NEW MEXICO
ENVIRONMENT DEPARTMENT

Hazardous Waste Bureau

2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505-6313
Phone (505) 476-6000 Fax (505) 476-6030
www.env.nm.gov

MICHELLE LUJAN GRISHAM
Governor

HOWIE C. MORALES
Lt. Governor

JAMES C. KENNEY
Cabinet Secretary Designate

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

February 8, 2019

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

RE: DISAPPROVAL
INVESTIGATION REPORT NORTH DRAINAGE DITCH AND
OW-29 & OW-30 AREAS
WESTERN REFINING SOUTHWEST INC., GALLUP REFINERY
EPA ID# NMD000333211
HWB-WRG-18-008

Dear Mr. Moore:

The New Mexico Environment Department (NMED) has reviewed the *Investigation Report North Drainage Ditch and OW-29 & OW-30 Areas* (Report), dated August 2018, submitted on behalf of Marathon Petroleum Company dba Western Refining Southwest Inc., Gallup Refinery (Permittee) and hereby issues this Disapproval with the following comments.

Comment 1

The Permittee received NMED's Approval with Modifications for the Investigation Work Plan OW-29 & OW-30 and North Drainage Ditch Areas on February 23, 2016 and conducted the field work from May 23, 2016 through June 1, 2016. The Permittee did not submit the Investigation Report until August 2018 over two years after field work was conducted. NMED did not establish a submittal date for the investigation report in the approval of the investigation work plan so that the Permittee submits investigation results in a timely manner and move forward with additional phases of investigation, as necessary. NMED will correct this oversight in future approvals.

Comment 2
While not a written requirement, in the past when the Permittee submitted the electronic version of documents, the Permittee separated out the text of the report, figures, tables, laboratory reports and other appendices as distinct files. This Report was submitted as a single file on the disc. It facilitates NMED's review to have distinct files. NMED requests the Permittee returns to this practice.

Comment 3
The Permittee did not collect soil samples for laboratory analysis from several borings where field observations (visual, olfactory and headspace vapor screening) indicated the presence of contamination was not observed. The Work Plan in Section 4.1.1 (Soil Sample Field Screening and Logging) stated that discrete soil samples would be retained for laboratory analyses "0'-0.5' (at all soil borings); 1.5'-2.0' (at all soil borings); >2.0'(from the interval in each soil boring with the greatest apparent degree of contamination, based on field observations and field screening); [f]rom the bottom of each borehole (all soil borings); [f]rom the 6" interval at the top of saturation (applicable only to borings that reach saturation); and [a]ny additional intervals as determined based on field screening results." However, no soil samples were collected from borings NDD-1, NDD-2, NDD-3, OW-53, and OW-56. Additionally, the Permittee collected only one sample at OW-54 from the 14 to 16 ft bgs interval (immediately above the saturated interval) and one sample at OW-55 from the 16 to 19 ft bgs interval (immediately above the saturated interval). This practice does not adequately characterize the subsurface. Lack of soil sample collection for laboratory analysis fails to collect data that is essential in determining the extent of impacts. The Permittee did not characterize the soil impacts adequately during this investigation. While field observations are an important part of investigation work, often the field observations do not represent the full picture regarding contaminant impacts. In addition, the Permittee did not implement the approved Work Plan, which constitutes noncompliance with RCRA Permit Section I.J.11 (Approval of Work Plans and Other Documents).

Comment 4
In Executive Summary, page E-ii, the Permittee states, "[e]leven organic constituents (1-methylnaphthalene, 2-methylnaphthalene, 1,2,4-trimethlybenzene, 1,3,5-trimethylbenzene, 1,2-dichloroethane, benzene, ethylbenzene, MTBE, naphthalene, toluene, and xylenes) were detected at concentrations above screening levels in at least one of the seven groundwater samples collected from the temporary well completions or permanent well completions." According to Table 8, *Groundwater Analytical Results Summary,* the concentration of bis(2-ethylhexyl) phthalate also exceeded the screening level in the groundwater sample collected from well OW-55. In addition, the concentrations of total petroleum hydrocarbon (TPH) gasoline and diesel range organics (DRO) exceed the screening levels in the groundwater samples collected from most of the groundwater monitoring wells. Revise the Report accordingly.

