

**MARATHON PIPE LINE LLC (MPL)
 RESPONSE TO U.S. EPA REQUEST FOR INFORMATION REGARDING
 CRUDE OIL DISCHARGE MARCH 11, 2022 NEAR EDWARDSVILLE, ILLINOIS**

The following table lists the documents produced and the number of the information request(s) to which it responds:

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This response is organized by U.S. EPA inquiry number and question followed by MPL response and the contributor(s). U.S. EPA defines “Facility” as “Wood River-Patoka 22-inch products pipeline located at or near Edwardsville, Illinois”. For purposes of this response, MPL understands the term “Facility’s pipeline segment” used in certain requests to mean the segment of the Wood River – Patoka 22” (aka WoodPat) crude oil pipeline between BV1 (milepost 0.434) and BV22 (milepost 21.846). All times referenced are Central Standard Time (CST) unless otherwise noted.

- 1. Identify all petroleum and all petroleum products (“oil”) used, produced, or stored at the Facility, as well as transported through the Facility, including raw materials, waste materials, and prime products. Include a copy of the MSDS for all petroleum and all petroleum products identified.**

Response:

Crude oil of varying grades is transported through the Facility. See Attachment A for Safety Data Sheet.

Contributor:

Todd Wadkins

2. Describe, in detail, all of the facts related to the discharge of oil from the Facility that began on, or about, March 11, 2022, at or near Edwardsville, Illinois.
- a. The duration, amount in gallons of oil, and type of oil released.

Response:

The duration of discharge is estimated. Based on the size of the opening against the elevation and pressure profile, MPL estimates the discharge duration to have been approximately fifteen (15) to thirty (30) minutes. The discharge occurred at approximately 0815 on March 11, 2022.

Approximately 147,000 gallons (3,500 barrels) of Wyoming Asphaltic Sour Crude oil was discharged.

Contributor:

Steve Hawkins

- b. The specific source of the discharge (i.e. underground storage tank, portable transfer pump, pipeline, etc.) and possible causes for the discharge. Include any metallurgic or mechanical analysis performed.

Response:

The source of the discharge was a carbon steel underground pipeline (1949, 22" OD, 0.344" wall thickness, ERW manufactured by A.O. Smith). The National Transportation Safety Board (NTSB) is working to complete a root cause investigation into the possible cause of the discharge. The NTSB is leading the formal investigation into the cause of the release including metallurgic analysis as part of the investigation. MPL has completed a geotechnical analysis with a third-party engineering firm. This information can be released following the finalization of the NTSB final report. In partnership with the NTSB, Pipeline Hazardous Materials Safety Administration (PHMSA) and the American Petroleum Industry (API), MPL presented details of the release to industry peers on bending strain risk associated land movements (See [Attachment Q](#)).

Contributors:

Steve Hawkins

- c. The area affected by the discharge. Include an assessment of the damage to both public and private property, and to wildlife, resulting from the discharge and ensuing clean-up efforts.

Response:

The area affected by the discharge included portions of the Cahokia Creek shoreline, approximately 0.5 acres of pipeline right-of-way (ROW), and 1.61 acres of wetland adjacent to the location of discharge at approximately [REDACTED], [REDACTED]. The Cahokia Creek extends approximately ten (10) miles from the location of discharge to the confluence with the Mississippi River. Crude oil observed within Cahokia Creek was confined within the banks and impacts were present in accumulated woody debris. The crude oil and sheen in the Cahokia Creek was primarily

observed at the boomed locations. No crude oil or sheen was observed in the Mississippi River.

There were no impacts to the public drinking water supply from the discharge or ensuing clean-up efforts to Cahokia Creek or the wetland. A potable well desktop survey was performed and included subsequent field verification visits to area properties to confirm the absence of potable wells. A single potable water sample was collected from a residence at 4251 Oldenburg Road, Hartford, Illinois at the request of the homeowner. The analytical results (provided in Attachment I) were below Method Reporting Limits (MRLs) for all constituents.

The wetland area was further affected during the clean-up efforts during removal of impacted debris and soil, but the additional clean-up efforts were necessary to minimize the overall potential impact due to a predicted rain fall event, and to prevent wildlife from additional exposure.

Wildlife impacts included forty-one (41) animals. Fifteen (15) were rehabilitated and released. See Attachment F Edwardsville Impacted Wildlife for a list of the species and data related to location of discovery and disposition.

