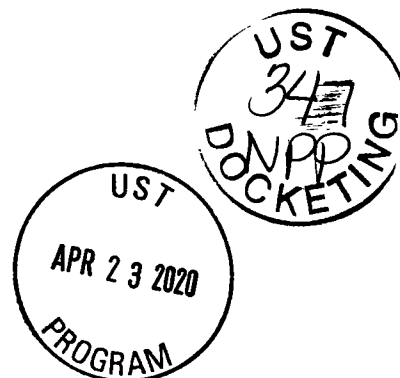


April 22, 2020

Delivered via Email and FedEx Overnight Delivery

Mr. Jeffery E. Mendenhall
South Carolina Department of Health and Environmental Control
Assessment Section, UST Management Division
Bureau of Land and Waste Management
2600 Bull Street
Columbia, South Carolina 29201



**Subject: Request to Modify Groundwater and Surface Water Monitoring Network
Plantation Pipe Line Company
Lewis Drive Remediation Site
Belton, South Carolina
Site ID #18693, "Kinder Morgan Belton Pipeline Release"**

Dear Mr. Mendenhall,

This correspondence is being submitted on behalf of Plantation Pipe Line Company (Plantation) to request approval to modify the surface water and groundwater network by reducing the number of monitoring locations and monitoring events at Plantation's Lewis Drive Remediation Site (Site ID #18693), located in Belton, South Carolina (site).

As you are aware, Plantation has worked diligently with DHEC over the last six years to assess, remediate, and monitor conditions at the site, and has amassed a significant body of data that for the most part indicates overall decreasing trends in hydrocarbon concentrations and frequency of occurrence as shown in the *Fourth Quarter 2019 Monitoring Report (October 1, 2019 through December 31, 2019)* submitted to DHEC on March 25, 2020. Areas not within the direct influence of the air sparge system and the few wells that are not responding as expected are being addressed and monitored on a focused schedule. With that in mind, there are now several monitoring locations that are no longer necessary. The locations proposed for removal from the monitoring program have yielded samples that:

- Were non-detect (ND) for benzene, toluene, ethylbenzene, and xylene (BTEX), 1,2-DCA, MTBE, and naphthalene for a year or more; or
- Are no longer adding value to the current dataset and are not helpful in focusing the path forward.

The current event schedule includes 4 site-wide sampling events, 4 mid-quarterly sampling events, and monthly surface water sampling events as outlined in the *Monitoring, Reporting, and Product Recovery Plan (April 1, 2019 through March 30, 2020)* submitted to SCDHEC on May 31, 2019. Plantation proposes to reduce sampling event frequency to 3 annual events (tri-annually), continue focused monitoring between tri-annual events and continue monthly surface water sampling. Focused monitoring between tri-annual events will occur as needed to monitor the ongoing performance of the air sparging system. The proposed plan for monitoring the site through March 31, 2021 is laid out in the attached Table 1. This modification of the

monitoring and reporting program to tri-annual events will allow needed funds to be focused on more meaningful remediation activities.

Future activities will include replacement of monitoring well MW-17. MW-17 has only been able to be sampled 2 times out of 18 sampling events since July 2015 due to insufficient water during 15 events and free product observed during 1 event.

The following tables present a summary of groundwater and surface water monitoring results over time and the rationale for removing the proposed locations from the monitoring program going forward.

Groundwater Monitoring Wells

Table 2 presents 16 monitoring wells recommended for removal from the site monitoring program (see Figure 1 for an aerial view of what the proposed monitoring network will look like once Table 1 is approved).

Table 2. Proposed Groundwater Monitoring Wells to be Removed from Plan
Lewis Drive Remediation Site, Belton, South Carolina

