

December 4, 2024

*Delivered via Trackable Overnight Delivery*

Ms. Caitlin Reilly  
South Carolina Department of Environmental Services  
Assessment and Non-Permitted Petroleum Section  
Underground Storage Tank Division  
2600 Bull Street  
Columbia, South Carolina 29201

**RECEIVED**

DEC 05 2024

UST DIVISION



**Subject: Request to Maintain the Current Groundwater Monitoring and Reporting Schedule through 2025, and Update the Surface Water Monitoring Schedule Products (SE) Pipe Line Corporation Lewis Drive Remediation Site Belton, South Carolina Site ID #18693, "Kinder Morgan Belton Pipeline Release"**

Dear Ms. Reilly,

On behalf of Products (SE) Pipe Line Corporation (PPL), Jacobs is submitting this letter to maintain the current number of groundwater monitoring and reporting events, maintain the current number of groundwater monitoring locations and update the surface water monitoring schedule at PPL's Lewis Drive Remediation Site (Site ID #18693), located in Belton, South Carolina (site).

As you are aware, PPL has worked diligently with the South Carolina Department of Environmental Services (DES) over the last 10 years to assess, remediate, and monitor conditions at the site. PPL has compiled a significant body of data that indicates overall decreasing trends in hydrocarbon concentrations and frequency of occurrence as shown in the First 2024 Semiannual Monitoring Report submitted to South Carolina Department of Health and Environmental Control (DHEC) on September 20, 2024.

As presented in the Corrective Action Plan Addendum #2 submitted to DHEC on May 24, 2021, and accepted by DHEC on June 29, 2021, PPL installed three new horizontal air sparge (HAS) wells (HAS-4, HAS-5, and HAS-6) to treat areas in the Browns Creek Protection Zone (BCPZ) and Cupboard Creek Protection Zone (CCPZ). HAS-4 and HAS-5 in the BCPZ began operation on June 20, 2022, and HAS-6 is ready to operate when the pending update to the current Permit to Operate is approved.

Jacobs proposes updating surface water monitoring frequency from monthly to quarterly monitoring events, with an additional surface water monitoring event in February. Since the site surface water plan was established, multiple surface water locations have become dry due to the stream flow changes resulting from the removal of site beaver dams. Of the 13 surface water locations, 10 remain usable for monitoring. Surface water locations that are no longer able to be sampled due to dry conditions post beaver dam removal include the following: SW-01 (dry since



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11/16/21), SW-12 (dry since 7/18/2023), and SW-13 (dry since 3/14/2023). Due to fluctuating stream flows, SW-03, SW-05, and SW-14 are only able to be sampled intermittently. Recent surface water monitoring results have shown detections at only 1 of the 10 surface water locations.

The proposed 2025 annual, semiannual, quarterly sampling events; semiannual product recovery; and semiannual reporting schedule are based on the current Table 1 – Groundwater and Surface Water Monitoring and Reporting Plan (January 1, 2024 to December 31, 2024) accepted by DHEC on January 4, 2024. Table 1 has been updated to reflect the changes to the surface water sampling event as agreed upon during the November 13, 2024 meeting with DES, PPL, and Jacobs. Changes agreed upon included moving surface water sampling from monthly to quarterly, with the addition of a February sampling event to capture any potential trends seen historically.

The proposed 2025 monitoring plan is presented in the attached Table 1 and sample locations are displayed on Figure 1. A calendar view of the proposed 2025 monitoring plan is displayed on Figure 2. Ideally, PPL is asking to receive concurrence to this request prior to December 30, 2024.

If you have any questions concerning this request or the project in general, please call me at (919) 859-5789 or Greg Dempsey/PPL at (770) 751-4143.

