



NEW MEXICO  
ENVIRONMENT DEPARTMENT



**ENTERED**



**Hazardous Waste Bureau**

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**CERTIFIED MAIL – RETURN RECEIPT REQUESTED**

April 23, 2019

Stacy Boultinghouse, PG  
Environmental Manager  
Transwestern Pipeline Company, LLC  
1300 Main Street  
Houston, TX 77002

**RE: APPROVAL WITH MODIFICATIONS  
REPORT OF 2018 GROUNDWATER REMEDIATION ACTIVITIES  
FORMER SURFACE IMPOUNDMENTS  
TRANSWESTERN COMPRESSOR STATION NO.9  
(ROSWELL COMPRESSOR STATION)  
6381 NORTH MAIN STREET  
ROSWELL, CHAVES COUNTY, NEW MEXICO  
EPA ID NMD986676955  
HWB-TWP-19-001**

Dear Ms. Boultinghouse:

The New Mexico Environment Department (NMED) has reviewed the *Report of 2018 Groundwater Remediation Activities Former Surface Impoundments, Transwestern Compressor Station No.9* (Report), dated March 2019 submitted by Transwestern Pipeline Company, LLC (the Respondent). NMED reviewed the Report and hereby issues this Approval with Modifications. The Respondent must address the following comments.

**Comment 1**

The Executive Summary, page iv, states, “[t]he divide in the hydraulic gradient appears to be located near the former surface impoundments.” Since the impoundments were backfilled in 2001, the groundwater mound would have dissipated unless a source of recharge is present in the vicinity. Section 1.0, *Introduction*, page 2, states, “[t]he treated water is then conveyed to an irrigation water tank for dispersal via an irrigation system.” Provide information regarding the

location where the treated water is discharged. Approximately 41,420 gallons of treated water was discharged in 2018 and the volume may be enough to sustain the mounding effect. Discuss whether the groundwater mound potentially originates from the irrigation activity in a response letter.

### **Comment 2**

In Section 3.0, *Semi-Annual Groundwater Monitoring*, page 3, the Respondent states, “[g]roundwater samples were collected from 14 of these monitoring wells during the May/June 2018 sampling event and from 17 of these monitoring wells during the November 2018 sampling event, in general accordance with the approved Sampling and Analysis Plan (SAP) presented in Table 3-1.” Comment 4 in the NMED’s *Approval with Modifications*, dated November 6, 2017 provides a table for the most recent sampling and analytical plan. Table 3-1, *Sampling and Analytical Plan* is not consistent with the table provided in the November 6, 2017 letter. Table 3-1 indicates that BTEX analysis for MW-29 is to be conducted only during second semi-annual event; however, NMED required BTEX analysis on both first and second semi-annual events for MW-29. Although the groundwater samples were collected from well MW-29 during both 2018 sampling events, the Respondent failed to update the SAP. Revise the SAP to include BTEX analysis for well MW-29 for both semi-annual sampling events.

### **Comment 3**

In Section 3.2, *Groundwater Monitoring & Chemical Analytical Data Results*, page 5, the Respondent states, “[g]roundwater elevations for the potentiometric surface maps were not included from RW-1 and the SVE wells as these locations are completed at shallower depths than the remaining wells.” According to Table 3-2, *Summary of Groundwater Surface Elevations*, the depth-to-water (DTW) measurements in SVE wells that are screened from 20 to 45 feet below ground surface (bgs) ranged from 28.53 to 42.46 feet bgs in November 2018. This water bearing zone is referred as a perched zone in the Report. The DTW measurements in most groundwater monitoring and MPE wells that are screened to the “uppermost aquifer” ranged from approximately 60 to 70 feet bgs. A separate perched aquifer above the “uppermost aquifer” is present at the site. Therefore, the designation of “uppermost aquifer” is misleading. Provide a different designation to reference the aquifer below the perched zone in future reports. In addition, the Respondent states that the benzene concentrations exceeded the applicable screening level in the groundwater samples collected from wells SVE-28, SVE-30 and RW-1. The extent of contamination in the perched zone is not delineated due to the limited number of wells screened to the perched zone. Submit a work plan to investigate the extent of contamination in the perched aquifer or provide justification for not proposing to investigate the perched aquifer.

### **Comment 4**

In Section 3.2, *Groundwater Monitoring & Chemical Analytical Data Results*, page 6, the Respondent states, “[g]roundwater gauging data collected from Site monitoring and recovery wells during the May/June 2018 sampling event indicates that the average apparent PSH

thickness was 1.02 feet, with a maximum of 4.78 feet measured in MPE-38. Groundwater gauging data collected from Site monitoring and recovery wells during the November 2018 sampling event indicates that the average apparent PSH thickness was 1.16 feet, with the maximum thickness of 3.15 feet measured in SVE-23.” Wells MPE-38 and SVE-23 are screened across separate water bearing zones (see Comment 3). In future reports, provide a separate discussion for each aquifer regarding PSH thickness.

