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AOC 17

Correspondence

2021



MICHELLE LUJAN GRISHAM
GOVERNOR

JAMES C. KENNEY
CABINET SECRETARY

Certified Mail - Return Receipt Requested

June 15, 2021

John Moore
Environmental Superintendent
Western Refining, Southwest Inc., Gallup Refinery
92 Giant Crossing Road
Gallup, New Mexico 87301

**RE: APPROVAL
RESPONSE TO DISAPPROVAL RAIL CAR LOADING AREA RELEASE SOIL SAMPLING
INVESTIGATION WORK PLAN
WESTERN REFINING SOUTHWEST INC., GALLUP REFINERY
EPA ID # NMD000333211
HWB-WRG-21-001**

Dear Mr. Moore:

The New Mexico Environment Department (NMED) is in receipt of the Marathon Petroleum Company dba Western Refining Southwest Inc., Gallup Refinery (Permittee) *Response to Disapproval Rail Car Loading Area Release Soil Sampling Investigation Work Plan (Response)*, dated April 30, 2021.

The Permittee adequately addressed all comments in NMED's *Disapproval Rail Car Loading Area Release Soil Sampling Investigation Work Plan*, dated March 4, 2021. Accordingly, NMED hereby issues this Approval. The Permittee must implement field investigation in accordance with the approved work plan and submit an investigation report summarizing the results of the investigation no later than **December 31, 2021**.

This approval is based on the information presented in the document as it relates to the objectives of the work identified by NMED at the time of review. Approval of this document does not constitute agreement with all information or every statement presented in the document.

SCIENCE | INNOVATION | COLLABORATION | COMPLIANCE

Hazardous Waste Bureau - 2905 Rodeo Park Drive East, Building 1, Santa Fe, New Mexico 87505-6313
Telephone (505) 476-6000 - www.env.nm.gov

If you have any questions regarding this correspondence, please contact Michiya Suzuki at (505) 690-6930.

Sincerely,

A handwritten signature in blue ink, appearing to read "Dave Cobrain".

Dave Cobrain
Program Manager
Hazardous Waste Bureau

cc: M. Suzuki, NMED HWB
T. McDill, OCD
L. King, EPA Region 6 (6LCRRC)

File: Reading File and WRG 2021 file



Western Refining Southwest LLC

A subsidiary of Marathon Petroleum Corporation

I-40 Exit 39
Jamestown, NM 87347

April 30, 2021

Mr. Kevin Pierard, Chief
New Mexico Environment Department
Hazardous Waste Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505

**RE: Response to Disapproval
Rail Car Loading Area Release Soil Sampling Investigation Work Plan
Western Refining Southwest LLC, Gallup Refinery
EPA ID #NMD000333211
HWB-WRG-21-001**

Dear Mr. Pierard,

Attached please find the response to comments contained in the New Mexico Environment Department (NMED) Disapproval letter for the Rail Car Loading Area Release Soil Sampling Investigation Work Plan (Work Plan) dated March 4, 2021. Two hard copies and one electronic version of the revised Work Plan are attached. Also included are the redline/strikeout text and revised Figure 2.

If you have any questions or comments regarding the information contained herein, please do not hesitate to contact Mr. John Moore at (505) 879-7643.

Certification

I certify under penalty of law that this document and all attachments were prepared under my direction of supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,
Marathon Petroleum Company LP, Gallup Refinery

Robert S. Hanks
Refinery General Manager

Enclosure

cc: D. Cobrain, NMED HWB
M. Suzuki, NMED HWB
C. Chavez, NMOCD
L. King, EPA Region 6

G. McCartney, Marathon Petroleum Corporation
K. Luka, Marathon Petroleum Corporation
T. McDill, NMOCD
H. Jones, Trihydro Corporation

Attachment A: Response to Comments

New Mexico Environment Department to Marathon Petroleum Company Comment Letter “Response to Disapproval Rail Car Area Release Soil Sampling Investigation Work Plan” (March 4, 2021)