Regards,

**William M. Waldron**  
Program Manager

Copies to: Greg Dempsey, PPL (Digital, [greg\\_dempsey@kindermorgan.com](mailto:greg_dempsey@kindermorgan.com))  
Mary Clair Lyons, Esq., PPL (Digital, [Mary\\_Lyons@kindermorgan.com](mailto:Mary_Lyons@kindermorgan.com))

Attachments:

Table 1 – Groundwater and Surface Water Monitoring and Reporting Plan (January 1, 2025 to December 31, 2025)  
Figure 1 – Site Overview  
Figure 2 – Monitoring and Reporting Plan – 2025

**Table**

**Table 1. Groundwater and Surface Water Monitoring and Reporting Plan (January 1, 2025 to December 31, 2025)**

Products (SE) Pipe Line Corporation

Lewis Drive Remediation Site, Belton, South Carolina

Site ID #18693 "Kinder Morgan Belton Pipeline Release"

	Sampling and Gauging				Biodegradation Evaluation	Product Gauging and Recovery
Frequency <sup>a</sup> :	February 2025	Quarterly (June 2025 and December 2025)	Semiannually <sup>b</sup> (September 2025)	Annually (March 2025)	Annually <sup>c</sup> (March 2025)	Semiannually and Annually (March and September 2025)
Analytes:	BTEX, MTBE, Naphthalene (and 1,2-DCA for Groundwater Samples Only) <sup>d</sup>				Nitrate <sup>e</sup> , Sulfate <sup>e</sup> , Ferrous Iron <sup>e,f</sup> , Carbon Dioxide <sup>e</sup> , Methane <sup>e</sup> , Alkalinity <sup>g</sup> , and DO <sup>e,f</sup>	Not Analyzed
Feature ID						
Surface Water						
SW-01 <sup>g</sup>	Y	Y	Y	Y		
SW-02 <sup>g</sup>	Y	Y	Y	Y		
SW-03 <sup>g</sup>	Y	Y	Y	Y		
SW-04	Y	Y	Y	Y		
SW-05 <sup>g</sup>	Y	Y	Y	Y		
SW-07	Y	Y	Y	Y		
SW-08 <sup>g</sup>	Y	Y	Y	Y		
SW-09	Y	Y	Y	Y		
SW-10 <sup>g</sup>	Y	Y	Y	Y		
SW-11	Y	Y	Y	Y		
SW-12	Y	Y	Y	Y		
SW-13	Y	Y	Y	Y		
SW-14	Y	Y	Y	Y		
Surface Water Subtotal:	13	13	13	13	0	0
Browns Creek Protection Zone						
MW-12			Y	Y	Y	
MW-12B			Y	Y		
MW-15			Y	Y	Y	
MW-15B		Y	Y	Y		
MW-24			Y	Y		
MW-24B			Y	Y		
MW-25			Y	Y	Y	
MW-25B			Y	Y		
MW-28			Y	Y	Y	
MW-34				Y		
MW-35			Y	Y	Y	
MW-37		Y	Y	Y		
MW-38		Y	Y	Y		
MW-38B		Y	Y	Y		
MW-39		Y	Y	Y		

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MW-40		Y	Y	Y	Y	
MW-41		Y	Y	Y		
MW-42			Y	Y	Y	
MW-43				Y		
MW-43B				Y		
MW-49				Y		
Browns Creek Subtotal:	0	7	17	21	7	0
<b>Cupboard Creek Protection Zone</b>						
MW-19			Y	Y	Y	
MW-20		Y	Y	Y	Y	
MW-23		Y	Y	Y		
MW-23B			Y	Y		
MW-26			Y	Y		
MW-26B			Y	Y		
MW-29			Y	Y		
MW-46			Y	Y		
MW-56		Y	Y	Y	Y	
MW-57		Y	Y	Y		
MW-58		Y	Y	Y		
MW-59		Y	Y	Y		
MW-60		Y	Y	Y		
MW-61B		Y	Y	Y		
MW-62		Y	Y	Y		
MW-63		Y	Y	Y		
Cupboard Creek Subtotal:	0	10	16	16	3	0
<b>Hayfield Zone</b>						
MW-02				Y	Y	
MW-02B				Y		
MW-03				Y	Y	
MW-04			Y	Y	Y	
MW-05				Y		
MW-06				Y		
MW-06B			Y	Y		