Contributor:

Tressa Benedetti

- d. The details of any evacuation, road closing(s) and/or closing(s) necessary as a result of the discharge. This should include the duration and extent of the evacuation and or closing(s).**

Response:

There were no evacuations as a result of the discharge. The general public was asked to avoid the Division 1 area for both worker and public safety.

Old Alton Edwardsville Road was restricted to local traffic only between Edwardsville Road (IL Highway 143) and approximately a quarter mile west of the Cahokia Creek for approximately twenty-five (25) days.

Wanda Road was closed between New Poag Road and Wagon Wheel Road for approximately eight (8) days.

The southernmost east bound lane of Edwardsville Road (IL Highway 143) was closed for approximately eight (8) days.

Contributor:

Steve Hawkins

- e. A complete narrative of the response efforts. Include the number of people involved, total man hours, duration of the clean-up, a list of all equipment used and a breakdown of the total cost of the response. Also include a current description of any**

areas affected by the discharge and the response efforts, and a narrative of current and future clean-up efforts resulting from the discharge.

Response:

The response efforts spanned from the originating location of the discharge at approximately [REDACTED], [REDACTED] which included impacts to the shoreline, pipeline ROW, and adjacent wetland as well as approximately ten (10) miles of the Cahokia Creek to the confluence with the Mississippi River. Unified Command was initiated on March 11, 2022 and transitioned to a post-response clean-up project on March 19, 2022. Gross contamination removal activities continued through May 16, 2022.

During the response, MPL deployed emergency response personnel and absorbent and/or hard booms at up to six (6) separate locations of Cahokia Creek upstream of the Mississippi River confluence.

The response was broken into four divisions (See [Attachment H](#) Edwardsville Overview Figure). Division 1 was bordered by IL Highway 143 and University Drive following the Cahokia Creek. Division 1 included the originating discharge location and impacted wetland, pipeline ROW, and Cahokia Creek shoreline. Division 2 extended west from University Drive to just beyond Wanda Road following the Cahokia Creek. Division 3 continued west following the Cahokia Creek to just beyond the Oldenburg Road access. Division 4 extended further west to the confluence of the Mississippi River.

Emergency response personnel utilized boats, vacuum recovery trucks, frac tanks, boom, and skimmers at various locations along approximately ten (10) miles of the Cahokia Creek. Intermittent sheen and stained debris were observed along the banks and manually removed via on-water teams of personnel and boats. Recirculation pumps were used by these teams to rinse impacted soils and vegetation and direct oil to absorbent booms and recovery equipment. Saturated absorbent booms were replaced as necessary and impacted vegetation was removed as observed. Additionally, Shoreline Cleanup and Assessment Technique (SCAT) was performed over twelve (12) segments of Cahokia Creek to the Mississippi River confluence.

Response activities in Division 1 included the vacuum recovery of crude and contact water and removal of impacted vegetation and soil. Additionally, MPL installed and operated a water treatment system to aid in the management and treatment of accumulated surface water throughout the wetland which allowed for further removal of impacted soil and debris.

MPL utilized its Wood River Station tank farm in Wood River, Illinois and Roxana Station in Hartford, Illinois for waste staging in preparation for characterization and profiling. All liquids recovered via vacuum trucks were transported to Wood River Station. A temporary timber mat staging area was created at Roxana Station for impacted soil and absorbent roll-off staging. Some soil was also stockpiled inside Wood River Station prior to waste characterization and profiling.

An Air Monitoring Plan was approved and implemented from March 11, 2022 through March 24, 2022. Real-time monitoring and analytical air samples were collected in multiple locations around the immediate work site as well as various locations around the community.

Work site samples were obtained in Division 1 and boom locations in Divisions 2, 3 and 4. Additionally, community zones were monitored between the Division 1 and impacted soil sites and populated areas in the prevailing direction of winds during the response. A combination of real-time monitoring and Organic Vapor Monitor (OVM) and Summa canisters sampling with laboratory analysis were used for sample collection.

Total number of people involved including MPL personnel and contractor support is estimated at 779 and total estimated manhours is 86,217. See [Attachment B](#) for list of equipment and total manhours and a breakdown of the total cost of the response which is \$21,044,862 as of July 21, 2022.