Comment 5
In Section 2.1 (North Drainage Ditch), page 2-1, the Permittee states, "[t]he area designated as the North Drainage Ditch is actually part of a larger drainage feature that begins on the north side of the tank farm, extends north along the western boundary of Solid Waste Management Unit (SWMU) 9 – Drainage Ditch and Inactive Landfarm, and passes beneath a dirt road, where it

bifurcates (Figure 2)." The Permittee later states, "[t]here is no record of waste or other contaminants being handled in the proposed area of investigation, nor is there a record of site operations in this area." While the drainage ditch may not have purposefully been used as an area to manage waste, it represents a migratory pathway for contaminants related to the refinery operations to move through the environment. While it seems that water entering the ditch is likely groundwater seeping into the ditch, the ditch is still a migration pathway. Revise the description to provide a more accurate description of the ditch and describe whether it is a natural or manmade feature or a combination of both. In addition, SWMU 9 (Drainage Ditch and Inactive Landfarm) and the locations of the dirt road where the ditch bifurcates are not depicted on Figure 2 (Investigation Area). It is not clear whether the ditch continues after passing the dirt road. Point out these features in a figure and clarify the pathway and extent of the ditch in the revised Report. The "larger drainage feature" extending from the north side of the tank farm in relation to the North Drainage Ditch must be presented in Figure 2 or a separate figure, if appropriate.

Comment 6

The Permittee does not explicitly discuss whether the surface water present in the ditch is there year-round or if it is present intermittently. In Section 2.1 (North Drainage Ditch), page 2-1, the Permittee discusses that the area was initially discovered in 2009 and the "[t]he potentially affected portion of the ditch was estimated to be 40 feet long with water depths of a few inches and up to one foot in width." At the end of the paragraph on page 2-2, the Permittee states, "[b]ased on the fact that the water appeared to be ephemeral in nature and there were very few detections of only low concentrations of chemical constituents in surface soils no further action was taken at the time." In 2015 the facility indicated that water in the ditch was more than ephemeral because cattails and grasses were present in the ditch. On page 2-2, the Permittee indicates that standing water was vacuumed from the ditch, but that another surface water sample was also collected after the water was removed. The time between removing the standing water and collection of the North Drainage Ditch surface water sample on April 23, 2015 is not clear. Understanding recharge rates of water entering the ditch may help assess contaminant migration. Provide information regarding whether water is consistently present in the ditch and the time spans between removal of the water and the return of water in the ditch.

Comment 7

In Section 2.2 (OW-29 and OW-30 Area), page 2-3, the Permittee states, "[p]otential sources are the tanks and ancillary equipment in the refinery tank farm." The Permittee discusses that the Tank Farm (SWMU 6) is the likely source of the contaminants in the ditch. Provide a figure that depicts the Tank Farm and labels the tanks and identifies the tank(s) that could be potential sources of the TPH and MTBE contamination in the revised Report. Provide a discussion regarding general tank maintenance as well.

Comment 8

In Section 4.2 (Subsurface Conditions), page 4-2, the Permittee states, "[o]ne underground pipeline was detected during clearance of utilities in the area north of the North Drainage Ditch." Provide information regarding the underground pipeline including the content conveyed in the

line in the revised Report and provide a figure depicting the location of the pipeline in the revised Report.

Comment 9
In Section 4.3.1 (North Drainage Ditch), page 4-6, regarding boring NDD-1, the Permittee states, "[t]he lithology encountered consisted of the following... Claystone (Chinle Group- Painted Desert Member): 14 feet bgl – 20 feet bgl (low plasticity, very stiff, damp to dry, reddish purple, no odor, trace grey)." Section 2.1 (North Drainage Ditch) states that the boring was drilled to the top of bedrock. The borings were advanced six feet into the bedrock (claystone), rather than to the top of bedrock. Therefore, the statement in Section 2.1 is contradictory. The same discrepancy is found in the description of drilling regarding other soil borings (e.g., NDD-2). Resolve the discrepancies in the revised Report.

