Evaluate dock inspection reports provided by Lessee

2. **Findings (observation):**

There were no inspections of docks performed during 2018.

D. FIRE PROTECTION SYSTEM INSPECTION OF RECORDS

1. **Requirement: Fire Protection System Inspection, Testing, and Maintenance (ITM) Records**

NFPA 25 Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems (2014 ed.):

- 4.3 Records.
- 4.3.1* Records shall be made for all inspections, tests, and maintenance of the system and its components and shall be made available to the authority having jurisdiction upon request.

- 4.1.5* Corrections and Repairs.
- 4.1.5.1* The property owner or designated representative shall correct or repair deficiencies or impairments that are found during the inspection, test, and maintenance required by this standard.

Findings Recommended for Corrective Action:

The Assessor requested, and received, annual inspection and testing reports for in-service fire pumps and building sprinkler systems. After reviewing the fire pump test performed on May 22, 2018, the Assessor noted the 10,000 gpm fire pump (P-3) located at Dock 1, failed Test # 2, Rated Flow @ Rated Pressure Test. In the Fire Protection Engineer's comments, he noted that since the pump failed this test, NFPA 25 requires an inspection be performed to determine the cause of the failure. The Assessor was not provided with any information related to identification of the cause of the failure, a subsequent correction, or required retesting.

In addition to the above failed test, the FPE conducting fire pump test on May 22, 2018, also commented that the test header was not compliant with NFPA 25. The Assessor has no additional information related to this issue.

On the second day of this assessment (10/25/18) Shell delivered a presentation describing plans for repair and replacement of fire protection and alarm systems. At that time the Assessor requested all inspection and testing reports related to foam deluge, and water ring exposure system maintenance. As of 11/8/2018 the Assessor has not received any reports related to tank fire protection systems.

IV. PROPERTY

A. STORAGE OF DOE ASSETS

1. Requirement:

Lease Agreement, Section 41, Appendix G – Spare Parts List.

Lessee is required to pay the Government for items used by them.

2. Findings:

- (1) An inventory of the 47 line items of Government property held in storage for possible use by Shell was conducted on October 25, 2018. This annual inventory is to determine any consumption of items by Shell. The inventory was performed by Mr. Rod Steib - FFPO, without any on hand support from Shell Representatives. There were no items determined to have been consumed during this 2018 fiscal year. Shell will not be billed for any items per this inventory.
- (2) The overall appearance of the storage warehouse, which houses DOE Property on the St. James Terminal, was found in good condition. All items were located as listed on the SAP inventory listing maintained by FFPO for DOE. It should be noted that this year there were a few Shell items co-mingled on the floor in the DOE storage area this concern was provided during the out brief and Shell stated that they would move the items soon.

- (3) The following tags were turned over to FFPO Property during this review for items that had been changed out in the field during the past year.

Description	GID	ELN
8” 150# Check Valve	700359	15C20CK
10” 150# Gate Valve	703211	20-BG-85
10” 150# Gate Valve	702535	P2420-S-77

3. Observations:

- (1) Yearly Reminder #1 - Once inventory items are removed from the warehouse by Shell and used, they are considered consumed and a replacement must not be returned to the warehouse.
- (2) Yearly Reminder #2 - An inventory is performed once a year to determine items consumed by Shell. However, a request has been made by both Ms. Deanna Walker, DOE and Mr. Rod Steib, FFPO that they be notified within two weeks via email of removal of any items from the warehouse inventory by Shell.

Findings Recommended for Corrective Action: None.

B. REAL PROPERTY SURVEY REPORT ST. JAMES

Survey report for St. James tracks installed pumps, motors and valves over 3” installed at St. James, and if they have been identified as Government Property in DOE’s SAP database as required to run operations. We also note replacement of equipment that need to be included in the SPR database, resulting from Shell’s replacement. However, FFPO’s Logistic department has not been instructed to make changes in St. James configurations in the SPR database, nor is FFPO provided with new equipment details such as serial number, model number, manufacture, size and warranty information. The intent of this report is to provide Shell with information that reflected in DOE’s records.

All items surveyed in the attached report has been generated from SAP report# Z_ZTPTR014. This report produces a record of all “PROFILED” pumps, valves, and motors active in the crude oil or raw water piping systems.



ST. JAMES RP
Survey 2019.xlsx

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APPENDIX A – PARTICIPANTS

ASSET EVALUATION TEAM MEMBERS

Roark, Christopher	DOE	Crude Oil Mgt Team Leader
Pizzeck, Marc	DOE	Mechanical Engineer
Walker, Deanna	DOE	Realty Officer
Nguyen, James	FFPO	Principal Engineer, Pipeline
Fresneda, Patrick	FFPO	Manager Maintenance Projects
Briuglio, Brian	FFPO	Sr. Mechanical Engineer
Brown, James	FFPO	Manager Stennis Warehouse
Ian Walsdorf	FFPO	Sr. Mechanical Engineer
Dubuc, Matthew	FFPO	Air Quality Specialist
Ivanyisky, Stephen	FFPO	Air Quality Specialist
Steib, Rod	FFPO	Manager Property
Johnson, Christopher	FFPO	Property Analyst
Herman, Art	FFPO	Property Analyst
Booth, Carol	FFPO	Sr. Property Analyst
Carlson, Steve	FFPO	Fire Protection
Guillory, Thomas	FFPO	Security
Landry, Scott	FFPO	Director Operations & Maintenance
Hebert, John	FFPO	Operations, Senior Planner
Boudreaux, Denny	Garrison	
Narvagz, Jason		
Heltz, Darren		

SHELL PERSONNEL

Green, Chester	SPLC	USCGRS
Soape, Brad	SPLC	USJSOG
Jackson, Brent	SPLC	Facility Engineer, USBSAI
Majewski, Martin	SPLC	Marine Technical Advisor
Gates, Tom	SPLC	Asset Manager
Landry, Greg	SPLC	Terminal Manager
Poche, Tory	SPLC	Operations Supervisor

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APPENDIX B – LEASE EVALUATION MATRIX

**Leased Asset Evaluation Criteria Assessment Schedule
Shell St. James Terminal Lease
(DE-RL-96-97PO70010)
October 2018**

CRITERIA	1 YEAR*	2 YEAR	3 YEAR
Cathodic Protection Records	X	X	X
Tank Inspection Records	X		X
Inhibitor Injection Records	X		X
Dock Inspection Records	X	X	
Documentation of Repairs and Construction	X	X	X
Operation & Maintenance Records Review	X	X	
Environmental Reports	X	X	X
Security	X		X
Fire Protection Systems	X	X	
Property/Facilities/Tanks and Docks Inspections	X	X	X
Inventory	X	X	X

*Assessed all areas due to nearing the end of the Lease period.

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