Well ID	Number of ND Results	Removal Justification
Browns Creek Protection Zone		
MW-34	0	MW-34 has been part of the high flow pumping plan for 11 events since 2018. Due to the slow recharge rate, the well is not thought to be in communication with the water table and therefore is not representative of what is occurring around it.
MW-43	15	MW-43 has been ND since November 2017 except for one MTBE detection below the RSL in July 2018. MW-24 can serve as a sentinel well in the BCPZ.
MW-43B	9	MW-43B has been ND since its installation in December 2017. Additionally, MW-24B can serve as a sentinel well in the BCPZ.
MW-49	9	MW-49 has been ND since its installation in December 2017. Groundwater flow direction provides evidence that the plume is not moving toward MW-49.
Hayfield Zone		
MW-02	7	MW-02 has been ND since June 2018 and is in direct influence of the horizontal sparging wells. It has provided evidence for the effectiveness of sparging on hydrocarbon degradation. MW-33T is downgradient and can provide continued boundary monitoring.
MW-02B	8	MW-02B has been ND since March 2017, except for one toluene (1.11 µg/L) detection in December 2017, and is in direct influence of the horizontal sparging wells. MW-48B and MW-50B are downgradient and can provide continued boundary monitoring.
MW-03	13	MW-03 has been ND since November 2017. Only 2 of the 15 total events had insufficient water for sampling. MW-32 (ND since May 2016) is close to MW-03 and can provide continued boundary monitoring.
MW-05	23	MW-05 (outside the direct influence of sparging) has been ND since monitoring began in July 2015. Only 1 of the 24 total events had insufficient water for sampling. MW-04 is located downgradient from MW-05 and can provide continued boundary monitoring.
MW-06	14	MW-06 has been ND since monitoring began in July 2015 and groundwater flow is not in that direction.
MW-08	4	MW-33 is downgradient of MW-08 and provides continued boundary monitoring.
MW-10	24	MW-10 has been ND since monitoring it was installed in June 2017. MW-33 is downgradient of MW-10 and provides continued boundary monitoring.

Table 2. Proposed Groundwater Monitoring Wells to be Removed from Plan
Lewis Drive Remediation Site, Belton, South Carolina

Well ID	Number of ND Results	Removal Justification
MW-16	1	MW-16 was ND in December 2019 and is in direct influence of the horizontal sparging wells. It has provided evidence for the effectiveness of hydrocarbon degradation via sparging. MW-33 is downgradient and can provide continued boundary monitoring.
MW-30	2	MW-30 has only been sampled 14 out of 23 events due to insufficient water. MW-54 was installed to take the place of MW-30. MW-30 has been ND since March 2019
MW-31	23	MW-31 has been ND for 23 consecutive events since monitoring began in May 2016.
Shallow Bedrock Zone		
MW-44	7	MW-44 has been ND since March 2018. Groundwater flow direction provides evidence that the plume is not moving toward MW-44.
MW-44B	8	MW-44 has been ND since March 2018. Groundwater flow direction provides evidence that the plume is not moving toward MW-44B.

Surface Water

Table 3 presents the 2 surface water locations recommended for removal from the site monitoring program.

Table 3. Proposed Surface Water Monitoring Locations to be Removed from Plan
Lewis Drive Remediation Site, Belton, South Carolina

Surface Water Location ID	Number of ND Results	Removal Justification
SW-07	41	SW-07 has been ND since February 2015. SW-07 has been dry during 18 out of 59 total events. SW-03 has been ND since February 2015 and can provide continuous upstream monitoring in this area.
SW-11	59	SW-11 has been ND since monitoring began in February 2015. SW-10 has been ND since February 2015 and can provide continuous downstream monitoring as the most downgradient surface water sampling location.

Ideally, Plantation would like to have a response to this request prior to the next monitoring event scheduled for May 18 through 22, 2020. If approved, the first tri-annual monitoring event would be scheduled for July 13 through 17, 2020.

If you have any questions concerning this request or the project in general, please call Tom Wiley/Jacobs at (404) 751-5690 or Mr. Jerry Aycock/Plantation at (770) 751-4165.

Mr. Jeffery E. Mendenhall
April 22, 2020
Page 4 of 4

JACOBS

Regards,



William M. Waldron
Program Manager

Copies to: Jerry Aycock, Plantation (Digital, Jerry_Aycock@kindermorgan.com)
Mary Clair Lyons, Esq., Plantation (Digital, Mary_Lyons@kindermorgan.com)
Richard Morton, Esq., Womble Bond Dickinson, LLP (Digital, ric.morton@wbd-us.com)

Tables:

Table 1 – Groundwater and Surface Water Monitoring and Reporting Plan (April 1, 2020 to March 31, 2021)

Table 2 – Proposed Groundwater Monitoring Wells to be Removed from Plan

Table 3 – Proposed Surface Water Monitoring Locations to be Removed from Plan

Figure 1 – Site Overview

Table 1

Table 1. Groundwater and Surface Water Monitoring and Reporting Plan (April 1, 2020 to March 31, 2021)

