

**AP – 110/  
1RP-4014**

**GENERAL  
CORRESPONDENCE**

**2019**

## Chavez, Carl J, EMNRD

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**Subject:** [EXT] Mtg w/HFNR  
**Location:** Santa Fe OCD/Conf Call - 1:30 pm MDT

**Start:** Thu 5/16/2019 1:30 PM  
**End:** Thu 5/16/2019 3:00 PM

**Recurrence:** (none)

**Meeting Status:** Accepted

**Organizer:** Holder, Mike

### Agenda:

- Stage I Abatement Plan for RO Fields
- Lovington Truck Rack Recovery Well
- Comments on Pilot Test WP and Receptor Survey
- Effluent Sales
- Other

### Toll-free dial-in number (U.S. and Canada):

(866) 381-0190

### Conference code:

3817290615

8663810190,,,3817290615#

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## Chavez, Carl J, EMNRD

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**From:** Chavez, Carl J, EMNRD  
**Sent:** Friday, May 10, 2019 2:23 PM  
**To:** Combs, Robert  
**Cc:** Billings, Bradford, EMNRD; Denton, Scott; Dade, Lewis (Randy)  
**Subject:** RE: Lovington Refinery (AP-110) Asphalt Discovery and Remediation Document

Robert:

Good afternoon. Actually, an AP was generated because the facility was transitioned from WQCC GW-14 to WQCC AP-110 on 2/9/2012.

The discovery in 2015 was under the WQCC AP-110.

Because there was a WQCC DP in place with groundwater remediation, and it was later transitioned to an AP under WQCC, and the release occurred within the refinery property, an RP was likely unnecessary as this particular groundwater issue was under WQCC Regs. Since the RP was created by OCD District Staff, Jim has directed me to track it to closure under the RP and under the AP-110. Once an RP is issued, OCD must follow through to conclusion.

After communicating with Bradford Billings and Jim, I am responsible for the abatement action under the AP-110 and the 1RP-4014. Therefore, I will update AP and RP admin. records accordingly, and Navajo may deal with me on the release.

Regarding the April 1, 2019 update below, OCD would like the operator to assess the efficiency of the new system through flow rate and PSH recovery testing to determine the most efficient operation of the system, i.e., optimum flow rate, continuous vs. on-off, etc. This should be performed soon to ensure this method of PSH recovery is feasible and efficient before August 2019. Please confirm Navajo's plans to test the efficiency of the new PSH removal system within 7 days of this msg.

Please contact me if you have questions.

Thank you.

Mr. Carl J. Chavez, CHMM (#13099)  
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**From:** Combs, Robert <Robert.Combs@HollyFrontier.com>  
**Sent:** Friday, May 10, 2019 1:31 PM

**To:** Chavez, Carl J, EMNRD <CarlJ.Chavez@state.nm.us>

**Cc:** Billings, Bradford, EMNRD <Bradford.Billings@state.nm.us>; Denton, Scott <Scott.Denton@HollyFrontier.com>; Dade, Lewis (Randy) <Lewis.Dade@HollyFrontier.com>

**Subject:** [EXT] RE: Lovington Refinery (AP-110) Asphalt Discovery and Remediation Document

Carl,

HollyFrontier Navajo Refining LLC (Navajo) is providing this status update on the historical impacts discovered at the asphalt loading rack at the Lovington refinery in November 2015 and seeking clarification on the appropriate regulatory number that should be referenced for this release discovery and on-going remediation. It appears that the discovery was assigned an RP number (1RP-4014) for Holly Energy Partners LP (HEP), but remediation is being completed by Navajo under AP-110 and reporting thus far has referenced AP-110. Navajo was not aware of this RP number until receiving the OCD letter dated December 13, 2018 (received February 6, 2019). Should future reporting associated with this release reference AP-110 or the RP number? If Navajo should continue to reference AP-110, would it be possible for OCD update their records for 1RP-4014 accordingly? A summary of the release and current status is provided below.

On November 11, 2015, during construction activities at the asphalt loading rack, HEP discovered stained soil with a hydrocarbon odor that was indicative of a historical release. HEP and Navajo both notified OCD of the historical release discovery. HEP conducted soil investigation and abatement activities in November 2015 and December 2015, and additional soil investigation activities in March 2016. Navajo documented the activities and results of the HEP investigation and abatement in a letter report submitted to the OCD on September 15, 2016. Navajo conducted additional soil and groundwater investigation activities in December 2016, which included the installation of monitoring well MW-31. Monitoring well MW-31 did not contain LNAPL after installation and development activities in December 2016, but measurable LNAPL was present during semi-annual groundwater gauging on February 6, 2017. Additional soil, groundwater, and LNAPL investigation activities were conducted at and near the asphalt loading rack in June 2017 and included installation of monitoring wells MW-32 and MW-33. Results of the December 2016 and June 2017 investigation activities were documented in a November 17, 2017, letter report that was approved with comments by the OCD in an email on December 22, 2017.