Future cleanup efforts will be completed under direction of the Illinois Environmental Protection Agency (IEPA).

Contributor:

Steve Hawkins
Tressa Benedetti
Breanna Morris
Megan Loos

f. A summary of the treatment and disposal of all oil collected during the clean-up, including amounts, in gallons, and types of waste and any waste manifests.

Response:

Approximately 807,211 gallons of precipitation runoff and/or groundwater from the wetland area was treated via dual stage carbon filtration and discharged to Cahokia Creek. Performance monitoring samples were collected throughout the process stream during discharge to ensure that Illinois Water Quality Standards and IEPA Derived Water Quality Criteria were met in accordance with the First Agreed Interim Order issued by the Court with jurisdiction over the enforcement action.

Crude and crude contact water collected from the skimming and recovery operations was transported to the Wood River Station and temporarily stored in MPL tankage. A total of 136,290 gallons of crude (based on tank gauging) was recovered and will be sent to Marathon's Robinson Refinery for processing. Approximately 698,030 gallons of water was treated via dual stage carbon filtration and transferred into the Wood River Station fire water tankage. A performance monitoring sampling plan was implemented across the process stream and the treated water was confirmed to be in accordance with the Water Quality Standards and Criteria required for the wetland water treatment system.

Approximately 33,050 gallons of contact water stored in frac tanks at Wood River Station was transported to Circon (Beaver) in Hodgkins, Illinois to be reclaimed. The total liquids from skimming and vacuuming operations was 867,370 gallons.

Approximately 48,750 gallons of contact water primarily from decontamination operations was transported to Valicor in St. Louis, Missouri to be reclaimed.

A total of 1,188 tons of non-hazardous construction debris was disposed of at Republic Services Roxana, Illinois. A total of 17,406.5 tons of non-hazardous crude impacted soil was disposed of at Republic Services Roxana, Illinois. A total of 66.31 tons of crude contaminated soil was transported to Green America in Hannibal, Missouri for reclamation. Eighty (80) tons of crude impacted materials have been reclaimed at Covanta Indianapolis Inc. in Indianapolis, Indiana. See [Attachment C](#) for a waste manifest spreadsheet which includes links providing access to each waste manifest.

Contributor:

Tressa Benedetti

g. The date and time that the discharge of oil from the Facility began.

Response:

The discharge began on March 11, 2022 at approximately 0815.

Contributor:

Paul Vahalik

h. The name, address, and phone number of the person employed at the Facility that was the first person to become aware of the discharge of oil from the Facility. State the date and time that that person became aware of the discharge of oil from the Facility.

Response:

Trey Howard
539 South Main Street
Findlay, OH 45840-3229
[REDACTED]

Contributor:

Paul Vahalik

i. The name, address, and phone number of the person employed by *you* that was the first person to become aware of the discharge of oil from the Facility. State the date and time that that person became aware of the discharge of oil from the Facility.

Response:

Trey Howard
539 South Main Street
Findlay, OH 45840-3229
[REDACTED]

March 11, 2022 at approximately 0815.

Contributor:

Paul Vahalik

- j. The earliest date and time that you first became aware of the discharge of oil from the Facility.**

Response:

March 11, 2022 at approximately 0815.

Contributor:

Paul Vahalik

- k. The date(s) and time(s) that you notified the National Response Center, the United States Coast Guard, and/or the EPA predesignated On-Scene Coordinator (OSC) of the discharge of oil from the Facility. Provide copies of all records memorializing such notification(s). Identify all other agencies and authorities that you notified of the discharge of oil from the Facility. Provide copies of all records memorializing such notification(s).**

Response:

On March 11, 2022 at approximately 1115 EST, MPL made an initial National Response Center (NRC) notification #1330806, which indicated a discharge of 3,000 barrels (126,000 gallons) of crude oil. On March 13, 2022, at approximately 1806 EST, MPL made a second NRC notification #1330949 updating the discharge volume to 3,900 barrels (163,800 gallons). In addition to NRC notifications, MPL also provided notice of the discharge to the Illinois Emergency Management Agency (IEMA) notification H-2022-0215 on March 11, 2022 at approximately 1050 CST. See Attachment D for copies of records memorializing the notifications.