Plantation Pipe Line Company

Lewis Drive Remediation Site, Belton, South Carolina

Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Feature ID	Sampling and Gauging		Biodegradation Evaluation	Product Gauging	
	Frequency ^a :	Monthly	Tri-Annually ^b	Annually ^c	Tri-Annually
	Analytes:	BTEX, MTBE, Naphthalene (and 1,2-DCA for Groundwater Samples Only) ^d		Nitrate ^e , Sulfate ^e , Ferrous Iron ^{e,f} , Carbon Dioxide ^e , Methane ^e , Alkalinity ^e , and DO ^{e,f}	Not Analyzed
Surface Water					
SW-01 ^g	Y	Y			
SW-02 ^g	Y	Y			
SW-03 ^g	Y	Y			
SW-04	Y	Y			
SW-05 ^g	Y	Y			
SW-07					
SW-08 ^g	Y	Y			
SW-09	Y	Y			
SW-10 ^g	Y	Y			
SW-11					
SW-12	Y	Y			
SW-13	Y	Y			
SW-14	Y	Y			
Surface Water Subtotal:	11	11	0	0	
Browns Creek Protection Zone					
MW-12		Y	Y		
MW-12B		Y			
MW-15		Y	Y		
MW-15B		Y			
MW-24		Y			
MW-24B		Y			
MW-25		Y	Y		
MW-25B		Y			
MW-28		Y	Y		
MW-34					
MW-35		Y	Y		
MW-37		Y			
MW-38		Y			
MW-38B ^h		Y			
MW-39		Y			
MW-40		Y	Y		

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	Monthly	Tri-Annually ^b	Annually ^c	Tri-Annually
Analytes:	BTEX, MTBE, Naphthalene (and 1,2-DCA for Groundwater Samples Only) ^d		Nitrate ^e , Sulfate ^e , Ferrous Iron ^{e,f} , Carbon Dioxide ^e , Methane ^e , Alkalinity ^e , and DO ^{e,f}	Not Analyzed
MW-41		Y		
MW-42		Y	Y	
MW-43				
MW-43B				
MW-49				
Brown's Creek Subtotal:		17	7	0
Cupboard Creek Protection Zone				
MW-19		Y	Y	
MW-20		Y	Y	
MW-23		Y		
MW-23B		Y		
MW-26		Y		
MW-26B		Y		
MW-29		Y		
MW-46		Y		
MW-56		Y	Y	
MW-57		Y		
MW-58 ^h		Y		
MW-59 ^h		Y		
MW-60 ^h		Y		
MW-61B ^h		Y		
Cupboard Creek Subtotal:		14	3	0
Hayfield Zone				
MW-02				
MW-02B				
MW-03				
MW-04		Y	Y	
MW-05				
MW-06				
MW-06B		Y		
MW-07		Y		
MW-08				

Table 1. Groundwater and Surface Water Monitoring and Reporting Plan (April 1, 2020 to March 31, 2021)

Plantation Pipe Line Company

Lewis Drive Remediation Site, Belton, South Carolina

Site ID #18693 "Kinder Morgan Belton Pipeline Release"

	Sampling and Gauging		Biodegradation Evaluation	Product Gauging	
	Frequency ^a :	Monthly	Tri-Annually ^b	Annually ^c	Tri-Annually
	Analytes:	BTEX, MTBE, Naphthalene (and 1,2-DCA for Groundwater Samples Only) ^d		Nitrate ^e , Sulfate ^e , Ferrous Iron ^{g,h} , Carbon Dioxide ^e , Methane ^e , Alkalinity ^e , and DO ^{e,f}	Not Analyzed
MW-09		Y	Y		
MW-09B		Y			
MW-10					
MW-13		Y			
MW-13B		Y			
MW-14		Y			
MW-14B		Y			
MW-16					
MW-17		Y			
MW-17B		Y			
MW-18		Y	Y		
MW-21		Y			
MW-30					
MW-31					
MW-31B					
MW-32		Y	Y		
MW-33					
MW-33T		Y			
MW-36		Y			
MW-36B		Y			
MW-45		Y			
MW-45B		Y			
MW-47		Y			
MW-48B		Y			
MW-50B		Y			
MW-51		Y			
MW-52		Y			
MW-53		Y			
MW-54		Y			
MW-55		Y			
Hayfield Subtotal:		27	4	0	
Shallow Bedrock Zone					
MW-01		Y	Y		

Table 1. Groundwater and Surface Water Monitoring and Reporting Plan (April 1, 2020 to March 31, 2021)

Plantation Pipe Line Company

Lewis Drive Remediation Site, Belton, South Carolina

Site ID #18693 "Kinder Morgan Belton Pipeline Release"

