

N6291
MANILA

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Scheduled Inspection

N629149198

FACILITY: Kinder Morgan Utopia LLC		SRN / ID: N6291
LOCATION: 7501 W JEFFERSON, DETROIT		DISTRICT: Detroit
CITY: DETROIT		COUNTY: WAYNE
CONTACT: Kevin Maloney, EHS - Senior Permit Compliance Specialist		ACTIVITY DATE: 06/12/2019
STAFF: C. Nazaret Sandoval	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: FY 2019 Inspection		
RESOLVED COMPLAINTS:		

Date of Investigation: June 12, 2019**Source:** Kinder Morgan Utopia LLC, Detroit River Valve Site**SRN:** N6291**Address:** 7501 West Jefferson, Detroit, Michigan 48209**Subject:** Scheduled Inspection**Facility Contact:** Kevin Maloney, Kinder Morgan Senior Permit Compliance Specialist**Safety Equipment/Safety Training/Security**

The site is unoccupied, and access must be arranged in advance with Kinder Morgan Utopia LLC. The historical address for the site, 7501 West Jefferson, was established when West Jefferson was the nearest roadway west of the riverfront and when Allied Signal's Detroit Coke Plant occupied most of the land between the Detroit River and the Yellow Freight truck yard. Springwells Court now loops behind Yellow Freight between the riverfront and West Jefferson, placing the Detroit River Valve Site adjacent to the Lafarge Midwest facility at 1301 Springwells Court.

No specific safety equipment is required when the valves, pipes, and flare are closed. Flame retardant clothing and other protective gear are required during maintenance activities and flaring events.

Facility and Regulatory BackgroundPipelines History

There are two separate 10-inch underground pipelines running side-by-side at the location of the Detroit River Valve Site. The pipelines cross the Detroit River to and from Windsor, Ontario. The two pipelines were constructed circa 1957 by American Brine, Inc. for the transport of liquid brine. The pipelines were purchased by Dome Pipeline in 1972 and their use repurposed for the transport of liquid forms of ethane, butane, propane, and some natural gas condensates. In 1997, Dome Pipeline received Wayne County Air Quality Management Division Installation Permit C-11429 and State of Michigan Air Quality Division (AQD) Permit to Install (PTI) No. 114-96 for a flare that had been constructed by Dome in 1977 to incinerate waste gases arising from the sending and receiving of pipeline traps, from site maintenance activities, and from emergency vent events; the single flare was installed to service both pipelines.

Beginning in 2007, a series of transactions resulted in one of the pipelines (the Cochin pipeline) coming under the ownership of Kinder Morgan Cochin, LLC and the other pipeline (part of Plains' EDS pipeline system, A.K.A. EDS pipeline) coming under the ownership of Plains LPG Services. The common flare at the site was jointly owned by Kinder Morgan and Plains. In 2008, Wayne Co. C-11429 was voided and Kinder Morgan was issued an updated PTI 114-96A. The PTI has been revised twice since, with the current PTI 114-96C having been issued on March 8, 2013. Although the permit was issued to Kinder Morgan, the permit covered all activities occurring at the flare, including those activities initiated by Plains.

The Cochin pipeline was long been utilized to deliver light hydrocarbon liquids (solely propane

in recent years) eastward from its western terminus at Fort Saskatchewan, Alberta, to customers located in the upper Midwest of the United States as the pipeline travels southeast and east to Windsor, Ontario. The pipeline traversed seven states in the United States and three provinces in Canada transporting products between the U.S. and Canada.

The EDS pipeline has been utilized in the past to deliver liquid hydrocarbons between its termini at Marysville, Michigan and Green Springs, Ohio through Port Huron, Sarnia (Ontario), Windsor, and Detroit. Historically, the flow of liquid has been from east to west at the Detroit River Valve Site. In its Presidential Permit – all such pipelines traversing the international border must obtain a Presidential Permit from the State Department – application of June 12, 2012, Plains reports the EDS pipeline inactive since at least 2010. However, based on a recent internet search it was found that a Presidential Permit was granted to Plains Pipeline on August 3, 2015. The permit authorized Plains to connect, operate, and maintain the existing pipeline facilities at the international boundary between USA and Canada.

Recent Projects - See attached maps

Cochin Pipe – Reversal Flow Project

In 2013, Kinder Morgan received a Presidential Permit authorizing the reversal of flow in the Cochin pipeline at a point near Kankakee, Illinois.