Contributor:

Tressa Benedetti

- l. The date and time that the discharge of oil from the Facility ended.**

Response:

The duration of discharge is estimated. Based on the size of the opening against the elevation and pressure profile, MPL estimates the discharge duration to have been approximately fifteen (15) to thirty (30) minutes. The discharge occurred at approximately 0815 on March 11, 2022.

Contributor:
Steve Hawkins

m. The duration of the discharge and the type of oil discharged from the Facility.

Response:

The duration of discharge is estimated. Based on the size of the opening against the elevation and pressure profile, MPL estimates the discharge duration to have been approximately fifteen (15) to thirty (30) minutes. The discharge occurred at approximately 0815 on March 11, 2022.

Wyoming Asphaltic Sour Crude oil was discharged.

Contributor:
Steve Hawkins

n. The specific location of the discharge of oil from the Facility and all possible causes for the discharge.

Response:

The discharge occurred at approximately [REDACTED], [REDACTED]. The NTSB is working to complete a root cause investigation into the possible cause of the discharge. The NTSB is leading the formal investigation into the cause of the release including metallurgic analysis as part of the investigation. MPL has completed a geotechnical analysis with a third-party engineering firm. This information can be released following the finalization of the NTSB final report. In partnership with the NTSB, PHMSA and the API, MPL presented details of the release to industry peers on bending strain risk associated land movements (See Attachment Q).

Contributor:
Steve Hawkins

o. Specify all of the areas affected by the discharge from the Facility including, but not limited to, the Cahokia Creek, the Mississippi River and their banks, floodplains and adjacent wetlands. Include an assessment of the damage to both public and private property, public drinking supply, and to wildlife, resulting from the discharge and ensuing clean-up efforts.

Response:

The area affected by the discharge included portions of the Cahokia Creek shoreline, approximately 0.5 acres of pipeline right-of-way (ROW), and 1.61 acres of wetland adjacent to the location of discharge at approximately [REDACTED], [REDACTED]. The Cahokia Creek extends approximately ten (10) miles from the location of discharge to the confluence with the Mississippi River. Crude oil observed within Cahokia Creek was confined within the banks and impacts were present in accumulated woody debris. The crude oil and sheen in the Cahokia Creek was primarily observed at the boomed locations. No crude oil or sheen was observed in the Mississippi River.

There were no impacts to the public drinking water supply from the discharge or ensuing clean-up efforts to Cahokia Creek or the wetland. A potable well desktop survey was performed and included subsequent field verification visits to area properties to confirm the absence of potable wells. A single potable water sample was collected from a residence at [REDACTED] Oldenburg Road, Hartford, Illinois at the request of the homeowner. The analytical results (provided in Attachment I) were below Method Reporting Limits (MRLs) for all constituents.

The wetland area was further affected during the clean-up efforts during removal of impacted debris and soil, but the additional clean-up efforts were necessary to minimize the overall potential impact due to a predicted rain fall event, and to prevent wildlife from additional exposure.

Wildlife impacts included forty-one (41) animals. Fifteen (15) were rehabilitated and released. See Attachment F Edwardsville Impacted Wildlife for a list of the species and data related to location of discovery and disposition.

Contributor:
Tressa Benedetti

- 3. Identify all owners of the Facility (including owners holding direct and indirect ownership interests in the Facility) at the time of the discharge. State the nature of the ownership interest of each owner. If the owner of the Facility is a partnership, then identify all of the partners (both general and limited) that are members of the partnership. If the owner of the Facility is a limited partnership, then identify all of the partners (both general and limited) that are members of the limited partnership. List all lease, limited and/or general partnership agreements, or any other operating agreements in place during your ownership or operation of the Facility.**

Response:
The facility is 100% owned and operated by MPL.

Contributor:
Steve Hawkins

- 4. Identify the person(s) who would have the authority to shut down the pipeline at the time of the discharge. If more than one person had the authority at the time of the discharge, then identify each person at the Facility who had that authority, and the respective dates and times that each such person was in charge of the Facility.**

Response:
Trey Howard was the Controller on-duty and had the authority to shut down the pipeline at the time of discharge.

Contributor:
Paul Vahalik

5. **State the amount of oil discharged from the Facility on or about March 11, 2022, located near or at Edwardsville, Illinois on the Cahokia Creek. How did you determine this quantity? Provide documentation to substantiate the quantity.**

Response:

Approximately 147,000 gallons of crude oil were discharged from the Facility. The quantity was ultimately determined from comparison of reconciliation of receipts and deliveries and refill volumes. See Attachment E for discharge volume support documentation.