Frequency ^a :	Sampling and Gauging		Biodegradation Evaluation	Product Gauging
	Monthly	Tri-Annually ^b	Annually ^c	Tri-Annually
Analytes:	BTEX, MTBE, Naphthalene (and 1,2-DCA for Groundwater Samples Only) ^d		Nitrate ^e , Sulfate ^e , Ferrous Iron ^{e,f} , Carbon Dioxide ^e , Methane ^e , Alkalinity ^e , and DO ^{e,f}	Not Analyzed
MW-01B		Y		
MW-11		Y	Y	
MW-22		Y	Y	
MW-27		Y		
MW-27B		Y		
MW-44				
MW-44B				
Shallow Bedrock Subtotal:		6	3	0
Product Recovery Feature				
RW-01				Y
RW-02				Y
RW-03				Y
RW-04				Y
RW-05				Y
RW-06				Y
RW-07				Y
RW-08				Y
RW-09				Y
RW-10				Y
RW-11				Y
RW-12				Y
RW-14				Y
RW-15				Y
RT-1A				Y
RT-1B				Y
RT-1C				Y
RS-01				Y
RS-02				Y
RS-04				Y
RS-05				Y
RS-06				Y
RS-07				Y
RS-08				Y

Table 1. Groundwater and Surface Water Monitoring and Reporting Plan (April 1, 2020 to March 31, 2021)

Plantation Pipe Line Company

Lewis Drive Remediation Site, Belton, South Carolina

Site ID #18693 "Kinder Morgan Belton Pipeline Release"

	Sampling and Gauging		Biodegradation Evaluation	Product Gauging
	Frequency ^a :	Monthly	Tri-Annually ^b	Annually ^c
Analytes:	BTEX, MTBE, Naphthalene (and 1,2-DCA for Groundwater Samples Only) ^d		Nitrate ^e , Sulfate ^e , Ferrous Iron ^{e,f} , Carbon Dioxide ^e , Methane ^e , Alkalinity ^e , and DO ^{e,f}	Not Analyzed
RS-09				Y
RS-10				Y
RS-11				Y
RS-12				Y
RS-13				Y
RS-14				Y
RS-15				Y
RS-16				Y
RS-17				Y
RS-18				Y
RS-20				Y
Product Recovery Subtotal:				Y
Grand Totals:	11	75	17	36

Notes:

^a Frequency: Any alterations to the monitoring frequency will be proposed to the South Carolina Department of Health and Environmental Control prior to March 31, 2021.

^b Tri-annual reports will follow the July 2020 and November 2020 tri-annual monitoring events.

^c The annual report will follow the March 2021 monitoring event.

^d Sampling and Gauging: BTEX, MTBE, naphthalene, and 1,2-DCA by EPA Method 8260B.

^e Biodegradation Evaluation: Nitrate by EPA Method SM2320B, sulfate by EPA Method D516-9002, ferrous iron by EPA Method SM3500 FE D, carbon dioxide and methane by EPA Method RSK-175, and alkalinity by Method SM2320B.

^f Parameter collected in the field.

^g Surface water location to be gauged at staff gauge.