New Mexico Environment Department (NMED) Comments	Marathon Petroleum Company (MPC) Response
Comment 1:	Response 1:
<p>In the Executive Summary, page 3 of 10, the Permittee states, “[d]iesel leaked across the railroad tracks into a culvert carrying product into the stormwater system.” Figure 2, <i>Proposed Sample Locations</i>, does not depict the location of the culvert and the stormwater system. Present the location of the culvert and the stormwater system in a revised figure. In addition, it is necessary to collect soil samples from the stormwater collection ditch where native soils are exposed immediately downstream of the culvert in order to verify whether the diesel release affected the soils in the ditch, if applicable. Revise the Work Plan accordingly.</p>	<p>In response to NMED’s Comment 1, Figure 2 has been revised to present the location of the culvert and the stormwater collection ditch.</p> <p>The Executive Summary, page 3 of 10, has been revised to state, “[i]n addition, the Investigation Work Plan proposes collection of soil samples from the stormwater collection ditch and northern boundary of the diesel release to verify if soils have been affected.” The Work Plan has also been revised in the Scope of Activities Section, page 6 of 10, to state, “[s]oil samples will be collected at the following locations:</p> <ul style="list-style-type: none"> • Four locations within the gasoline release excavated area • Five to eight locations at the stormwater collection ditch and northern boundary of the diesel release. The total number and location of borings will be based on visual observations (e.g., discolored soil, stressed vegetation, low topography). The stormwater collection ditch will be sampled where native soils were exposed, downstream of the culvert . The northern boundary samples will be collected to verify whether the area was affected and if released diesel could have potentially accumulated in topographically low areas. <p>Samples will be collected with a hand trowel and/or a hand auger, at 6-inches bgs and 1-ft bgs. The number of collected soil samples at the ditch and northern boundary will be dependent on visual impacts and indicators.”</p>

New Mexico Environment Department to Marathon Petroleum Company Comment Letter “Response to Disapproval Rail Car Area Release Soil Sampling Investigation Work Plan” (March 4, 2021)

New Mexico Environment Department (NMED) Comments	Marathon Petroleum Company (MPC) Response
Comment 2:	Response 2:
<p>In the Background Section, page 5 of 10, the Permittee states, “[o]n March 13, 2019, an estimated 1,765 gallons of diesel were released in the same area. Of the 42 barrels (1,765 gallons) released, approximately 40 barrels (1,680 gallons) were recovered via vacuum truck. Approximate locations of both releases are shown in Figure 2.” Figure 2 shows three non-contiguous affected areas where the extent of the diesel release is estimated. It is not clear how the diesel spread into three non-contiguous areas. Provide an explanation in the revised Work Plan. In addition, one of areas affected by the release is shown 2,000 feet northeast of the rail loading rack sump in Figure 2; however, the northern boundary of the area is not defined. Revise the figure to depict the northern boundary of the release. Furthermore, it is necessary to collect soil samples in the vicinity of the northern boundary to verify whether the diesel release affected the area. The soil samples must be collected in topographically low areas where the released diesel could potentially accumulate. Revise the Work Plan accordingly.</p>	<p>In response to NMED’s Comment 2 on how the diesel spread into three non-contiguous areas, the Background Section, pages 5 of 10 and 6 of 10, has been revised to state, “The diesel release began due to a valve and/or union connection failure on hard piping at the diesel filter pot and spread to the northeast (Figure 2). The diesel then migrated north via the storm water ditch; the non-contiguous locations are due to the pathway of the ditch.” Of the 42 barrels (1,765 gallons) released, approximately 40 barrels (1,680 gallons) were recovered via vacuum truck. Approximate locations of both releases are shown in Figure 2.</p> <p>The purpose of this Investigation Work Plan is to collect soil confirmation samples to determine the extent of contamination. The sample results will guide the need for any further investigation. If the analytical results indicate that additional investigation is required, MPC will prepare a work plan to extend the investigation area. Based on the results, MPC will review options for potential remediation, as necessary.”</p> <p>Figure 2 has been updated to show the northeastern extent of the diesel release.</p> <p>In response to the collection of soil samples, the Work Plan has been revised in the Executive Summary, page 3 of 10, to state, “[i]n addition, the Investigation Work Plan proposes collection of soil samples from the stormwater collection ditch and northern boundary of the diesel release to verify if soils have been affected” and in the Scope of Activities Section, page 6 of 10, to state, “[s]oil samples will be collected at the following locations:</p> <ul style="list-style-type: none"> • Four locations within the gasoline release excavated area • Five to eight locations at the stormwater collection ditch and northern boundary of the diesel release. The total number and location of borings will be based on visual observations (e.g.,