Contributor:

Aaron Martinez

6. **What is the diameter of the pipe (internal and external) at the point of discharge?**

Response:

The external diameter of the pipe is 22", with 0.344" wall thickness, resulting in a 21.312" internal diameter.

Contributor:

Steve Hawkins

7. **What was the velocity/flow rate of the product in the pipeline at the point of discharge?**

Response:

The velocity of the product was 4.221 ft/sec and the flow rate was 6,732 barrels per hour.

Contributor:

Jason Dalton

8. **How was the discharge detected? Was the discharge detected through loss of pressure in the pipeline? If so, what day and time was the loss of pressure detected?**

Response:

The discharge was detected via loss of pressure and related alarm. The first indication of loss of pressure occurred on March 11, 2022 at 0815:21.

Contributor:

Steve Hawkins

9. **How long after the discharge or loss of pressure did product continue to flow through the Pipeline?**

Response:

Based on Supervisory Control and Data Acquisition (SCADA) Analysis the product continued to flow from March 11, 2022 at 0815:21 through March 11, 2022 at 0823:18.

Contributor:

Paul Vahalik

10. State all authority that was given to the Facility that allowed the discharge of oil from the Facility including all permits issued to the Facility during the response action.

Response:

No authorization or permits were given to the Facility that allowed the discharge.

Contributor:

Tressa Benedetti

11. Submit copies of all reports and studies regarding the discharge of oil from the Facility that began on or about March 11, 2022, the response efforts, damage assessments, and all other events or results related to that discharge since the start of the discharge. Describe how you assessed damage and provide documentation to substantiate your answer.

Response:

MPL utilized trained personnel and environmental consultants along with employees from U.S. EPA and IEPA, to assess damage to the impacted areas. See Attachment F for the following response plans and data resulting from plan execution:

- Surface Water Sampling
- Pipeline Corridor Soil Sampling
- Division I Wetland Soil Sampling
- Cahokia Creek Sediment Assessment Poling #1
- Cahokia Creek Sediment Assessment Poling #2
- Wildlife Assessment
- SCAT
- Air Monitoring Plan
- Wetland Delineation

Contributor:

Tressa Benedetti

12. Submit copies of all correspondence with Illinois, local officials, and the United States Fish and Wildlife Service since March 11, 2022 through the present, that involve the discharge from the Facility, the response to the discharge, and any other discharge-related events related to environmental damage.

Response:

See Attachment G for correspondence through July 31, 2022.

Contributor:

Tressa Benedetti

13. Submit a detailed map depicting all of the areas impacted by the discharge of oil from the Facility that began on or about March 11, 2022. Show the extent of the discharge, location of recovery equipment, access routes and response staging areas, the areas that were evacuated and roads that were closed (if applicable), and all other pertinent details. Submit copies of all

calculations showing: the amount of oil discharged, the amount recovered during the cleanup, the amount lost due to evaporation, the amount degraded into the environment, and the amount that may still be present in the environment.

Response:

See Attachment H for a detailed map depicting areas impacted by the discharge, locations of recovery equipment, access routes and response staging areas of the emergency response and for a spreadsheet documenting estimated calculations of mass balance.

Of the 147,000 gallons (3,500 barrels) released, approximately 2,764 gallons (66 barrels) were unrecoverable due to evaporation, approximately 136,290 gallons (3,245 barrels) were recovered via vacuum trucks, approximately 4,956 gallons (118 barrels) have been recovered via excavation of contaminated soil and absorbent recovery. Approximately 2,991 gallons (71 barrels) are estimated to be either degraded or remaining in the environment. See Attachment E for discharge volume support documentation.

Contributor:

Tressa Benedetti

- 14. Submit copies of all reports and analytical results related to the monitoring or sampling of the areas impacted by the discharge of oil from the Facility that began on or about March 11, 2022. Do not include reports and data already submitted in response to other requests in this Information Request.**

Response:

See Attachment I for sampling and analytical reports.

Contributor:

Tressa Benedetti

- 15. When did the Facility begin operating? If you acquired the Facility from another owner, then state when you acquired the Facility. If you operated the facility for another owner, then state the name of that other owner, and provide the dates of your operation of the Facility.**

Response:

MPL bought the facility from Shell in April 2004 and has maintained owner operator status since that time.