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MW-07		Y	Y	Y		
MW-08				Y	Y	
MW-09			Y	Y	Y	
MW-09B			Y	Y		
MW-10				Y	Y	
MW-13			Y	Y		
MW-13B			Y	Y		
MW-14		Y	Y	Y		
MW-14B		Y	Y	Y		
MW-16				Y		
MW-17			Y	Y		
MW-17B		Y	Y	Y		
MW-18			Y	Y	Y	
MW-21			Y	Y		
MW-30				Y		
MW-31				Y		
MW-31B				Y		
MW-32			Y	Y	Y	
MW-33				Y		
MW-33T			Y	Y		
MW-36		Y	Y	Y		
MW-36B			Y	Y		
MW-45		Y	Y	Y		
MW-45B			Y	Y		
MW-47			Y	Y		
MW-48B			Y	Y		
MW-50B			Y	Y		
MW-51			Y	Y		
MW-52			Y	Y		
MW-53			Y	Y		
MW-54			Y	Y		
MW-55			Y	Y		
Hayfield Subtotal:	0	6	27	39	8	0

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Shallow Bedrock Zone						
MW-01			Y	Y	Y	
MW-01B			Y	Y		
MW-11		Y	Y	Y	Y	
MW-22			Y	Y	Y	
MW-27			Y	Y		
MW-27B			Y	Y		
MW-44				Y		
MW-44B				Y		
Shallow Bedrock Subtotal:		1	6	8	3	0
Product Recovery Feature						
RW-01						Y
RW-02						Y <sup>h</sup>
RW-03						Y <sup>h</sup>
RW-04						Y <sup>h</sup>
RW-05						Y <sup>h</sup>
RW-06						Y
RW-07						Y <sup>h</sup>
RW-08						Y
RW-09						Y
RW-10						Y <sup>h</sup>
RW-11						Y
RW-12						Y
RW-14						Y
RW-15						Y <sup>h</sup>
RT-1A						Y
RT-1B						Y
RT-1C						Y
RS-01						Y <sup>h</sup>
RS-02						Y <sup>h</sup>
RS-04						Y
RS-05						Y <sup>h</sup>
RS-06						Y

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RS-07						Y
RS-08						Y
RS-09						Y
RS-10						Y
RS-11						Y
RS-12						Y
RS-13						Y
RS-14						Y <sup>h</sup>
RS-15						Y
RS-16						Y
RS-17						Y
RS-18						Y
RS-20						Y
Product Recovery Subtotal:						
<b>Grand Totals:</b>	<b>13</b>	<b>37</b>	<b>79</b>	<b>97</b>	<b>21</b>	<b>35</b>

Notes:

<sup>a</sup> Frequency: Any alterations to the monitoring frequency will be proposed to the South Carolina Department of Environmental Services prior to December 31, 2025.

<sup>b</sup> The second semiannual report will follow the December 2025 monitoring event.

<sup>c</sup> The first semiannual report will follow the June 2025 monitoring event.

<sup>d</sup> Sampling and Gauging: BTEX, MTBE, naphthalene, and 1,2-DCA by EPA Method 8260D.

<sup>e</sup> Biodegradation Evaluation: Nitrate and Sulfate by EPA Method 9056A, ferrous iron and dissolved oxygen by field test analysis, carbon dioxide by method SM4500-CO2 D, methane by method RSK-175, and alkalinity by method SM2320B.

<sup>f</sup> Parameter collected in the field.

<sup>g</sup> Surface water location to be gauged at staff gauge.

<sup>h</sup> Product recovery feature deployed in well.