New Mexico Environment Department to Marathon Petroleum Company Comment Letter “Response to Disapproval Rail Car Area Release Soil Sampling Investigation Work Plan” (March 4, 2021)

New Mexico Environment Department (NMED) Comments	Marathon Petroleum Company (MPC) Response
	<p>discolored soil, stressed vegetation, low topography). The stormwater collection ditch will be sampled where native soils were exposed, downstream of the culvert. The northern boundary samples will be collected to verify whether the area was affected and if released diesel could have potentially accumulated in topographically low areas.</p> <p>Samples will be collected with a hand trowel and/or a hand auger, at 6-inches bgs and 1-ft bgs. The number of collected soil samples at the ditch and northern boundary will be dependent on visual impacts and indicators.”</p>
New Mexico Environment Department (NMED) Comment	Marathon Petroleum Company (MPC) Response
Comment 3:	Response 3:
<p>In the Scope of Activities Section, page 6 of 10, the Permittee states, “[s]oil samples will be collected at four locations within the gasoline release excavated area with a hand trowel and/or a hand auger, at 6-inches bgs and 1-ft bgs. In addition, soil borings will be completed with a Geoprobe at seven locations outside of the bermed area to 8 ft bgs.” Figure 2 shows the extent of the gasoline release; however, it is not clear whether the excavated area overlaps with the extent of the gasoline release. Provide a clarification in the revised Work Plan. If the extent of the gasoline release is not consistent with the excavated area, Figure 2 must be revised to present the excavated area. In addition, the location of the berms presumably overlaps with the boundary of each diesel release extent; however, it is not clear from Figure 2. Present the location of the berms in the revised figure. Furthermore, provide information regarding the maximum depth of the excavation in the revised Work Plan. If the maximum depth of the excavation exceeded eight feet below ground surface (bgs), propose to advance the soil borings to the equivalent maximum depth outside of the bermed area. Revise the Work Plan, where applicable.</p>	<p>In response to NMED’s Comment 3, Figure 2 has been revised to show the extent of the gasoline release excavation and the location of the berms. The excavation extent overlaps with the gasoline release extent. The Work Plan has been revised in the Background Section, page 5 of 10, to state, “[t]he area excavated covered the extent of the gasoline release.”</p> <p>Information regarding the maximum depth of the excavation is located in the Background Section, page 5 of 10, and has been updated to state, “[i]n November 2018, approximately 153 tons of petroleum-impacted soils beneath the pipe rack were excavated to a depth of 18-inches below ground surface (bgs) in an area approximately 41 feet by 97 feet (Figure 2).”</p> <p>The maximum depth of the excavation did not exceed eight ft bgs.</p>

New Mexico Environment Department to Marathon Petroleum Company Comment Letter “Response to Disapproval Rail Car Area Release Soil Sampling Investigation Work Plan” (March 4, 2021)

