

DEPARTMENT OF ENVIRONMENTAL QUALITY  
 AIR QUALITY DIVISION  
 ACTIVITY REPORT: Self Initiated Inspection

N622029642

FACILITY: PLAINS LPG SERVICES RAPID RIVER TERMINAL		SRN / ID: N6220
LOCATION: 10955 US HWY 41, RAPID RIVER		DISTRICT: Upper Peninsula
CITY: RAPID RIVER		COUNTY: DELTA
CONTACT: Brett Lewis , Operations Supervisor		ACTIVITY DATE: 06/02/2015
STAFF: Joel Asher	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Unannounced inspection		
RESOLVED COMPLAINTS:		

On 6/2/2015, I conducted an unannounced inspection of this facility. My contact was Mr. Brett Lewis, Operations Supervisor. The facility employs 6 staff.

The initial reason for this visit was due to a complaint that was filed regarding improper handling of H2S within the facility (complaint #C-15-0073). Since the last compliance inspection of this facility was conducted in 2010 it was decided to conduct a compliance evaluation along with the complaint inspection.

This facility operates a process where propane is removed from pipeline natural gas. Natural gas (NG) is piped from the gas line that runs to the north of the site. The NG is run through the large sphere that holds about 738,108 gallons of NG and separates out 332,136 gallons of C4+. Roughly the sphere holds about 1,000,000 gallon capacity. The C4+ is sent back to the NG pipeline, while the propane (after completing the separation process) is stored in one of 4 - 90,000 gallon bullets on site. During the winter, the plant is capable of producing about 10,000 gallons of propane and about 7,500 gallons in the summer. Mr. Lewis stated there have not been any out of the ordinary situations at the facility in the last year. The last load of mercaptan was delivered to the facility in July of 2014. No issues were observed at that time that would have involved an odor release.

The complaint alleged improper handling of the H2S at the "refinery". Mr. Lewis explained they don't handle any H2S and rarely remove any sulfur from the NG. Typically the sulfur is removed from the NG in Fort Saskatchewan where the pipeline starts. In the event there is an issue and the sulfur is not removed, they (each station along the pipeline) will be notified and have the capability to remove it.

The Rapid River plant has a sulfur treatment system that utilizes a catalyst for removal. This system has not been used for 2 years. A new charge of catalyst was placed in the system in 2008 or 2009. Mr. Lewis stated the catalyst does not have a shelf life and they keep a full spare charge on site (this was observed during the site tour). The unit is kept loaded with the catalyst and would be available for operation immediately if needed. The catalyst in the system has been tested and they have used 3% of the catalyst life. The system is fully operational.

The plant is subject to the Part 60 NSPS Subpart KKK Standards of Performance for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants. Subpart KKK requires the facility to conduct leak checks and audit all valves, packings, and gaskets. Mr. Lewis stated they conduct the leak checks every quarter. The last audit was conducted on 5/12/2015 (a copy of the results was provided and is attached to this report). If a leak is detected a purple tag is attached to the part and will not be removed until 2 consecutive months of non-leaks are recorded for a specific part.

A tour of the facility was made with Mr. Lewis and Mr. Corey Wicklund. It was observed there is no venting from the sulfur treatment system. The facility also has analyzers that sample 4 different streams through out the plant every 8 minutes. There are high alarms on the NG that measure for sulfur. An alarm is activated if the H2S is higher than 2.5 ppm.

Daily rounds are conducted at the facility. Observations were made of the logs. Any abnormalities or issues are recorded.

The facility appears to be well kept and well run. No violations of the Air Pollution Control Rules were observed during this inspection.

As the plant does not "handle H2S" and appears to keep their sulfur treatment system operational and up to date, no observations were made to substantiate the filed complaint. The complaint will be resolved.