^h Proposed Monitoring Well

1,2-DCA = 1,2-dichloroethane

BTEX = benzene, toluene, ethylbenzene, and xylenes

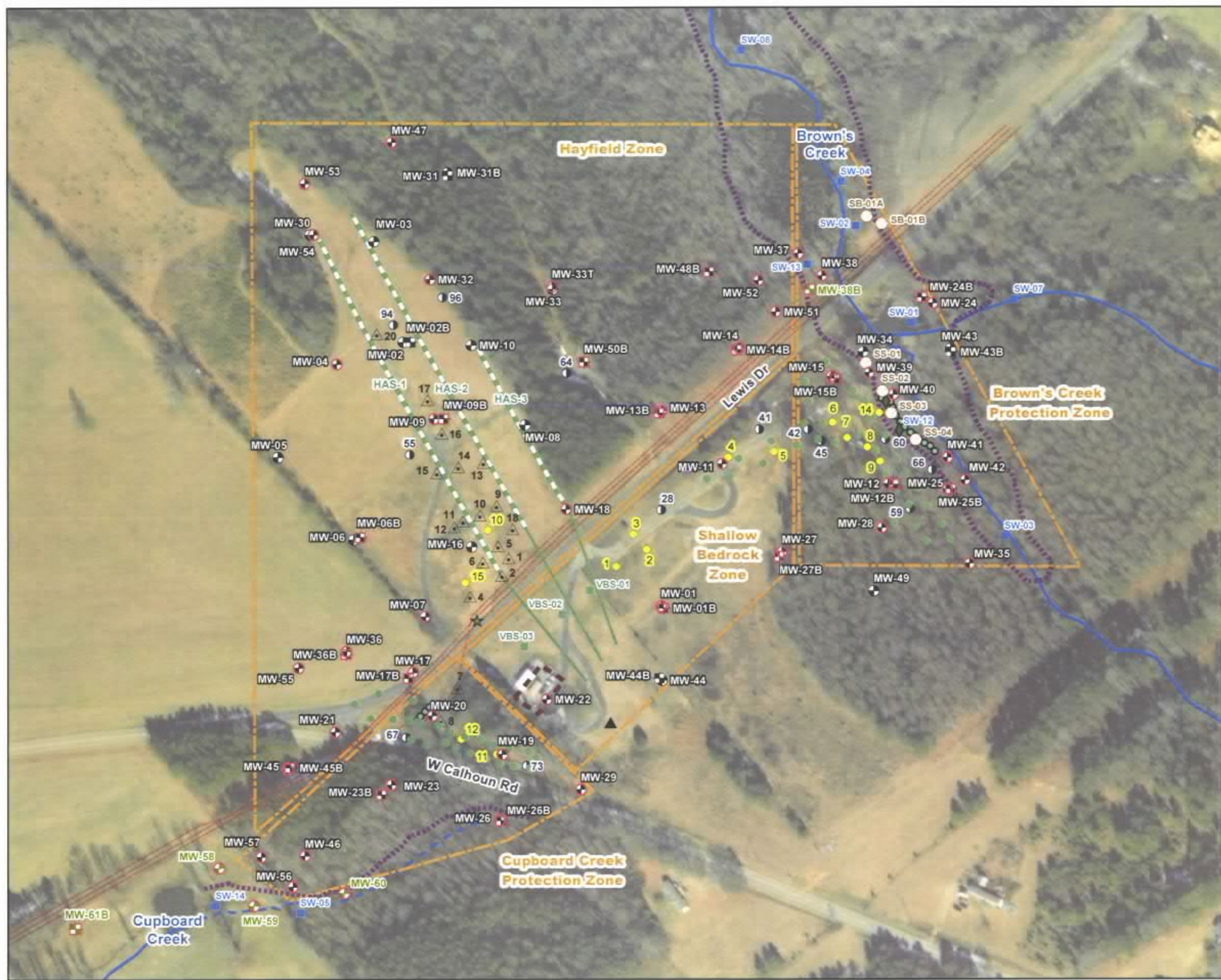
DO = dissolved oxygen

EPA = U.S. Environmental Protection Agency

MTBE = methyl tertiary butyl ether

Y = yes

Figure



LEGEND

- ★ Release Point
- Residuum Monitoring Well
- ⊕ Bedrock Monitoring Well
- Proposed Residuum Monitoring Well
- ⊕ Proposed Bedrock Monitoring Well
- △ Recovery Sump
- Soil Boring Location
- Recovery Trench Point
- Recovery Well (4-inch diameter)
- Surface Water Sampling Location
- ▲ Septic Tank
- ◆ Seep Location
- Vertical Bedrock Sparging Well
- Vertical Saprolite Sparging Well
- Pipeline
- Horizontal Sparging Well Riser
- Horizontal Sparging Well Screen
- Waterbody
- - Intermittent Stream
- ⋯ Inspection Route for Sheen or Distressed Vegetation
- AS System Compound
- Remediation Zone
- Residuum wells remaining in monitoring plan
- Bedrock wells remaining in monitoring plan

Base Map Sources:
 *Environmental Systems Research Institute (Esri)
 ArcMap World Imagery, 2018. Basemap features are approximate.
 *United States Geological Survey (USGS) National Hydrography Dataset (NHD)

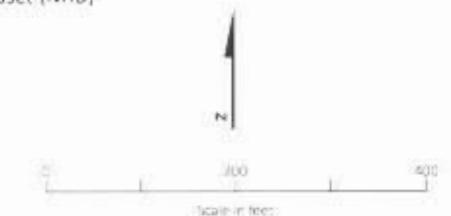


Figure 1. Site Overview
 Lewis Drive Remediation Site
 Belton, South Carolina
 Site ID #18693 "Kinder Morgan Belton Pipeline Release"