Oliktok Pipeline Company

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December 09, 2008

Karen L. Kennedy Mgr., Engineering & Operations Phone: (907) 263-3741



Mr. Chris Hoidal
Director, Western Region
US- Department of Transportation
Pipeline and Hazardous Materials Safety Administration
12300 West Dakota Avenue, Suite 110
Lakewood, CO 80228

Re: Notice of Amendment, CPF No. 5-2008-5029M -- Oliktok Pipeline

Dear Mr. Hoidal:

Thank you for allowing us the addition time necessary to address the Notice of Amendment (NOA) CPF No. 5-2008-5029M dated September 10, 2008 concerning the Oliktok Pipeline Operation Manual's Standard Operating Procedures (SOPs).

Attached please find pages 7 and 8 of document number NSPL-0000-PL-4701 addressing item 1 of the NOA concerning purging of permanently abandoned pipelines; and document number OPLM-0000-SD-0027 "Startup after Deinventory and Purge" addressing item 2 of the NOA concerning filling, packing, and returning a previously purged pipeline to normal operations. Item 3, relating to an outdated reference to an API code, was previously corrected in SOP OPLM-0000-SD-0043 and submitted.

We have amended our procedures and look forward to receiving confirmation that this enforcement action has been closed. Please call Bruce Novinska (907-265-6316) or me if you have questions or comments.

Sincerely,

Karen L. Kennedy

Engineering and Operations Manager

Cc *Electronic Copy Only

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Location: GKA / WNS	Facility: DOT REGULATED PIPELINES
Section: PIPELINES	PIPELINE SYSTEM CHANGES
Document Name: REMOVE A PIPELINE FROM SERVICE	
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gas or another substance).

 Method to isolate the line from the active system (i.e., install a blind flange and gasket, weld a cap or plate on the end of the disconnected pipe).

5.2. REMOVE FROM SERVICE

Once prerequisites are complete, the pipeline may be removed from service as described in this section.

5.2.1. Preparation

- 1. Obtain applicable permits in accordance with ASH.
- 2. Notify the affected **Board Operator** of the type, location, and schedule of activities.
- 3. Complete lockout / tagout procedures.

5.2.2. Disconnect

- 1. Deinventory the pipe by either draining and/or pigging.
- 2. Isolate the pipeline by either closing existing valves, or hot tapping and stoppling the pipe segment in accordance with NSPL-0000-PL-4431 through NSPL-0000-PL-4433.
- 3. Disconnect meters or other salvageable equipment, if appropriate.
- 4. Shut down cathodic rectifiers remove potential source of electrical energy and lower the possibility of an electrical discharge, if applicable.
- 5. Bond the pipe segment to be disconnected to prevent a spark or electrical discharge when the disconnected pipe is removed from the existing pipeline.
- 6. Dispose of the product removed from the pipe segment in accordance with the *Alaska Waste Disposal and Reuse Guide.*
- Disconnect the pipeline from the remaining facilities by either unbolting at an existing flange, or cutting the pipe in accordance with the NSPL-0000-PL-4126 procedure. Cutting should be as close as practical to the point

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were it connects to the active line.

5.2.3. Purge

- Purge pipeline in accordance with NSPL-0000-PL-4125 to remove all the vapors and prevent a hazardous atmosphere from remaining in the pipe segment.
- 2. Sample the atmosphere within the disconnected pipeline to ensure purging process removed all hazardous vapors.

5.2.4. Seal

- Seal the disconnected pipeline by either installing a blind flange and gasket or welding a cap or plate on the end. Welding must be performed in accordance with SPC-PT-NS-80001.
- 2. If desired, leave a small positive pressure on the nitrogen remaining in the line to preserve the interior of the pipe and remove any residual flammable vapors.

Note: An *idled line* should be left with a small amount of positive nitrogen pressure provided the gas amount poses **no** potential hazard. However, a line left pressurized is considered *In-service* per ASH for any activities regarding this line. Additionally, end closure design (plate) must consider any potential line pressure. This nitrogen blanket is meant to inert the line and not to provide current or future verification of the integrity of the line. Therefore, subsequent monitoring of the pressure is not required.

3. Start up cathodic rectifiers, if applicable.

5.2.5. Completion

- 1. Complete lockout / tagout procedures.
- 2. Notify the affected **Board Operator** that the work is completed.
- 3. Close applicable permits in accordance with ASH.