**Comment 5**

In Section 3.2, *Groundwater Monitoring & Chemical Analytical Data Results*, page 6, the Respondent states, “[g]roundwater samples were collected and analyzed for BTEX by EPA method 8021B or for VOCs via EPA Method 8260B in accordance with the SAP.” Table 3-1 indicates that both BTEX and VOCs are analyzed by EPA Method 8260. Resolve the discrepancy in future reports.

**Comment 6**

In Section 4.0, *Remediation System Operation, Maintenance, and Monitoring*, page 8, the Respondent states, “[t]he groundwater/PSH recovery portion of the remediation system was deactivated 48 to 72 hours prior to the 2018 semi-annual sampling events (May/June 2018 and November 2018).” The SVE system may affect the groundwater levels in the wells. The SVE portion of the remediation system must also be deactivated prior to future sampling events. Incorporate the provision in future sampling events and update the SAP.

**Comment 7**

In Section 5.0, *Summary of Findings and Conclusions*, page 10, the Respondent states, “[a]nalytical data from the 2018 semi-annual groundwater monitoring events indicates that BTEX and 1,1-DCE were detected at dissolved concentrations exceeding the GCLs. These exceedances are within the existing monitoring network.” According to Figures 3-6 and 3-7, the extent of the benzene plume is not delineated. For example, PSH is observed in well MPE-14 but groundwater samples were not collected from wells located outside the known extent of the plume. Collect groundwater samples from wells MW-10, MW-11 and MW-17 for BTEX analysis during the November 2019 sampling event and discuss the results of the analysis in the 2019 Report and update the SAP.

**Comment 8**

According to Table 3-2, *Summary of Groundwater Surface Elevations*, the DTW measurement in well MPE-36 is recorded as 40.74 feet on November 6, 2018, which is the highest level recorded since 2009. The measured DTW decreased approximately 15 feet since June 1, 2018. Historical data indicates that the average DTW increased over a foot since 2009. The observation of the increased groundwater elevation in well MPE-36 is contradictory to the trend. Discuss the cause of sudden increase of groundwater level in well MPE-36 in the response letter. In addition, clarify whether the DTW data recorded in Table 3-2 reference from ground surface or top of casing in the response letter.

**Comment 9**

According to Table 3-5, *Summary of Groundwater Analytical Results* and Figure 3-6, *Distribution of Dissolved Benzene Uppermost Aquifer May & June 2018*, the groundwater sample collected from well MW-27 on May 31, 2018 was collected below PSH. According to Table 3-2, no measurable thickness of PSH was present. Resolve the discrepancy and provide an explanation in the response letter. Provide replacement page(s) for the table and figure, as necessary.

**Comment 10**

The description of SVE wells in Figure 1-3, *Remediation System Layout* is shown as “MPE & Soil Vapor Extraction (SVE) Well Cluster”. Since groundwater is not extracted from the SVE wells, remove “MPE” from the figure. Provide a replacement figure.

**Comment 11**

According to Figures 3-6 and 3-8, many MPE wells were sampled for benzene and BTEX; however, these wells were not sampled. Revise the figures for accurate presentation of data and provide replacement figures.

The Respondent must address all comments in this Approval with Modifications and submit a response letter and replacement pages, tables and figures as well as an electronic copy of the revised Report no later than **May 31, 2019**. The work plan required by Comment 3 must be submitted no later than **December 31, 2019**.

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.

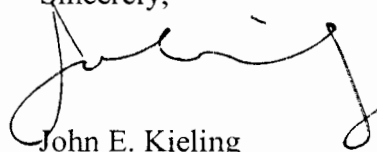
Ms. Boultinghouse

April 23, 2019

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If you have questions regarding this Approval with Modifications, please contact Michiya Suzuki of my staff at 505-476-6059.

Sincerely,

A handwritten signature in black ink, appearing to read "John E. Kieling". The signature is fluid and cursive, with a large initial "J" and "K".

John E. Kieling

Chief

Hazardous Waste Bureau

cc: D. Cobrain NMED HWB  
M. Suzuki NMED HWB  
J. Griswold, NMOCD  
B. Billings, NMOCD  
T. Gum, NMOCD  
L. King, EPA Region 6 (6LCRRC)

File: TWP-19-001 and Reading, 2019  
NMOCD Administration Record, AP-125