NAME 

DATE 6/9/15

SUPERVISOR \_\_\_\_\_

**Plains LPG Services LP Rapid River Terminal**  
 Leaking Equipment for the Time Period From 05/10/2015 through 05/14/2015  
 UNIT: Deprop, C3 Treat, Mercap, C3 Stg, Trk Load, Flare, HO Htr, S

EQUIPMENT										
TAG NO.: 4050	LINE #: U	LOCATION: 5FT NW OF SPHERE PDT-091					CVS: No			
ACCESS: Accessible	EQUIP: Valve	GROUP: NSPS KKK					SIZE: 0.250			
SERVICE: Light Liquid	CONFIG: Externally Actuated	PRODUCT: NGL					LEVEL: 05			
COMMENT:		P & ID : 14				UNDER 300 HRS: No				
INSPECTION										
DATE READ: 05/12/2015 08:04:00	READING: 10,643.00	AVO LEAK: NO			LEAK LIMIT: 10000					
TECHNICIAN: Eva Mueller	BACKGROUND: 3.00	INSTRUMENT: 433051								
ATTEMPT DUE DATES										
ATTEMPT: 1ST ATTEMPT										
DATE DUE: 05/17/2015										
COMPLETED: 05/13/2015										
REPAIR DUE DATES										
LEAK LIMIT: 10000										
DATE DUE: 05/27/2015										
COMPLETED: 05/13/2015										
REPAIR STATUS										
DATE REPAIRED: 05/13/2015	EST. REPAIR DATE:	ISOLATED FROM SVC:			RETURNED TO SVC:					
PLACED ON DELAY:	AUTHORIZED BY:	YRS ON DELAY:			WARRANTY EXPIRY:					
REASON:				WORK ORDER #:						
COMMENT:				EXTRAORDINARY ATT ALLOWED: Yes						
				CLOSE AUTH BY:						
REPAIR ATTEMPTS										
EMISSION POINT: Valve Packing										
ATTEMPT DATE	REPAIR METHOD	MATERIAL USED	REMON DATE	BKGD	READING	AVO	TECHNICIAN	INSTRUMENT	TECH MADE ATT	EX ATT
05/13/15 08:08:00	Tighten Packing		05/13/15 08:11:00	3.00	3,291.00	NO	Eva Mueller	433051	No	No



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 Leaking Equipment for the Time Period From 05/10/2015 through 05/14/2015  
 UNIT: Deprop, C3 Treat, Mercap, C3 Stg, Trk Load, Flare, HO Htr, S

EQUIPMENT										
TAG NO.: 4450	LINE #: U	LOCATION: 4FT W OF SPHERE	CVS: No							
ACCESS: Accessible	EQUIP: Valve	GROUP: NSPS KKK	SIZE: 1.000							
SERVICE: Light Liquid	CONFIG: Externally Actuated	PRODUCT: NGL	LEVEL: 04							
COMMENT:		P & ID : 14	UNDER 300 HRS: No							
INSPECTION										
DATE READ: 05/12/2015 10:20:00	READING: 21,490.00	AVO LEAK: NO	LEAK LIMIT: 10000							
TECHNICIAN: Eva Mueller	BACKGROUND: 3.00	INSTRUMENT: 433051								
ATTEMPT DUE DATES										
ATTEMPT: 1ST ATTEMPT										
DATE DUE: 05/17/2015										
COMPLETED: 05/13/2015										
REPAIR DUE DATES										
LEAK LIMIT: 10000										
DATE DUE: 05/27/2015										
COMPLETED: 05/13/2015										
REPAIR STATUS										
DATE REPAIRED: 05/13/2015	EST. REPAIR DATE:	ISOLATED FROM SVC:	RETURNED TO SVC:							
PLACED ON DELAY:	AUTHORIZED BY:	YRS ON DELAY:	WARRANTY EXPIRY:							
REASON:			WORK ORDER #:							
COMMENT:			EXTRAORDINARY ATT ALLOWED: Yes							
			CLOSE AUTH BY:							
REPAIR ATTEMPTS										
EMISSION POINT: Threaded Valve End										
ATTEMPT DATE	REPAIR METHOD	MATERIAL USED	REMON DATE	BKGD	READING	AVO	TECHNICIAN	INSTRUMENT	TECH MADE ATT	EX ATT
05/13/15 09:20:11	Installed Sealing Material		05/13/15 09:20:25	3.00	18.00	NO	Eva Mueller	433051	No	No











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Leaking Equipment for the Time Period From 05/10/2015 through 05/14/2015  
UNIT: Deprop, C3 Treat, Mercap, C3 Stg, Trk Load, Flare, HO Htr, S

**8 TOTAL LEAKS FOR UNIT Deprop, C3 Treat, Mercap, C3 Stg, Trk Load, Flare, HO Htr, S**