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DOCUMENT SUMMARY

This document describes the procedures used to restart the OPL after the line has been deinventoried of NGL and inerted with nitrogen.

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1. RESPONSIBILITIES

1.1. OPERATOR QUALIFICATION

This procedure includes the following covered task that requires the individuals performing this task to have current OQ.

Operations Personnel	OQ 1.3.3C	Startup after deinventory and purge
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2. REPORTABLES

Exceeding 110% MOP requires Safety-Related Condition Reporting in accordance with NSPL-0000-PL-5104.

3. PRECAUTIONS AND LIMITATIONS

3.1. GENERAL

Prior to executing this procedure, read applicable portions of ASH, MSDS 74010, and specific cautions identified in this procedure.

3.2. ABNORMAL OPERATING CONDITIONS

The following are the AOC that an individual could encounter while performing this procedure and the appropriate response to make should the AOC be encountered:

Abnormal Operating Condition	Appropriate Response
Fire or explosion due to a release of	Make appropriate notifications
hydrocarbon	AND
	 If authorized, activate emergency shutdown and response

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Abnormal Operating Condition	Appropriate Response
Malfunction of a pipeline component during the course of performing a covered task	 Make appropriate notifications AND If authorized, initiate emergency shutdown/ isolation of pipeline facility and/or component
Leak or unintended release of hydrocarbon from a pipeline facility or component	 Make appropriate notifications AND If authorized, initiate emergency shutdown/ isolation of pipeline facility and/or component
Physical damage of a pipeline facility or component	Make appropriate notifications

4. PROCEDURES

The steps presented in this procedure specify the minimum requirements for the following scenario:

- The pipeline has been deinventoried of NGL and inerted with nitrogen (N_2) .
- The following valves are closed:
 - Skid 50 -- OPL inlet HV-L1-1044
 - CPF1 -- OPL outlet ROV-CR9310

4.1. PREPARATION

Caution!!	Before proceeding, ensure that any work that was in progress on the
	pipeline is complete and all openings are closed. Place a standby
	person on-site where work was performed to check for leaks as the
	line pressures up.

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Note: During line fill the electronic leak detection systems will be of no use as flow will be registered at the inlet meter only. Increase visual surveillance until the electronic leak detection systems are fully functional. See also OPLM-0000-SD-0023.

- 1. Confirm overpressure protection devices are in service. See OPLM-0000-SD-0021 and OPLM-0000-D-03.
- 2. Open mainline HV-L1-1041, HV-L1-1035, HV-L1-1056 and HV-L1-1064.
- 3. Open mainline ROV-CY-9000, ROV-9361, ROV-9360, and ROV-9210.
- 4. Verify proper alignment of thermal PSV-CR5043.

Note: PSV-CR5043 can be routed to either the CPF1 NGL Closed Hydrocarbon Drain (CHD) or the Primary Separator. **The Primary Separator is the normal relief path.** In the event the Primary Separator is out of service, the PSV will be routed to the NGL CHD.

4.2. PREPARE PIG LAUNCHER / RECEIVER V1-116 FOR PIGGING OPERATIONS AS A RECEIVER

Note: Launcher / receiver V-116 at CPF1 is not currently configured as a receiver. Design changes meeting DOT regulations will be required for safe operation as a pig receiver.

4.3. PRESSURE PIPELINE WITH N₂ AT LAUNCHER / RECEIVER V1-501

Caution!! The OPL must be pressured up with N₂ to above NGL vapor pressure to prevent the NGL from flashing when it is introduced into the line.

- 1. Check the SETCIM "Pipeline VSM-Linelift Information" screen for the minimum pressure that must be maintained on the line during the filling operations.
- 2. Verify PSV-5148 is in service and lined up to the OPL.
- 3. Install a N_2 connection at HV-L1-1039.
- 4. Rig up to the N_2 truck.