<p>Comment 4:</p> <p>In the Scope of Activities Section, page 7 of 10, the Permittee states, “[a]nalytical results will be screened by comparison to NMED Industrial Soil Screening Levels (SSLs).” Since some soil samples will be collected below one foot bgs, analytical results must also be screened by comparison to NMED Residential and Construction Work Soil Screening Levels (SSLs). Revise the Work Plan accordingly.</p>	<p>Response 4:</p> <p>In response to NMED’s Comment 4, the Work Plan has been revised in the Scope of Activities Section, page 7 of 10, to state, “[a]nalytical results will be screened by comparison to NMED Industrial, Residential, and Construction Work Soil Screening Levels (SSLs).”</p>
<p>Comment 5:</p> <p>In the Investigation Methods Section, page 7 of 10, the Permittee states, “[t]he proposed locations include four locations collected at two depths (0.5 ft bgs and 1 ft bgs) within the gasoline release excavation footprint and seven soil borings outside the bermed area, sampled every 2.5 ft beginning with a surface sample,” and “[s]amples will be field screened at regular intervals via photoionization detector (PID) for evidence of hydrocarbon impacts and will be recorded in the boring logs.” If the highest PID readings and/or visual and olfactory signs of contamination are recorded at depths outside of the proposed sampling intervals, modify the sampling depths to propose to collect potentially more contaminated soil samples. Revise the Work Plan accordingly.</p>	<p>Response 5:</p> <p>In response to NMED’s Comment 5, the Work Plan has been revised in the Investigation Methods Section, page 7 of 10, to state, “[i]f the highest PID readings and/or visual and olfactory signs of contamination are recorded at depths outside of the proposed sampling interval of every 2.5 feet, the sampling depths will be modified to collect soil samples from other intervals.”</p>
<p>Comment 6:</p> <p>In Investigation Methods Section, <i>Sample Collection Procedures</i>, page 8 of 10, proposes PAH analysis using EPA Method 8310. Use the EPA Method 8310 presupposes a high expectation of finding the specific compounds of interest with lower method detection limits. However, some semi-volatile organic compounds (SVOCs) potentially released at the site may not be detected by EPA Method 8310 alone. SVOC analysis using EPA Method 8270 may also be required for the purpose of this investigation. Provide a justification to propose EPA Method 8310 in lieu of EPA Method 8270 in a response letter or revise the Work Plan to propose both EPA Methods 8270 and 8310.</p>	<p>Response 6:</p> <p>MPC proposes to conduct EPA Method 8270/8270 SIM in lieu of EPA Method 8310. Using 8270/8270 SIM provides the expanded SVOC list to cover potential site constituents as well as lower detection limits for the PAH compounds. Therefore, the Work Plan has been revised in the Investigation Methods Section, <i>Sample Collection Procedures</i>, Number 3, third bullet, page 8 of 10, to state, “SVOCs, Method 8270/8270 SIM.”</p>

Attachment B: Revised Text



MARATHON PETROLEUM CORPORATION

GALLUP REFINING DIVISION

**REVISED RAIL CAR LOADING AREA RELEASE SOIL
SAMPLING INVESTIGATION WORK PLAN**

APRIL 30, 2021



Soil Sampling Investigation Work Plan

Approval to Proceed

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: Kateri Luka

Date

Title: Senior HSE Professional



Soil Sampling Investigation Work Plan

Executive Summary

The Marathon Petroleum Company (MPC), Gallup Refining Division is submitting this Investigation Work Plan for the soil investigation in the rail car loading area for hydrocarbon impacts. On May 7, 2017, a hydrocarbon spill was discovered pooling underneath the pipe rack located along the west side of the rail car loading area. An estimated 8,900 gallons of recovered gasoline were placed in the slop tank. At that time, no soil confirmation samples were collected. The on-site laboratory analyzed one release sample, which verified that the released product was gasoline. In an effort to remove impacts, approximately 153 tons of impacted soils were excavated from beneath the pipe rack in November 2018.

However, a subsequent diesel release occurred in the same area. On March 13, 2019, diesel was discovered leaking in the rail car loading area. Diesel leaked across the railroad tracks into a culvert carrying product into the stormwater system. An estimated 42 barrels was released; 40 barrels were recovered via vacuum truck and 2 barrels were released onto the ground surface.

On January 6, 2020, MPC submitted "Response Action Report, DGS 105 Additive Tank – Rail Car Loading Area – Gasoline Release" to New Mexico Environment Department (NMED) (Marathon 2020a). NMED returned an Approval with Modifications letter on April 3, 2020 (NMED 2020). MPC submitted a Response to Approval with Modifications letter to NMED on November 15, 2020 (Marathon 2020b). In the Response to Approval with Modifications letter, MPC committed to submitting this Investigation Work Plan to collect additional soil samples within and around the footprint of these releases.

This Investigation Work Plan proposes collecting soil samples to determine if additional soil excavation is necessary. In addition, the Investigation Work Plan proposes collection of soil samples from the stormwater collection ditch and northern boundary of the diesel release to verify if soils have been affected. This investigation will reduce data gaps from previous activities and will be utilized to determine if additional excavation or investigation is warranted.



Soil Sampling Investigation Work Plan

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Soil Sampling Investigation Work Plan

Introduction

The Marathon Petroleum Company (MPC), Gallup Refining Division (Refinery) is located approximately 17 miles east of Gallup, McKinley County, New Mexico along the north side of Interstate Highway I-40 (Figure 1). The physical address is I-40, Exit #39 Jamestown, New Mexico 87347. The Refinery property covers approximately 810 acres.