Late in 2013, Kinder Morgan announced a letter of intent to build a new pipeline from Harrison Co., Ohio northwest to link with the Michigan portion of the Cochin pipeline with the stated objective to transport natural gas liquids produced from the Utica Shale northward to Windsor, Ontario. That project was named, the Utopia Pipeline System (see next paragraph).

In March 2014, the direction of flow on the segment of the Cochin Pipeline from Kankakee, Illinois, to Fort Saskatchewan was reversed to transport condensate westbound. The reversed pipeline started operations in July 2014. Following the Cochin pipeline reversal, the eastern leg of the pipeline that includes the Detroit River valve site was idled.

The Utopia Pipeline System Project

Construction of the new, approximately 150-mile leg of the Utopia pipeline to connect to the idled eastern portion of the formerly Cochin pipeline began in 2016. The owner/operator of the pipeline is Kinder Morgan Utopia, LLC, who notified AQD about the company's name change on May 17, 2017. The route of the U.S. portion of the Utopia project consists of a pipeline from a point in Harrison County, (Cadiz Meter Station) Ohio, to a connection with the existing Cochin Kinder Morgan pipeline and facilities near Riga, Michigan. The full Utopia pipeline system of approximately 250+-mile-long and 12 inch-diameter pipeline, transports ethane/ethane-blend up to Windsor, Ontario and includes three meter-stations across its route. The initial capacity of the Utopia Pipeline System is 50,000 barrels per day (b/d), which is expandable to more than 75,000 b/d with the development of additional pumping stations. Most of the project was completed in January 2018.

The Utopia Pipeline Detroit River Crossing project

As of the date of the site inspection on 6/12/2019, the Detroit River Crossing project was in progress and had an impact at the valve site and at the point where the pipeline crosses the river from Detroit to Windsor. The project is to replace the 10" existing pipeline with a new 10" pipeline. The current Detroit River pipeline was built in 1957 and buried four meters under the riverbed. The new pipeline will be 12 meters deep, buried in bedrock. The old pipeline will be capped, filled and decommissioned in place. The section that will be constructed across the Detroit River is essentially a final phase of the Utopia Pipeline System to renew the entire stretch that originates in Harrison County, Ohio. The end of the Utopia pipeline is in Sarnia where it interacts with NOVA Chemicals which converts ethane into a product essential for plastics. All project permitting is completed, and at the time of the site visit the project was in the Horizontal Directional Drilling (HDD) boring phase. The HDD entry is on the US side at the Detroit River valve site and extends approximately 3,727 feet to the exit location in Windsor. The new pipeline will tie into the existing 12" block valve at the Detroit River valve site. The

operation and use of the pipeline will be unchanged.

AQD Flare Permits

As indicated earlier, AQD permit PTI 114-96C covers the stationary flare at the site, the flare has been unused since the last event in March-April 2014. The Kinder Morgan pipeline was idled for the Cochin reversal project and construction of the southern leg of the Utopia pipeline. A determination was made in 2017 that the Detroit River stationary flare, previously used for propane/propane-blend, was not suitable for the planned ethane/ethane-blend to be transported in the Utopia pipeline. The flare is currently disconnected from the Utopia pipeline and will be dismantled.

Kinder Morgan applied for a permit in 2018 to use portable flares on the Michigan portion of the Utopia pipeline for maintenance and emergency events. The permit (PTI 120-18) issued on 12/21/2018 for SRN N5916 permitted a total of four portable flares.

In relation to the status of the EDS pipe owned by Plains, I contacted Mr. Daniel Holli, Environmental R/C Specialist for Plains, shortly after the site visit of 6/12/2019. I asked him about Plain's plans for flaring gases from the Plains pipeline at the Detroit Valve Site, once the stationary flare permitted to Kinder Morgan, under PTI 114-96C is dismantled. My request prompted him to reach out to AQD on July 1, 2019. He contacted permit section in Lansing and the Detroit District office requesting information about permitting requirements for sweet gas flaring at various locations along the pipeline. He indicated that the temporary flare will be used in Wayne, Monroe, and St Clair Counties to evacuate either butane or propane from station piping for maintenance over the course of a year. A permit application was received by AQD Permit Section on 8/5/2019. The application submitted by Plains Pipeline, L.P. describes the equipment as: "FS-4 --- 4-inches x 20 inches". "The portable flare is to be used (as needed) along EDS or SDS pipeline system to drain product from small sections of pipeline for maintenance". At the time of writing this report the application is being reviewed.

Summary of Facility Visit

I met Mr. Kevin Maloney, Kinder Morgan Senior Permit Compliance Specialist, at the Detroit River Valve Site on 6/12/2019 and we toured the grounds from 10:00 AM to 10:30 AM.