Comment 10
In Section 4.3.1 (North Drainage Ditch), page 4-7, regarding boring NDD-3, the Permittee states, "[t]he well was installed with the screened interval ranging from 5 feet bgl to 15 feet bgl. On May 14, 2015 the well was gauged, purged and a water sample collected. The well casing and screen were removed and the borehole was grouted." Clarify how the borehole was grouted in the revised Report.

Comment 11
In Section 4.3.1 (North Drainage Ditch), page 4-9, regarding boring NDD-5, the Permittee states, "[t]he lithology encountered consisted of silt from 0 to 2 feet bgl. This low plasticity silt was soft, damp and exhibited an odor at the base." The Permittee does not state the type of odor encountered; e.g., petroleum or organic odor. Also, provide the elevation difference between the ground level at the surface compared to the ground level within the ditch where the boring was installed in the description. Revise the Report to include the type of odor encountered and include a ground elevation for all borings installed within the ditch.

Comment 12
In Section 4.3.1 (North Drainage Ditch), page 4-9, regarding boring NDD-6, the Permittee installed one hand auger boring within the ditch starting at the surface within the ditch and then moved outside the ditch and installed another boring, designating both borings with the same name as the boring in the ditch and collected samples starting at four feet below the ground surface (ft bgs). Then, the Permittee describes the lithology encountered, but it is not clear if the lithology described is from the boring within the ditch combined with the boring outside the ditch or just the boring outside the ditch. In the revised Report, give each boring a separate designation (e.g., NDD-6 and NDD-6A) to distinguish the separate borings. Provide a separate discussion for each boring.

Comment 13
Sampling depths should have been modified in the field in a couple of instances. For example, two samples were collected from boring NDD-12, from 0-0.5 ft below ground level (bgl) and from 1.5-2 ft bgl. The description of the boring states, "[t]he lithology encountered consisted of silt from 0 - 2 feet bgl. This low plasticity silt was soft, damp, and exhibited a hydrocarbon odor

at the base." The PID reading for the boring increased with depth (8.9 ppm to 66.4 ppm). The Permittee missed the opportunity to define the vertical extent of potential soil contamination. No revision is necessary, but during future investigations, define the vertical extent of contamination if field screening indicates that contamination could be present. In future work plans, provide a contingency for boring installation and additional soil sampling to define the vertical extent of contamination.

Comment 14

In Section 4.3.1 (North Drainage Ditch), page 4-10, the Permittee states, "[a]pproximately 145 feet due northwest of NDD-6 are three boring locations NDD-7 (north of ditch), NDD-8 (middle of ditch), and NDD-9 (south of ditch)." The PID readings from borings NDD-8 and NDD-9 were recorded as 904 and 1,530 parts per million (ppm), respectively, which are significantly higher compared to the PID readings from other borings. Neither boring NDD-8 or NDD-9 was drilled deeper for soil investigation or converted to a temporary well to collect groundwater samples. On page 4-11, the Permittee also states, "[a]pproximately 180 feet due northwest of NDD-7, NDD-8 and NDD-9 are three boring locations NDD-10 (north of ditch), NDD-11 (middle of ditch), and NDD-12 (south of ditch)." The PID readings from borings NDD-10, NDD-11, and NDD-12 were significantly lower compared to those from borings NDD-8 and NDD-9; however, boring NDD-11, which exhibited the lowest PID reading among the set, was drilled deeper to collect soil samples and was converted to a temporary well. The Permittee should have focused on investigating the areas where the highest PID readings were recorded. No revision required; however, in future work plans, include a provision to more thoroughly investigate the areas where field data indicate the most probable presence of contamination. Propose additional investigation in a work plan to further assess the locations where the high PID readings were observed.