Trihydro Corporation has prepared this Investigation Work Plan for the investigation of soils around the rail car loading rack, located on the eastern portion of the Refinery. The 2017 release occurred in the area of the DGS 105 Additive tank and connecting line area, which is located on the west side of the rail car loading rack (Figure 2). The 2019 release was due to a connection failure on the Diesel Filter pot, and diesel leaked on to the east and west sides of the rail car loading rack (Figure 2).

The proposed locations include collecting samples to satisfy the commitments in the *Response to Approval with Modifications Response Action Report DGS 105 Additive Tank – Rail Car Loading Area – Gasoline Release* (Marathon 2020b). NMED comments #2, 4, and 5 required submitting a work plan for advancing soil borings to the final depth of excavation, collecting soil samples outside the bermed area, and collecting soil samples within the gasoline release excavation area, respectively (NMED 2020). The proposed sample locations include areas within the berm and outside of the bermed area, to verify that the soils outside the spill area were not adversely affected.

Background

As detailed in “Response Action Report, DGS 105 Additive Tank – Rail Car Loading Area – Gasoline Release” (Marathon 2020a), approximately 8,900 gallons of gasoline were released under the rail car loading rack on May 7, 2017. In November 2018, approximately 153 tons of petroleum-impacted soils beneath the pipe rack were excavated to a depth of 18-inches below ground surface (bgs) in an area approximately 41 feet by 97 feet (Figure 2). The area excavated covered the extent of the gasoline release. Based on the analytical data from the waste sampling, the release was not anticipated to extend further into the subsurface. However, soil confirmation samples were not collected at this time and this assumption cannot be confirmed. On March 13, 2019, an estimated 1,765 gallons of diesel were released in the same area. The diesel release began due to a valve and/or union connection failure on hard piping at the diesel filter pot and spread to the northeast (Figure 2). The diesel then migrated north via the storm water ditch; the non-contiguous locations are due to the



Soil Sampling Investigation Work Plan

pathway of the ditch. Of the 42 barrels (1,765 gallons) released, approximately 40 barrels (1,680 gallons) were recovered via vacuum truck. Approximate locations of both releases are shown in Figure 2.

The purpose of this Investigation Work Plan is to collect soil confirmation samples to determine the extent of contamination. The sample results will guide the need for any further investigation. If the analytical results indicate that additional investigation is required, MPC will prepare a work plan the investigation area. Based on the results, MPC will review options for potential remediation, as necessary.

Site Conditions

The Refinery is a crude oil refinery that processes crude oil transported by pipeline or tanker truck from the Four Corners region that is currently transitioning to idle. Various process units that have operated at the Refinery include crude distillation, reformer, fluidized catalytic cracker, alkylation, sulfur recovery, mercox treater, and hydrotreater. Past operations have produced gasoline, diesel fuels, jet fuels, kerosene, propane, butane, and residual fuel.

Surface Conditions

Local site topographic features include high ground in the southeast gradually decreasing to a lowland fluvial plain to the northwest. Elevations on the refinery property range from 6,860 feet (ft) above mean sea level (amsl) to 7,040 ft amsl. The area near the rail car loading rack is approximately 6,935 ft amsl.

Subsurface Conditions

The shallow subsurface soil (alluvium) is comprised of clay and silt with some inter-bedded sand layers. Beneath the alluvium is the Petrified Forest Member of the Chinle Group, which primarily consists of interbedded mudstone, siltstone, and sandstone. The Alluvium/Chinle interface is as little as 15 ft bgs to over 32 ft bgs.

Scope of Activities

The investigative activities of the rail car loading area will be completed to delineate horizontal and vertical hydrocarbon impacts and collect samples from the gasoline release excavated area. Pending NMED approval, MPC anticipates investigation work to be completed by the end of second quarter 2021.

Soil samples will be collected at the following locations:

- Four locations within the gasoline release excavated area.



Soil Sampling Investigation Work Plan

- Five to eight locations at the stormwater collection ditch and northern boundary of the diesel release. The total number and location of borings will be based on visual observations (e.g., discolored soil, stressed vegetation, low topography). The stormwater collection ditch will be sampled where native soils were exposed, downstream of the culvert. The northern boundary samples will be collected to verify whether the area was affected and if released diesel could have potentially accumulated in topographically low areas.