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- 5. Open launcher outlet HV-L1-1033
- 6. Open launcher drive gas HV-L1-1039.
- 7. Start N_2 flow. Approximately 1.1 mmscf of N_2 will be needed to raise the pressure to 70 psig.
 - a. Monitor the local pressure at PI-5001.
 - b. Request the **CPF3 Board Operator** monitor PI-CY5124 and PI-CR5094.
 - c. Verify all three pressures are rising.
 - d. Monitor the temperature on V1-501 to ensure it stays above 20 ° F.
- 8. Shut down the N_2 once the line is pressured up to the value outlined in <u>Step 1</u>.
- 9. Close HV-L1-1033 and HV-L1-1039 to isolate the launcher.

4.4. PREPARE LAUNCHER / RECEIVER V1-501 FOR PIGGING OPERATIONS AS A LAUNCHER

- 1. Close HV-L1-1033 and HV-L1-1036.
- 2. Open the needle valve at PI-5001 to bleed off any pressure.
- 3. Open vessel door and load the pig.
- 4. Close the vessel door and the needle valve at PI-5001.

4.5. LAUNCH PIG (V1-501 IN MODULE 501)

- 1. Install a N₂ connection at HV-L1-1039.
- 2. Rig up to a N_2 source.
- 3. Open HV-L1-1033.

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- 4. Open HV-L1-1039 and launch the pig with N₂, just to get it out of the launcher and past the bypass line.
 - Do not exceed 740 psig (set point of PSV-5148 on V-116).
- 5. Shut down the N_2 .
- 6. Close HV-L1-1033 and HV-L1-1039.
- 7. Verify HV-L1-1036 is closed.
- 8. Open the needle valve at PI-5001 to bleed off any pressure.
- 9. Open vessel door and verify the pig is gone.
- 10. Close the vessel door and the needle valve at PI-5001.
- 11. Add N_2 to the launcher to provide a low-pressure inert atmosphere for extended standby.
- 12. Disconnect N₂.

4.6. FILL LINE WITH NGL

Note: Launcher / receiver V-116 at CPF1 is not currently configured as a receiver. Design changes meeting DOT regulations will be required for safe operation as a pig receiver. Following are key points that will apply to the line-fill operation, regardless of the future configuration V-116. Following design of the receiver, a detailed procedure can be written.



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- 1. Slowly open inlet valve HV-L1-1044, inventorying the 8-inch pipe segment to HV-L1-1041.
 - Coordinate with the Pipeline Controller and EOC.
- 2. Slowly open manual plug valve HV-L1-1041, allowing flow from Skid 50 into the pipeline and driving the pig.
 - Avoid excessive pig speed. Until fully opened, pig speed is controlled by HV-L1-1041. Use Skid 50 meter data as an indicator of pig speed. As the pig travels down the line, backpressure will increase and the pig will slow, allowing the valve to be fully opened.
- 3. When HV-L1-1041 can be fully opened without over speeding the pig, begin controlling backpressure, and therefore speed, by venting to flare at CPF1. Monitor Skid 50 meter data.
 - Maintain backpressure to approximately 50 psi above NGL vapor pressure.
- 4. Upon arrival of the pig, block in to the flare.
 - The pipeline is now liquid-packed and at the Skid 50 inlet pressure.
- 5. Prior to pulling the pig, consider flushing the receiver and pig with diesel.
 - Diesel is more effective than N₂ alone at eliminating NGL vapors.
 Ensure that NGLs are not trapped by the pig and inadvertently drawn out upon its removal from the receiver.
- 6. Do a final walk down to ensure that valves, overpressure protection, and monitoring devices are aligned properly and that car seals are installed.

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5. REFERENCES

The listed documents are not by reference part of this procedure. Reference is made only to the paragraph or section listed and not the entire document.

5.1. REGULATORY REFERENCES

49 CFR 195.402(d)	Transportation of Hazardous Liquids by Pipeline – Abnormal operations

5.2. CPAI REFERENCES

Health, Safety, and Environmental Policies	Alaska Safety Handbook	
MSDS 744010	Natural Gas Liquids (North Slope)	
NSPL-0000-PL-5104	Safety-Related Condition Reporting	
OPLM-0000-SD-0011	Normal Startup of Oliktok Pipeline -	
OPLM-0000-SD-0021	Response to Unintended Valve Closure	
OPLM-0000-SD-0023	Response To Communication Failure	
OPL-0000-D-03	Oliktok Pipeline Overpressure Protection	
PLD-L1XX-56465	KRU Valve Schematic of the Oliktok Pipeline	

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Process Safety Management



STANDARD OPERATING PROCEDURES

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