Comment 15

The Permittee's description of the intervals encountered in the groundwater monitoring well OW-54 in Section 4.3.2 (Downgradient of OW-14, OW-29, and OW-30), page 4-17, states, "[s]andy Clay: 22 feet bgl – 30 feet bgl (low plasticity, soft, moist to saturated, brown, faint hydrocarbon odor, gravel present)." However, this is not entirely accurate, as the boring log in Appendix G (May 2016 Soil Boring Logs and Well Logs) indicates that the faint hydrocarbon odor was observed in 22 to 24 ft bgs interval and not through the whole interval as described. Revise the description to be more accurate.

Comment 16

In Section 4.4.1 (North Drainage Ditch), page 4-19, the Permittee states, "[t]he well development and purging is [sic] also discussed in Appendix F." In Appendix F (Field Methods), the Permittee states that field measurements of groundwater stabilization parameters included pH, specific conductance, dissolved oxygen concentrations, oxidation-reduction potential, and temperature and the readings are presented in Table 4. Table 4 (Groundwater Field Measurements) presents the readings; however, since only one set of readings is presented, it is not clear that the Permittee followed procedures to ensure stabilization of these readings. Revise Table 4 to present three sets of reading per each well to demonstrate that the parameters were stabilized prior to sampling. In addition, on page 4-20, the Permittee also states, "[t]he purge

water was turbid." Turbidity readings are often used as a criterion for groundwater stabilization for newly developed wells. The Permittee must follow RCRA Permit Section IV.J.2.h (Groundwater Sampling).

Comment 17

Section 4.4.1 (North Drainage Ditch) states that most temporary wells were installed, purged, sampled and abandoned on the same day or abandoned on the following day. Since the seepage velocity of separate phase hydrocarbons (SPH) may not be consistent with groundwater and may be slower than groundwater recharge, the temporary wells should not have been abandoned immediately. In future investigations, temporary wells must be monitored for the presence of SPH for a minimum of two weeks, where SPH is potentially present. Include the provision in future work plans.

Comment 18

In Section 4.4.2 (Downgradient of OW-14, OW-29, and OW-30), page 4-23, regarding well construction and groundwater sampling, the Permittee states, "[o]n May 26, 2016 the drilling rig was set up on location OW-53. The boring was installed using the HSA drilling method. Groundwater was not encountered. A permanent well was constructed of 2-inch Schedule 40 PVC screen and casing. The well was installed with the screened interval ranging from 16 feet bgl to 31 feet bgl. The screen was placed from the top of bedrock to encounter any groundwater accumulating on this surface and upward through a silty clay that did not indicate presence of saturation." The Permittee notes that the well was dry during subsequent monitoring events as well. It seems that since saturation was not encountered at all, it would have made sense to not install a well or that the boring be left open for a period of time to see if groundwater entered the boring. Soil samples were not collected for laboratory analysis from the boring for this well either. Therefore, other than the description of the soil lithology, this boring did not add to the data set for this investigation. No revision necessary.

Comment 19

In Section 4.4.2 (Downgradient of OW-14, OW-29, and OW-30), page 4-26, regarding well construction and groundwater sampling at well OW-56, the Permittee states, "[g]roundwater was encountered in gravelly sandy clay (12 feet bgl to 14 feet bgl). A permanent well was constructed of 2-inch Schedule 40 PVC screen and casing. The well was installed with the screened interval ranging from 6 feet bgl to 16 feet bgl. Although saturated sediments were not observed during the drilling activities, the top of the screen was placed at six feet to intercept the potential occurrence of groundwater in a silty clay that hosted a sand/gravel seam at 7.5 feet bgl to 7.75 feet bgl. The screen was extended across a saturated gravelly sandy clay (12 feet to 14 feet bgl). The screen intercepted the top of bedrock at 14 feet bgl and extended to a depth of 16 feet bgl." The Permittee makes contradictory statements in this paragraph, first stating that groundwater was encountered from 12 to 14 ft bgl in gravelly sandy clay and then stating that saturated sediments were not observed during drilling activities. Revise the Report to accurately describe the groundwater and soil conditions.

