

GW-028

**ANNUAL GW
MONITORING
REPORT**

2013

Chavez, Carl J, EMNRD

From: Martinez, Cynthia, NMENV
Sent: Monday, February 15, 2016 9:24 AM
To: Robert.Combs@hollyfrontier.com; lrodriguez@arcadis-us.com
Cc: Kieling, John, NMENV; Cobrain, Dave, NMENV; Dhawan, Neelam, NMENV; VanHorn, Kristen, NMENV; Tsinnajinnie, Leona, NMENV; Chavez, Carl J, EMNRD
Subject: Letter to Mr. Denton
Attachments: NRC 2016 HWB-NRC-14-003.pdf

Good Morning All,
The attached letter was mailed on Friday February 12th.

*Cynthia Martinez
New Mexico Environment Department
Hazardous Waste Bureau
2905 Rodeo Park Drive East, Bldg.1
Santa Fe, New Mexico 87505
Phone 505-476-6000*



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RYAN FLYNN
Cabinet Secretary
BUTCH TONGATE
Deputy Secretary

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

February 12, 2016

Mr. Scott M. Denton
Environmental Manager
HollyFrontier Navajo Refining L.L.C.
P.O. Box 159
Artesia, New Mexico 88211-0159

**RE: APPROVAL WITH MODIFICATIONS
2013 ANNUAL GROUNDWATER REPORT
HOLLYFRONTIER NAVAJO REFINING L.L.C. - ARTESIA REFINERY
EPA ID NO. NMD048918817
HWB-NRC-14-003**

Dear Mr. Denton:

The New Mexico Environment Department (NMED) has completed its review of HollyFrontier Navajo Refining L.L.C., Artesia Refinery's (Permittee) *2013 Annual Groundwater Report* (Report), dated February 2014. NMED hereby issues this Approval with the following modifications.

Comment 1

In Section 2.6 (Exceptions to Groundwater Monitoring Work Plan), pages 7 and 8, bullet items 8 and 7, respectively, the Permittee states that phase-separated hydrocarbons (PSH) were detected at a thickness of less than 0.03 feet in monitoring wells NCL-34A and KWB-8. The *2012 and 2013 Facility Groundwater Monitoring Workplans* state that a groundwater sample will not be collected if PSH is greater than 0.03 feet in the monitoring wells. However, a groundwater sample was not collected from either of these monitoring wells even though the PSH was less than 0.03 feet and the Permittee did not explain why a sample was not collected in the Report or the field notes. In the response letter, provide an explanation for not collecting groundwater

samples from these monitoring wells. In future reports, provide an explanation for all exceptions to the groundwater monitoring work plans.

Comment 2

In Table 1 (Well Information and Gauging Data), pages 3 through 10, there appear to be typographical errors in reporting the *Depth to Water* measurements for several monitoring wells that include KWB-1B, MW-39, MW-88, MW-97, NCL-44 and RW-16B. The *Depth to Water* measurements only report one significant digit (e.g., MW-88: 9 feet below top of casing (ft btoc)) while other measurements report two or more (e.g., MW-76: 10.95 ft btoc). According to the Field Notes in Appendix A, there are two significant digits reported for each of these monitoring wells. No revision is necessary; however, ensure the correct number of significant digits (i.e., to an accuracy of 0.01 foot) is reported in all tables for future reports.

Comment 3

On Figures 4 (Shallow Saturated Zone, Potentiometric Surface Map, 2013 First Semiannual Event (March)) and 6 (Shallow Saturated Zone Potentiometric Surface Map, 2013 First Semiannual Event (Oct)), the Permittee presents the potentiometric surface contours for the March and October 2013 groundwater monitoring events. There appears to be a depression between the North Reverse Osmosis (RO) Reject Pond and the South RO Reject Pond for the March and October monitoring events and another depression around MW-48 and RW-15C during the October monitoring event that were not discussed in the Report. The potentiometric surface maps from the 2012 Annual Groundwater Report did not depict these depressions in any of the figures. Provide an explanation for these potentiometric surface depressions in the response letter and discuss these occurrences in future reports, if present.

Comment 4

In Appendix A (Field Sampling Notes and Wells Logs), the Permittee provides observations in the field notes for the first and second semiannual monitoring and sampling events. However, some of these observations are not discussed in the Report. For example, there are several monitoring wells in the vicinity of the Evaporation Ponds where the groundwater was reported to have a "light/heavy odor" and a yellow discoloration. Review the field notes for all locations at the site and provide an explanation in the response letter for any observations that were not discussed in the Report. In future reports, include a discussion about such observations.

Comment 5

In Appendix A.2 (Second Semiannual Event Rainfall Data and Field Notes), page 42 of the Appendices on the CD does not provide the monitoring well ID because there was an error with scanning the well sampling form. Provide a copy of the well sampling form with the missing monitoring well ID and ensure scanned documents are legible in future submittals.

Comment 6

In Appendix C (Trend Plots of COC Concentrations, Groundwater Elevations, and PSH Thickness), there appears to be a formatting error in presenting the trend charts for the *Field East of the Refinery* pages 36 through 40 and *RO Reject Fields* pages 11 through 15 and 21 through 25. The trend charts for KWB-11A, MW-115 and MW-116 are not complete figures and the ends of the charts continue on a separate page. In all future Reports, ensure all figures and charts are properly formatted.

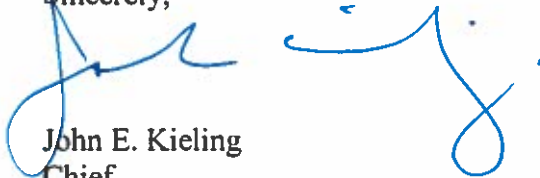
Comment 7

In Appendix C (Trend Plots of COC Concentrations, Groundwater Elevations, and PSH Thickness), *Three Mile Ditch*, the Permittee provides trend charts for arsenic for NP-1 and NP-2. However, there does not appear to be any historical data for arsenic at NP-1 and NP-2. If arsenic was not analyzed at NP-1 and NP-2, remove these charts from all future Reports.

The Permittee must address Comments 1 and 3 in a response letter contained in this Approval with Modifications and submit the response letter to NMED by **May 13, 2016**.

If you have any questions regard this letter, please contact Leona Tsinnajinnie of my staff at (505) 476-6057.

Sincerely,



John E. Kieling
Chief
Hazardous Waste Bureau

cc: D. Cobrain, NMED HWB
N. Dhawan, NMED HWB
K. Van Horn, NMED HWB
L. Tsinnajinnie, NMED HWB
C. Chavez, NMEMNRD OCD
R. Combs, HollyFrontier Navajo Refining L.L.C., Artesia Refinery
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File: Reading and NRC 2016, HWB-NRC-14-003