Contributor:

Steve Hawkins

- 16. Since 2016, list all pipeline integrity tests including, but not limited to, pressure tests and internal pipeline inspection tests, conducted on any part of the Facility during your ownership and/or operation of the Facility. For each such test, describe the results of the test and state whether the pipeline tested is/was subject to United States Coast Guard, United States Department of Transportation, and/or EPA requirements regarding spill or release prevention, response, and/or reporting requirements.**

Response:

Per U.S. EPA email May 31, 2022, the referenced timeframe for MPL response was changed from 2016 to 2017.

Since January 1, 2017, the following tests have been performed on the Facility:

- 2/2017: Geometry (GEO), Inertial Measurement Unit (IMU)
- 3/2017: Circumferential Magnetic Flux Leakage (CMFL)
- 3/2017: Ultrasonic Wall Measurement (UTWM)
- 1/2018: Electromagnetic Acoustic Transducer (EMAT), CMFL, IMU, Strain Analysis
- 1/2018: Ultrasonic Crack Detection (UTCD)
- 3/2018: Hydrotest
- 5/2018: UTCD
- 3/2019: UTCD
- 2/2020: UTCD
- 8/2021: GEO, IMU, Strain Analysis
- 9/2021: Ultrasonic Circumferential Crack Detection (UTCCD)
- 10/2021: CMFL
- 10/2021: Magnetic Flux Leakage (MFL)
- 5/2022: IMU, Strain Analysis

These inspections were performed to inspect for evidence of internal corrosion, external corrosion, geometric anomalies, geohazards, and crack-like features on the Facility. The inspected Facility is subject to PHMSA and regulated under 49 CFR 195.

Contributor:

Kristen Schnipke

17. Identify where the pipeline begins and ends. Describe the pipeline infrastructure between these two points. Include the following information:

Response:

The pipeline begins in Wood River, Illinois and ends in Patoka, Illinois.

Contributor:

Steve Hawkins

a. The size of the pipe.

Response:

The external diameter of the pipe is 22", with 0.344" wall thickness, resulting in a 21.312" internal diameter.

Contributor:

Steve Hawkins

b. A description of all materials that flow through the pipeline between these two points.

Response:

Crude oil of varying grades flows through the pipeline.

Contributor:

Jayson Nohl

- c. **A copy of a map depicting the pipeline infrastructure.**

Response:

See Attachment J for the pipeline system overview.

Contributor:

Steve Hawkins

- d. **A copy of each permit issued to the Facility for use of the pipeline.**

Response:

Facility operates under MPL Department of Transportation (DOT) operator identification number 32147. There are no issued permits.

Contributor:

Chris Aldrich

- e. **A copy of all documents discussing problems (i.e., discrepancy reports, unplanned shutdowns, etc.) associated with the pipeline.**

Response:

See Attachment K for MPL Stop-Help-Start (SHS) documentation from 2017-2022 for the WoodPat 22" crude system. SHS is our structured team approach and process for resolving abnormal operations which would cover discrepancy reporting, unplanned shutdowns, and other events.

Contributor:

Steve Hawkins

- 18. Since 2016, identify all discharges of oil from the Facility, other than the discharge from that began on or about March 11, 2022. For each such discharge of oil from the Facility (whether or not detected as a result of a pipeline integrity test), describe, in detail, the discharge from the Facility and the response to the discharge, including, but not limited to the following:**
- a. **The date, and duration of the discharge of oil and/or hazardous substances.**
 - b. **The specific location of the discharge and possible causes for the discharge.**
 - c. **The area affected by the discharge. Include an assessment of the damage to both public and private property, public drinking water supplies, and to wildlife, resulting from the discharge and ensuing clean-up efforts.**
 - d. **A complete narrative of response efforts. Include the number of people involved, total man hours, duration of the clean-up, a list of all equipment used, and a breakdown of the total cost of the response. Also include a current description of any areas affected**

by the discharge and the response efforts, and a narrative of current and future clean-up efforts resulting from the discharge.

- e. A summary of the treatment and disposal of all oil and/or hazardous substances collected during the clean-up, including amounts and types of waste and any waste manifests.
- f. Estimate the total amount of oil and/or hazardous substances discharged, including the amount that entered a navigable water, the amount recovered, and the amount lost. Explain how you calculated the amount of oil for each category.