Comment 20
Section 4.4.2 (Downgradient of OW-14, OW-29, and OW-30) discusses groundwater measurement relative to the top of casing; however, the Permittee does not discuss the length of casing stickup. The length of the casing above ground level also is not immediately evident from the boring log. The Permittee provided the elevation of the top of casing and the top of the pad. The survey data in Appendix D does not include the elevation of the ground surface for the permanent groundwater monitoring wells. Revise the Report to include the length of stickup so that NMED can determine the depth to groundwater below the ground surface, since that is how groundwater is discussed in other sections of the Report.

Comment 21
There appears to be a copy-paste error in Section 4.4.2 where the Permittee discusses OW-55 but references well OW-54 on page 4-25. The Permittee states, "[o]n May 31, 2016 OW-54 was gauged. The depth to water was 18.16 feet [below top of casing] btoc." Revise the Report to correct the reference and ensure that other copy-paste errors are corrected, if necessary.

Comment 22
Include a table that lists information regarding the three new wells that were installed (OW-54, OW-55, and OW-56) and the existing wells (OW-13, OW-14, OW-29, OW-30, OW-50, and OW-52) in the area. The table must include information such as the well designation, the ground elevation of the well, total depth, screen interval, and the groundwater level (elevation and depth below ground surface) in the revised Report.

Comment 23
In Section 5 (Regulatory Criteria), second paragraph on page 5-1, the Permittee states, "[t]o achieve closure as "corrective action complete without controls", the affected media must meet residential screening levels, which are presented in Table 5. Table 5 also provides a list of the available NMED and EPA soil screening levels for non-residential properties." Then, in the fourth paragraph on pages 5-1 and 5-2, the Permittee states, "[t]he aforementioned Table 5 has soil screening levels for the soil-to-groundwater pathway that are based on a dilution/attenuation factor (DAF) of 1.0, which is NMED's most conservative screening level for this pathway. The soil-to-groundwater soil screening level is not applicable to the specific conditions observed at the North Drainage Ditch and the OW-29 & OW-30 Areas. The "impacted" soils appear to be impacted as the result of lateral transport of contaminants in groundwater to the locations where soil samples were collected and analyzed. The subject groundwater contamination originates from various up-gradient sources. NMED recently provided guidance to address this situation in Comment No. 2 in the June 14, 2018 Disapproval Investigation Report SWMU 10 Sludge Pits. NMED stated, '. . . since groundwater contamination beneath the Sludge Pits originates from various upgradient sources, and contamination is already present in the aquifer, the use of a site-specific DAF is not applicable. DAF is used to determine if contaminants in soil can migrate to groundwater, and in this case, groundwater is contaminated in the area.'" The Permittee seems to misinterpret NMED's comment. To further clarify NMED's statement regarding DAF, there were several issues regarding the Permittee's calculated DAF used in the SWMU 10 Sludge Pit investigation report. The Permittee calculated a site-specific DAF based on data collected from another unit. It is clear that some of the contamination found during that investigation is from

upgradient sources; however, the Sludge Pits affected the area as well. It was not appropriate to use soil data from the Aeration Basin to calculate a DAF for the Sludge Pits. The Permittee then based its investigation on the calculated DAF rather than use an industrial or residential soil screening level. Investigations should not be based on a calculated DAF; the highest SSL listed in NMED's Guidance Table A-1 for a chemical based on a DAF of 20 (e.g., the industrial, construction, or residential SSLs as appropriate) should be applied for initial screening. If potential for migration to groundwater is applicable for a site, the NMED may determine that a DAF of 1 or greater, as calculated using the NMED-approved methods, for contaminated soils is appropriate to achieve clean closure. There is no need to discuss DAF values in Section 5 if the Permittee is not using them. Since groundwater is already affected by contaminants, use of DAF is irrelevant because soil contaminants have affected groundwater. Remove the reference to NMED's comment regarding the SWMU 10 Sludge Pit investigation and remove the discussion of DAF from this section of the Report.