1,2-DCA = 1,2-dichloroethane

BTEX = benzene, toluene, ethylbenzene, and xylenes

DO = dissolved oxygen

EPA = U.S. Environmental Protection Agency

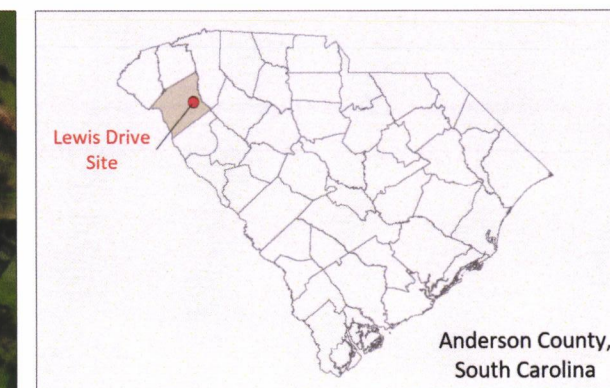
MTBE = methyl tertiary butyl ether

Y = yes



## Figures





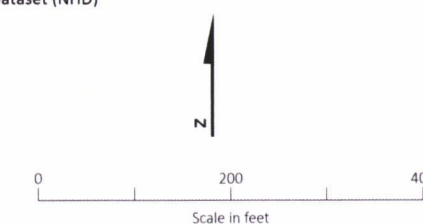
# LEGEND

- ★ Release Point
- ⊕ Bedrock Monitoring Well, Quarterly Sampling
- ⊕ Bedrock Monitoring Well, Semiannual Sampling
- ⊕ Bedrock Monitoring Well, Annual Sampling
- ⊕ Monitoring Well, Quarterly Sampling
- ⊕ Monitoring Well, Semiannual Sampling
- ⊕ Monitoring Well, Annual Sampling
- Observation Well
- ⊠ HAS-6 Modification Access Point
- △ Recovery Sump
- Recovery Trench Point
- Recovery Well (4-inch diameter)
- Surface Water Sampling Location
- ▲ Septic Tank
- ◆ Seep Location
- Vertical Saprolite Sparging Well
- Grout
- Horizontal Sparging Well Screen
- Horizontal Sparging Well Riser
- Pipeline
- National Hydrography Dataset Stream
- Intermittent Stream
- ⊠ Delineated Wetland
- Inspection Route for Sheen or Distressed Vegetation
- ⬡ AS System Compound
- ⬡ Remediation Zone

**Note:**  
All quarterly wells will be sampled semiannually.  
All quarterly and semiannual samples will be sampled annually.  
Northern surface water locations SW-09, SW-10, and SW-11 are not shown in Figure.

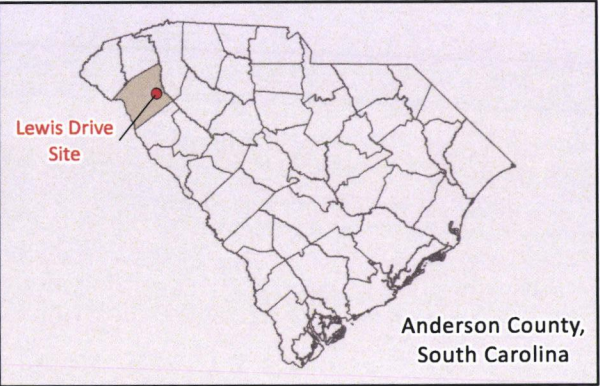
**Base Map Sources:**  
Environmental Systems Research Institute (Esri)  
ArcMap World Imagery, 2020. Basemap features are approximate.

United States Geological Survey (USGS) National Hydrography Dataset (NHD)



**Figure 1. Site Overview**  
Lewis Drive Remediation Site  
Belton, South Carolina  
Site ID #18693 "Kinder Morgan Belton Pipeline Release"





- NOTES:
- 1. SW = surface water
  - 2. GW = groundwater
  - 3. Green border indicates the month a semiannual or annual report will be submitted
  - 4. Report submittal after receipt of analytical reports for September Semiannual and December Quarterly Sampling
  - 5. Report submittal after receipt of analytical reports for March Annual and June Quarterly Sampling

Figure 2. Calendar View of the 2025 Monitoring and Reporting Plan  
Lewis Drive Remediation Site  
Belton, South Carolina  
Site ID #18693 "Kinder Morgan Belton Pipeline Release"