Response:

Per U.S. EPA email May 31, 2022, the referenced timeframe for MPL response was changed from 2016 to 2017. No other discharges of oil have occurred from the Facility from 2017 to current.

Contributor:

Tressa Benedetti

19. Submit an oil flow diagram.

Response:

See Attachment J for an oil flow diagram.

Contributor:

Steve Hawkins

20. Describe the coating system used for all pipelines or segments of the Facility.

Response:

The coating system in the area of the release was coal tar enamel, replaced with fusion bonded and liquid epoxy. The primary coating on the WoodPat 22" system is coal tar enamel, with sections of wax tape, liquid epoxy, and fusion bonded epoxy.

Contributor:

Ian Stallman

21. Describe the schedule (and provide all documentation) for inspection and maintenance for the Facility's pipeline segment.

Response:

In addition to aerial patrol inspections at least every 21 days, the following are recent/future assessments on the Facility's pipeline segment. See also Attachment L.

Year	Assessment Type	Completion Date
2017	Geometry (GEO), Inertial Measurement Unit (IMU)	2/2017
2017	Circumferential Magnetic Flux Leakage (CMFL)	3/2017
2017	Ultrasonic Wall Measurement (UTWM)	3/2017

2018	Electromagnetic Acoustic Transducer (EMAT), CMFL, IMU, Strain Analysis	1/2018
2018	Ultrasonic Crack Detection (UTCD)	1/2018
2018	Hydrotest	3/2018
2018	UTCD	5/2018
2019	UTCD	3/2019
2020	UTCD	2/2020
2021	GEO, IMU, Strain Analysis	8/2021
2021	Ultrasonic Circumferential Crack Detection (UTCCD)	9/2021
2021	CMFL	10/2021
2021	Magnetic Flux Leakage (MFL)	10/2021
2022	IMU, Strain Analysis	5/2022

Contributor:

Kristen Schnipke

22. Describe (and provide all documentation) any dents, corrosion, or other anomalies on the Facility’s pipeline segment.

Response:

The following anomaly data counts for the Facility’s pipeline segment were gathered from the most recent in-line inspection tool data from 2021. See [Attachment M](#) for dents, corrosion, and anomaly information.

- Geometric - 4
- Metal loss – 1361
- Crack-Like – 119
- Lamination - 86
- Manufacturing Indications – 41,063

Contributor:

Kristen Schnipke

23. Describe typical operation of the pipeline segment.

Response:

The asset is utilized to move crude oil from Wood River, Illinois to Patoka, Illinois.

Contributor:

Steve Hawkins

24. Describe (and provide all documentation relating to) all repairs made during the past 5 years to the Facility's pipeline segment.

Response:

Since January 1, 2017, and through March 31, 2022 there have been one hundred thirty-nine (139) B-sleeve repairs, and thirty (30) cut-outs to the Facility's pipeline segment. See Attachment N for documentation of repairs.

Contributor:

Kristen Schnipke

25. Describe (and provide all documentation relating to) all inspections of the Facility's pipeline segment conducted within the past 5 years, including whether the pipeline was excavated and/or visually or internally inspected.

Response:

Since January 1, 2017, and through March 31, 2022 there were three (3) inspection and recoats in addition to the repairs referenced in response to Question 24. See Attachment N for documentation of inspections and repairs.

Contributor:

Kristen Schnipke

26. Submit copies of all photographs and video related to the Facility's discharge that began on or about March 11, 2022.

Response:

See Attachment O.

Contributor:

Molly O'Connell

27. For the period beginning January 1, 2016, through the date of this Information Request, list all fines and penalties for which you have been assessed. Provide copies of all administrative or judicial orders issued by any federal, state, or local agency or authority for any activity at your facilities. Identify the agency, department, or other authority that assessed the fine or penalty. State the claimed basis or bases for each fine or penalty. State the date of each fine or penalty assessment. State how each fine or penalty assessment was resolved, including the amount of any fine or penalty paid. State the date of each fine or penalty assessment resolution.

Response:

Per U.S. EPA email May 31, 2022, the referenced timeframe for MPL response was changed from 2016 to 2017. See Attachment P for a list of fines, penalties, and administrative or judicial orders and copies of same.

Contributor:

Greg Smith