Comment 24

In Section 6.1 (Soil Analytical Results), on page 6-2, the Permittee states, "[t]here are 16 soil samples [list of borings and sample intervals] with concentrations of manganese ranging from 480 mg/kg to 1,600 mg/kg, which exceeded the non-residential (i.e., construction worker) screening level of 464 mg/kg as indicated with highlighting in Table 7. The concentrations are shown on Figure 14. All sample results are less than the residential soil screening level of 10,500 mg/kg." Elevated manganese concentrations may be detected at refinery sites because some crude oils contain high concentrations of manganese or due to reducing conditions. Discuss whether there is information available regarding the level of manganese in crude oil historically stored at the facility.

Comment 25

In Section 6.1 (Soil Analytical Results), on pages 6-2 and 6-3, the Permittee states, "[t]he detected concentrations [of gasoline range organics (GRO)] range from 0.061 mg/kg to 1,900 mg/kg," and "[t]he detected concentrations [of diesel range organics (DRO)] range from 8.3 mg/kg to 27,000mg/kg," and "[t]he detected concentrations [of motor oil range organics (MRO)] range from 360 mg/kg to 19,000 mg/kg." The Permittee must collect a groundwater sample for fingerprint analysis to determine the possible source(s) of the contamination, if nearby wells contain SPH.

Comment 26

In Section 6.2 (Groundwater Analytical Results), on page 6-4, the Permittee states, "[i]n addition, groundwater samples were analyzed for chloride, fluoride, and sulfate using EPA method 300." Elevated levels of nitrate and nitrite may be present at the site. Propose to collect groundwater samples for nitrate and nitrite analyses from all groundwater monitoring wells at the site in the 2019 Facility-Wide Groundwater Monitoring Work Plan. No revisions to this Report are necessary.

Comment 27

In Section 6.2 (Groundwater Analytical Results), on page 6-4, the Permittee states, "[t]he individual results that exceed the applicable cleanup levels are highlighted [in Table 8]." The

exceedances are indicated with bold font, rather than highlighted. Resolve the discrepancy in the revised Report.

Comment 28

The Permittee states in Section 7.2 (Recommendations), pages 7-3 and 7-4, "[s]ix additional temporary wells are recommended to complete the lateral delineation of impacts to groundwater to the northwest and north of the North Drainage Ditch borings and northwest of monitor wells OW-53 and OW-54. These additional borings will be installed and sample collection and analysis will be completed pursuant to the previously approved Investigation Work Plan for OW 29 & OW-30 and North Drainage Ditch Areas (Western Refining Southwest, Inc. August 2015). The proposed boring locations are depicted on Figure 25." If the Permittee wishes to conduct an additional investigation, the Permittee must submit a separate work plan to propose the work. It does not appear that the location of the temporary wells as depicted in Figure 25 makes sense based on the information provided in this Report. Explain the basis for the proposed location of temporary wells in the in the work plan proposing the additional work. Determine if there is a continuing source as well as delineating impacts in the next phase of investigation.

Comment 29

Table 3 (Soil Boring Samples – Vapor Screening Results) presents vapor screening results. Two different PID readings are presented for sampling depths between zero to two feet bgs at borings NDD-5 through NDD-17. The former readings were collected at the depth between zero and 0.5 feet bgs and the latter readings are collected at the depth of 1.5 feet bgs according to Section 4.3.1. Provide the note for the two readings in Table 3. In addition, only one PID reading is presented for borings NDD-1 through NDD-4 and OW-53 through OW-56 at the same depth interval. Explain why only one reading is provided for borings NDD-1 through NDD-4 and OW-53 through OW-56 while two readings are provided for NDD-5 through NDD-17.

Comment 30

Table 9 (Soil Cumulative Risk and Hazard Index Evaluation), Table 10 (Groundwater Cumulative Risk and Hazard Index Evaluation) and Section 7.1 (Conclusions) present the calculation of the cumulative risk for soil and groundwater. It is not clear why the Permittee calculated risk when additional work is proposed. The calculation of risk associated with contaminants should be conducted when an investigation is thought to be concluded. The cumulative risk is calculated to demonstrate that site constituent concentrations are below NMED requirements for corrective action complete determinations. It is inappropriate to calculate cumulative risk for groundwater as there are specific groundwater standards that must be met. Remove the risk calculation discussion and associated tables from the revised Report.