Samples will be collected with a hand trowel and/or a hand auger, at 6-inches bgs and 1-ft bgs. The number of collected soil samples at the ditch and northern boundary will be dependent on visual impacts and indicators.

In addition, soil borings will be completed with a Geoprobe at seven locations outside of the bermed area to 8 ft bgs. Samples will be collected at 2.5-ft intervals within each soil boring, beginning with a surface sample.

Another soil sample will be collected at the total boring depth. Soil samples will be analyzed for hydrocarbon impacts via Method 8015M/D (total petroleum hydrocarbons-diesel range organics [TPH-DRO]), Method 8015D (total petroleum hydrocarbons-gasoline range organics [TPH-GRO]), Method 8310 (polyaromatic hydrocarbons [PAHs]), Method 8260B/1311 (volatile organic compounds [VOCs]), Method 6020 (total metals), Method 6010B (Toxicity Characteristic Leaching Procedure [TCLP] metals), and Method 7470 (mercury). The laboratory will be notified to hold the samples for TCLP analysis at a later time, should it be needed. Analytical results will be screened by comparison to NMED Industrial, Residential, and Construction Work Soil Screening Levels (SSLs).

Investigation Methods

The proposed sampling locations are shown on Figure 2. The proposed locations include four locations collected at 2 depths (0.5 ft bgs and 1 ft bgs) within the gasoline release excavation footprint and seven soil borings outside the bermed area, sampled every 2.5 ft beginning with a surface sample. The proposed locations include areas within the berm and outside of the bermed area to verify that the soils outside the spill area were not adversely affected.

Soils obtained will be visually inspected and classified in general accordance with American Society for Testing and Materials D2487 (Unified Soil Classification System) and D2488 (Description and Identification of Soils). Detailed boring logs will be compiled in the field by qualified field staff. Samples will be field screened at regular intervals via photoionization detector (PID) for evidence of hydrocarbon impacts and will be recorded in the boring logs. If the highest PID readings and/or visual and olfactory signs of contamination are recorded at



Soil Sampling Investigation Work Plan

depths outside of the proposed sampling interval of every 2.5 feet, the sampling depths will be modified to collect soil samples from other intervals.

Sample Collection Procedures

Samples will be collected in accordance with the soil sampling Standard Operating Procedure (Appendix A). Details related to sample collection will be documented on the soil sample field forms (Appendix B). General observations recorded on the field forms for each soil sample location will include sampling start and end times, weather, site conditions, sampling team members, and other affiliations present. Sample-specific information will include field sample identification, time of sample collection, sample start and end depth, collection method, sample type (i.e., composite or aliquot), soil classification and characteristics, any deviations from or clarification of sampling procedures, and other observations. A summary of the sampling activities is shown below:

1. Collect eight soil samples within the gasoline release excavation area
2. Install seven soil borings to observe visual impacts, collect PID readings for evidence of impacts, and collect soil samples from the borings at the surface and then every 2.5 ft, for a total of 28 samples.
3. Submit samples to off-site laboratory and analyze samples for the following parameters:
 - TPH-DRO, Method 8015M/D
 - TPH-GRO, Method 8015D
 - SVOCs, Method 8270/8270 SIM
 - VOCs, Method 8260B/1311
 - Total metals, Method 6020
 - TCLP metals, Method 6010B, if deemed necessary based on total metals results
 - Mercury, Method 7470
4. Screen analytical data by comparison with NMED Industrial SSLs.

Equipment will be decontaminated before collecting each sample and equipment decontamination will be noted on the field forms. When reusable equipment is used, equipment blanks will also be collected at a rate of



Soil Sampling Investigation Work Plan

10 percent (%) and submitted to the laboratory. Upon collection, samples will be placed into a clean, sealable plastic bag labeled with the field sample identification. PID readings will be collected while the sample is in the plastic bag. After collecting PID reading, sample jars will be filled, labeled, and placed in a cooler. Before shipment, each cooler will be packed with ice, one laboratory-provided trip blank, and one laboratory-provided temperature blank. A chain of custody (CoC) form will accompany each sample shipment. Coolers will be sealed and shipped overnight to Eurofins Environment Testing in Pensacola, Florida.