The site houses a series of interconnected above-ground pipes for the launching and receiving of "traps" into the pipelines. Traps are solid cylindrical devices with diameters slightly less than that of the pipeline. When introduced into the trap launcher, the trap is propelled down the pipeline by the natural flow of the liquid until it reaches a trap receiver. Traps are used to clean debris from the inner surface of the pipe and to inspect the interior. Up until April 2014, the northern set of launching and receiving traps served the former Cochin pipeline and the southern set served the EDS pipeline.

Whenever residual material needed to be removed from either the Cochin or EDS piping it was "blown down" into a 500-gallon tank, flashing the liquid to a gas, and then incinerated in the flare. One flash tank and one flare served both pipelines.

The stationary flare was manually operated and so any activity requiring the use of the flare only occurred with facility personnel present on-site.

Construction activities were in progress during the facility visit and although the system described on the previous paragraph is still in-place, there were various changes. The Utopia Pipeline Detroit River Crossing project was underway on its HDD phase. The Kinder Morgan operator, Mr. Cliff Davenport, showed us the underground pipes that were cut and capped to disconnect them from the valve-system and from the flash tank that connected to the stationary flare. He also explained the new pipe routing and the point of connection to the existing system. At the time of the inspection the stationary flare associated with PTI 114-96C and one of the portable flares associated with PTI 120-18 were located at the southeast corner of the site near the perimeter, but none of them were connected to the pipe system.

For details, please refer to the attached pictures which were taken during the site visit. A drawing showing the proposed pipe alignment for the construction project at the Detroit Valve Site is also attached.

The inspection report of 5/20/2014 indicated that the Cochin reversal was nearly complete and the transport of propane through the Detroit location would cease. During the site visit of 6/12/2019 I confirmed that the operations had ceased shortly after the AQD visit of 2014. That section of the former Cochin pipeline running through the Detroit site was dormant for some time. Kinder Morgan maintained records of the flare throughput resulting from work on the former Cochin pipeline during the time the pipe was active.

The operations of Kinder Morgan and Plains are completely independent, and Kinder Morgan will not necessarily be aware of flaring events, maintenance, etc. conducted by Plains relating to the operation of the EDS pipeline. Plains operations will be regulated under another permit when the portable flare permit application received by AQD is approved.

After the site visit, I sent an email to Mr. Maloney asking for a copy of usage records. Mr. Maloney responded by email on 6/14/2019 with records attached. Also attached are the print-outs of the email communications that AQD maintained with Kinder Morgan during the process of the investigation.

Compliance Status

Since the stationary flare at the Detroit River Valve Site is still standing, the Permit to Install No. 114-96C, issued March 8, 2013 to Kinder Morgan Utopia, LLC is still active.

PTI 114-96C (issued 3/8/2013), General (GC) and Special (SC) Conditions

GC 6 – Compliance – Nuisance emissions prohibited – No citizen complaints have been received by the AQD's Detroit Office for the Detroit River Valve site.

GC 11, SC IV.1 – Compliance – The flare shall not be operated except in a satisfactory manner, including such that no visible emissions shall be emitted from the flare – The flare was not in operation during the site visit of 6/12/2019 and the last time it was on service was in March 2014. AQD Detroit has not received any reports of visible emissions from the flare while in operation in previous years.

SC II.1, VI.1 – Compliance – Flare use limited to not more than 3,510 gallons of liquefied propane or propane blends per 12-month rolling time period as determined at the end of each calendar month; records to be maintained for not less than five years – Previous records from Kinder Morgan provided in an email submittal of 5/27/2014 showed that in 2014 the flare operated in February 2014 combusting 220 gallons and in March 2014 combusting 196 gallons for a 12-month total of 416 gallons ending April 2014. Emissions of VOC, CO, NOx, and SO2 calculate to less than 20 pounds each during this period. The records provided on 6/14/2019 showed zero emissions for all years since 2015 to the present.

SC VIII.1 – Compliance – Exhaust gases from the flare to be discharged unobstructed vertically upwards from a stack diameter not more than 2 inches and from a stack height not less than 25 feet above ground – The flare was observed during the inspection of 6/12/2019 and judged to be in compliance with these conditions, though measurements were not made.

Conclusion:

At the completion of the investigation, Kinder Morgan Utopia's Detroit River Valve Site (N6291) appears to be in compliance with its applicable requirements.

NAME Handoral

DATE 9/13/2019

SUPERVISOR JK