Comment 31

Figure 7 (Cross Section Location Map), Figure 10 (Isopach Map Saturated Sand and Gravel Above Chinle Group), Figure 11 (Paleotopography Top of Chinle Group), and Figure 12 (September 2016 Potentiometric Surface Map) include soil boring locations that are not presented in the Report. North of the drainage ditch are two borings, 0117-B2 and 01117-B1. South of OW-54 there are borings 0649 and MP-9. Along the A-A' line there is boring 548, 643, and 651. Borings MP-5 and MP-4 are located along the landing strip. South of OW-14 there is

boring B-1. To the east of the railyard loading rack there is boring 652. Borings 0665, 657, 656, and B-3 are located in the boneyard. Clarify what these borings are related to in the response to comments letter. Additionally, borings such as 656 and B-3, located just north of Tank 583 and Tank 579 may be useful to demonstrate whether there are diesel impacts since both tanks store diesel. Include this information in the revised Figures 10 and 11.

Comment 32
Figure 15 is missing from the printed and electronic versions of the Report. In the revised Report, include Figure 15, which depicts the gasoline range organics (GRO) concentrations at the North Drainage Ditch.

Comment 33
The MTBE concentration in the groundwater sample collected from temporary well NDD-16 was recorded as 75 ug/L according to Figure 22 (VOCs Groundwater Map). Well NDD-16 was located furthest west within the boundary of the North Drainage Ditch. The MTBE concentrations in the samples collected from wells OW-50 and OW-52, located directly north of the suspected MTBE source area, were recorded as 0.5J ug/L and 0.49J ug/L, respectively. The concentration of MTBE in temporary well NDD-16 is significantly higher and may indicate that the North Drainage Ditch is a conduit for contaminant migration. Provide an explanation for the fate of ponded water in the North Drainage Ditch. The dense bushed area extends from the east end of the North Drainage Ditch to the tank farm. The dense bushed area may also be a part of the North Drainage Ditch. The area extending from the tank farm must also be investigated. Propose to submit a work plan to investigate the area in the revised Report.

Comment 34
Appendix C is titled as Waste Manifests in the Table of Contents. However, the Report contains four Appendices C titled as Waste Manifests, Aquifer-Test Data and Analyses, RCRA Post-Closure Care Permit Application Land Treatment Unit, and Land Treatment Unit Historical Information and Data some of which appear to be part of Appendix E. Remove unnecessary pages and revise the Report for clarity.

Comment 35
Appendices H and I are included in the electronic Report but not included in the printed Report. Since Appendices H and I include analytical laboratory data reports and quality assurance/quality control review, the practice is appropriate. However, the printed Report does not include tabs for the missing appendices, so readers can be misled to assume that these appendices are not included at all. Divider tabs for the appendices must be included in the revised printed Report. When appendices are provided in electronic format only, insert a page followed by the divider tab in the printed Report to clarify that the laboratory reports and files are provided by electronic format only.

The Permittee must address all comments in this Disapproval letter and submit a revised Report. Provide NMED with two hard copies with electronic versions of the revised Report. Include a red-line strikeout version, in electronic format, showing where all the revisions to the Report have been made. The revised Report must be accompanied with a response letter that details

where all the revisions to the Report have been made, cross-referencing NMED's numbered comments. The revised Report must be submitted to NMED by no later than **April 27, 2019.**

The Permittee must submit a work plan to propose additional work no later than **April 30, 2019**.

If you have any questions regarding this letter, please contact Kristen Van Horn at (505) 476-6046.

Sincerely,

John E. Kieling
Chief
Hazardous Waste Bureau

cc: D. Cobrain, NMED HWB
K. Van Horn, NMED HWB
M. Suzuki, NMED HWB
C. Chavez, EMNRD OCD
B. Moore, Marathon
L. King, EPA

File: WRG 2019 and Reading
HWB-WRG-18-008