Navajo has conducted routine LNAPL recovery and gauging at monitoring well MW-31 since LNAPL was discovered in February 2017. A passive skimmer (Petro-Bailer™) was installed and maintained in MW-31 from February 2017 through March 2019. The skimmer was emptied on a daily to weekly basis. The depth to LNAPL and groundwater was gauged in MW-31 after removing the passive skimmer from the well. In addition to emptying the passive skimmer on a daily to weekly basis, LNAPL was manually bailed from MW-31 on a primarily weekly basis from February 2018 through March 2019, but was occasionally conducted on a daily basis during this timeframe. The depth to LNAPL and groundwater was gauged in MW-31 before and after manual bailing. Gauging and recovery results were documented in Annual Facility-Wide Groundwater Monitoring Reports (for AP-110) that were submitted to OCD in April 2018 and April 2019.

On April 1, 2019, Navajo installed a pneumatic skimmer pump system (Geotech SpOILer System) in MW-31 that was programmed to operate at regular intervals to continuously recover LNAPL and reduce in-well apparent LNAPL thickness. Operation and maintenance (O&M) of the recovery system will be conducted on a weekly basis, but gauging of the well will only be conducted on a quarterly basis when the skimmer pump is removed for more intensive O&M. The recovery system installation and recovery results will be documented in the next Annual Facility-Wide Groundwater Monitoring Report that will be submitted to OCD in April 2020 (for AP-110).

If you have any questions or need to discuss, please let me know.

Thanks,

Robert

**Robert Combs**

Environmental Specialist  
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**From:** Chavez, Carl J, EMNRD [<mailto:CarlJ.Chavez@state.nm.us>]  
**Sent:** Wednesday, January 17, 2018 12:02 PM  
**To:** Combs, Robert  
**Subject:** RE: Lovington Refinery (AP-110) Asphalt Discovery and Remediation Document

Robert:

Happy New Year! 🌸 I appreciate the work you do for the refinery and OCD.

Thank you.

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**From:** Combs, Robert [<mailto:Robert.Combs@HollyFrontier.com>]  
**Sent:** Wednesday, January 17, 2018 6:26 AM  
**To:** Chavez, Carl J, EMNRD  
**Cc:** Sahba, Arsin M.  
**Subject:** RE: Lovington Refinery (AP-110) Asphalt Discovery and Remediation Document

Carl,

Happy New Year!

Thank you for your response to our report! We will continue our monitoring/recovery at the well and will report as required.

Thanks,  
Robert

**Robert Combs**

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**From:** Chavez, Carl J, EMNRD [<mailto:CarlJ.Chavez@state.nm.us>]  
**Sent:** Friday, December 22, 2017 11:56 AM

**To:** Combs, Robert

**Cc:** Dawson, Scott, EMNRD; Griswold, Jim, EMNRD; Billings, Bradford, EMNRD; Yu, Olivia, EMNRD

**Subject:** FW: Lovington Refinery (AP-110) Asphalt Discovery and Remediation Document

Robert:

Good morning. The New Mexico Oil Conservation Division (OCD) convened this morning after evaluation of the attached HollyFrontier Navajo Refining LLC (Navajo) above subject report.

OCD was pleased with the report and work conducted up to completion of a professional quality report submitted for OCD review. Thank you.

OCD concurs with Navajo's conclusions and "Path Forward" with recommendations; however, OCD requires at a minimum of weekly monitoring and bailing until such time as Navajo submits updated data supporting a reduced monitoring and bailing frequency to OCD for approval and/or OCD reviews the upcoming annual report for progress.

Please contact me if you have questions. Thank you and Seasons Greetings! ☺

Mr. Carl J. Chavez, CHMM (#13099)  
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**From:** Chavez, Carl J, EMNRD

**Sent:** Friday, December 1, 2017 5:03 PM

**To:** Griswold, Jim, EMNRD <[Jim.Griswold@state.nm.us](mailto:Jim.Griswold@state.nm.us)>

**Cc:** Combs, Robert ([Robert.Combs@hollyfrontier.com](mailto:Robert.Combs@hollyfrontier.com)) <[Robert.Combs@hollyfrontier.com](mailto:Robert.Combs@hollyfrontier.com)>

**Subject:** FW: Lovington Refinery Asphalt Discovery and Remediation Document

Jim:

We should discuss soon.