Sample Frequency

Samples collected from the soil borings will include the following applicable intervals and depths:

- At the surface of the proposed boring locations;
- At 2.5-ft intervals;
- At the maximum depth of each boring; and
- At intervals suspected of being source or contaminated zones.

Data Quality and Validation

Quality assurance/quality control (QA/QC) samples will be collected during sampling to monitor the validity of the sample collection procedures. A minimum of one field duplicate will be collected with additional field duplicates collected at a rate of 10% of all samples collected. Equipment blanks will be collected from re-usable equipment at a rate of 10%; if disposable sampling equipment is used, the blanks shall be collected at a frequency of one per day. One trip blank per cooler will accompany the samples to the laboratory. The field duplicate, blank samples, and trip blanks will be submitted to the laboratory along with the soil samples.

QA/QC samples will be recorded on the field forms and CoCs. All data will undergo Tier II data validation.

Data Evaluation

The soil confirmation sampling results will be compared to NMED Industrial SSLs to determine if further excavation and/or investigation is necessary. Soil recovered during sampling will be placed in roll-off boxes or drums, labeled, and stored on the 90 Day Pad and characterized prior to disposal within 90 days.



Soil Sampling Investigation Work Plan

Monitoring and Sampling Program

No groundwater, ambient air, subsurface vapor, remediation systems, engineering controls, or other monitoring and sampling programs are currently being implemented at the rail car loading area. This Investigation Work Plan will delineate horizontal and vertical hydrocarbon impacts and collect samples from the gasoline release excavated area.

Schedule

Pending NMED approval, MPC anticipates the investigation to begin in early 2021. Once the investigation has been completed, MPC will prepare an investigation report summarizing the sampling results and investigation conclusions within 90 days of the receipt of the analytical data.

References

- Marathon. 2020a. Response Action Report, DGS 105 Additive Tank – Rail Car Loading Area – Gasoline Release, Gallup Refinery Marathon Petroleum Company LP, Gallup, New Mexico, EPA ID# NM000333211. January 6.
- Marathon. 2020b. Response to Approval with Modifications, Response Action Report DGS 105 Additive Tank – Rail Car Loading Area – Gasoline Release, Western Refining Southwest, Inc., Gallup Refinery, EPA ID #NMD000333211, HWB-WRG-20-004. November 15.
- New Mexico Environment Department (NMED). 2020. Approval with Modifications, Response Action Report DGS 105 Additive Tank – Rail Car Loading Area – Gasoline Release, Western Refining Southwest Inc., Gallup Refinery, EPA ID #NMD000333211, HWB-WRG-20-004. April 3.

Attachment C: Revised Figure 2

M:\TOWN\MARATHON\CADD\GALLUP\REPORTS\RELEASES\RAILCARLOADINGAREA\202104_RAILCARRELEASE_IMP_DISAPPROVAL_RTC_697-RAILCAR-RELEASE-202104

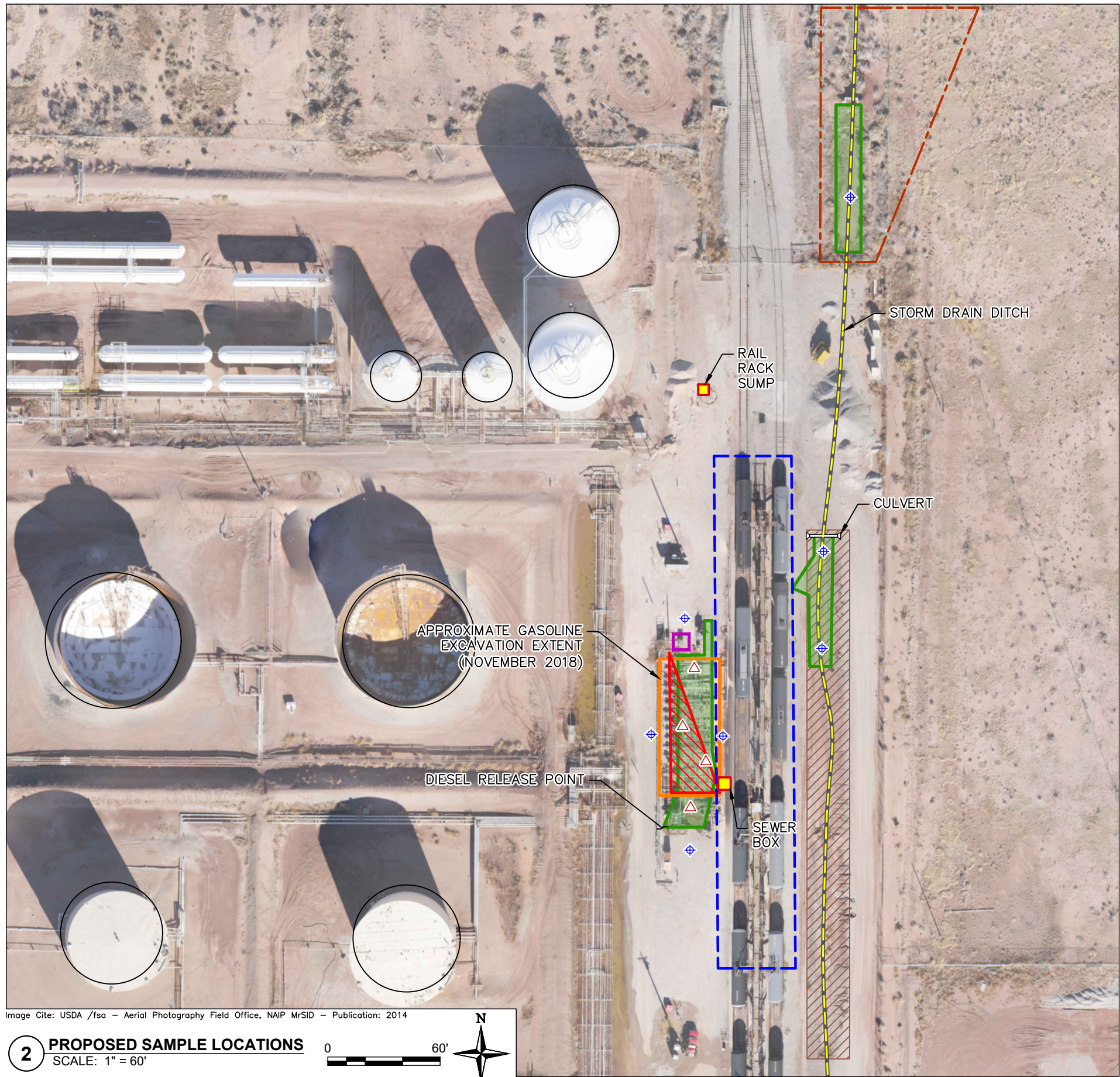
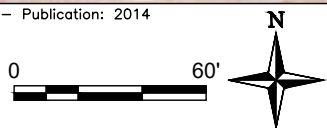


Image Cite: USDA /fsa - Aerial Photography Field Office, NAIP MrSID - Publication: 2014

2 PROPOSED SAMPLE LOCATIONS
SCALE: 1" = 60'



EXPLANATION

- PROPOSED SOIL BORING
- PROPOSED SOIL SAMPLE
- STORM COLLECTION DITCH
- APPROXIMATE GASOLINE EXCAVATION EXTENT
- PROPOSED SOIL SAMPLE AREA
- RAIL CAR LOADING AREA
- DIESEL RELEASE EXTENT (MARCH 13, 2019)
- GASOLINE RELEASE EXTENT (MAY 7, 2017)
- BERM
- DGS 105 ADDITIVE TANK
- RAIL RACK SUMP OR SEWER BOX
- TANK
- CULVERT



Image Cite: USDA /fsa - Aerial Photography Field Office, NAIP MrSID - Publication: 2014

1 KEY MAP
SCALE: 1" = 800'



FIGURE 2

PROPOSED SAMPLE LOCATIONS

**MARATHON PETROLEUM CORP.
GALLUP REFINING DIVISION
GALLUP, NEW MEXICO**

Trihydro
CORPORATION
1252 Commerce Drive
Laramie, Wyoming 82070
www.trihydro.com
(P) 307/745.7474 (F) 307/745.7729

Drawn By: REP Checked By: MS Scale: AS SHOWN Date: 3/23/21 File: 697-RAILCAR-RELEASE-202104