## **CONCLUSIONS**

The results of the December 2016 and June 2017 soil and groundwater investigations completed at the asphalt loading rack area indicate the following:

- Vertical and lateral delineation of TPH in soil above RALs is complete based on laboratory results of soil samples collected at MW-31 and SB-01-062017 through SB-04-062017.
- Lateral delineation of PAHs in soil is complete based on laboratory results of soil samples collected at soil borings SB-01-062017 through SB-04-062017.
- Vertical delineation of PAHs in soil was not achieved; however, further delineation is not feasible since the deepest sample (98 feet bgs) was collected just above the saturated zone. Therefore, groundwater in the vicinity of the asphalt loading rack will be assessed in all directions for PAHs as part of the ongoing facility-wide groundwater monitoring program.
- Lateral delineation of dissolved-phase PAHs in groundwater above WQCC Standards is complete in all directions of the asphalt loading rack and MW-31 based on laboratory results of groundwater samples collected from wells MW-32 and MW-33 in June 2017 and wells MW-5, MW-21, and MW-22 since at least 2010.
- Lateral delineation of LNAPL is complete in all directions of the asphalt loading rack and MW-31 based on soil screening results at soil borings SB-01-062017 through SB-04-062017 and wells MW-32 and MW-33; and groundwater gauging data collected from the surrounding wells since at least 2010.
- LNAPL characterization results for MW-31 indicate a mixture of primarily moderately weathered middle distillate and a lesser amount of gasoline range material.
- The mean LNAPL transmissivity at MW-31 was calculated to be 0.05 ft<sup>2</sup>/day in June 2017, which is below the range of LNAPL recovery endpoint values established by the ITRC indicating that hydraulic or pneumatic methods of LNAPL recovery would be ineffective at MW-31.

## PATH FORWARD

Navajo recommends the following path forward to address the soil and groundwater impacts at the asphalt loading rack:

- Continue to implement the facility-wide groundwater monitoring program. The FWGWMWP will be updated to include the three new monitoring wells (MW-31 through MW-33) and to include TPH GRO and DRO analysis at select wells (MW-5, MW-21, MW-22, MW-31 through MW-33, WW-North, WW-South, and WW-North).
- Continue to conduct routine, manual LNAPL recovery at monitoring well MW-31 using bailing or skimming techniques. Recovery will be conducted on a weekly to monthly basis depending on apparent LNAPL thickness and recovered volumes. Recovery will be documented in the Annual Facility-Wide Groundwater Monitoring Report that is due to the NMOCD by April 15 of each calendar year.
- Conduct LNAPL bail-down testing at MW-31 on a periodic basis (semi-annually to annually) to confirm the June 2017 LNAPL transmissivity calculation and to assess LNAPL transmissivity over time as LNAPL recovery efforts continue.

These recommendations are based on the following:

- The most likely source of the historical soil impacts was the drainage boxes and drain line and these have been plugged and abandoned. There are no other diesel storage or active diesel transfer lines present in the vicinity of the loading rack. Therefore, source abatement is considered complete. Continued LNAPL recovery will improve groundwater conditions. The concrete slab present beneath the asphalt loading rack

serves as a "cap" over the historical soil impacts, effectively preventing worker exposure to impacted soil and preventing vertical migration of fluids from the surface through the impacted soil zone (i.e., prevents precipitation from percolating through the soil impacts and leaching to groundwater).

- Further excavation of impacted soil in this area is not feasible due to the existence of loading rack infrastructure, active loading rack operations, and the depth of soil impacts. Loading rack operations, which include active truck traffic and loading, occurs on a 24-hour basis.
- VOCs and/or SVOCs are delineated in groundwater in all directions within the refinery boundary. The proposed groundwater monitoring program effectively monitors VOCs and SVOCs in all directions of the asphalt loading rack (i.e., installation of any additional wells would be redundant).
- Installation of a hydraulic or pneumatic LNAPL recovery system at monitoring well MW-31 would not be practicable due to the low LNAPL transmissivity and because the presence of the system would interfere with active loading operations.

Navajo requests NMOCD approval of this recommended path forward for the historical impacts at the asphalt loading rack. If you have any questions or concerns, please do not hesitate to contact Scott Denton at (575) 746-5487 or myself at (575) 746-5382.

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**From:** Chavez, Carl J, EMNRD  
**Sent:** Friday, December 1, 2017 1:20 PM  
**To:** Yu, Olivia, EMNRD <[Olivia.Yu@state.nm.us](mailto:Olivia.Yu@state.nm.us)>  
**Cc:** Brown, Maxey G, EMNRD <[MaxeyG.Brown@state.nm.us](mailto:MaxeyG.Brown@state.nm.us)>  
**Subject:** Lovington Refinery Asphalt Discovery and Remediation Document

FYI: OCD-SF is currently reviewing.

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