

January 16, 2019

*Delivered via FedEx Overnight Delivery*

Ms. Bobbi Coleman  
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:** Response to Comments in SCDHEC Letter Titled, "Reviews of Misc. Reports, Annual Report and Response to Comments", dated December 11, 2018  
Plantation Pipe Line Company  
Lewis Drive Remediation Site  
Belton, South Carolina  
Site ID #18693, "Kinder Morgan Belton Pipeline Release"

Dear Ms. Coleman,

On behalf of Plantation Pipe Line Company (Plantation), CH2M HILL Engineers, Inc. (CH2M), a wholly owned subsidiary of Jacobs Engineering Group Inc. (Jacobs), has prepared this response to comments received from the South Carolina Department of Health and Environmental Control (SCDHEC) in the letter date-stamped December 11, 2018 and logged in by Plantation on December 18, 2018. Each SCDHEC comment is presented below, followed by Plantation's response.

**Comment 1:** *In the future, field data sheets will be provided on a standardized form and a discussion of field observations (i.e. odors, sheens, seeps, biota changes) will be provided in quarterly reports, regardless of the nature of the visit, should any environmental changes be noted. If a sheen or seep is observed it will be noted and the action taken documented. These forms should include a designated space for all pertinent information to include current and recent weather events that could impact results, site conditions, etc. The Department noted in the November 19, 2018 conference call that the Department cannot agree with the statement that the hydrocarbon sheen noted in a depressed area caused by the settlement of the recovery trench adjacent to Brown's Creek naturally biodegraded and did not migrate to Brown's Creek as laboratory analysis collected at SW-12 documents a release to Brown's Creek in the area of the trench during this time period.*

**Response:** Noted. A standardized field data sheet has been developed and will be used during future sampling events. Plantation does not understand the 2<sup>nd</sup> part of this comment. No there is no direct scientific justification correlating the observed sheen to the analytical results of SW-12. Regardless of what type of sheen this is, this area is monitored regularly.

**Comment 2:** *In the future, a discussion of influence from the air sparge system (i.e. bubbling, air sparging, pressure, etc), in any monitoring well will be documented and discussed within the next quarterly report.*

**Response:** Noted. Bubbling or other qualitative observation will be provided in the gauging table.

**Comment 3:** *Every effort will be made to not to collect any environmental samples during rain events to reduce the possibility of bias in samples.*

**Response:** Noted. Sampling has never occurred during a rain event. Current practice is to not collect surface water samples if there has been a rain event of greater than 1-inch in the preceding 48-hours.

**Comment 4:** *In the future, notation will be provided on Table 3 (Groundwater Elevation and Product Thickness Data) when a well is not bracketing the water table. The Department requests that in areas where monitoring points/wells are not bracketing the water table, the ability to determine the extent of free phase petroleum be discussed in the quarterly report text. The following locations are of concern due to multiple events where the water table was not bracketed and their location relative to a receptor or the current product plume and/or the dissolved concentration within the well: MW-38, MW-40, RT-2A-RT2f, RT-2G, RT-2I, RT-2J, RT-2K, RT-2L, MW-11, MW-2, MW-9, and MW-45.*

**Response:** Agreed. This information will be provided in the gauging table. Future results will note instances where the water table did not bracket the well screen. In most cases these occurrences have been temporary due to the long period of record and seasonal variation. Most locations are not critical to understanding the impacts of receptors at the site. The RT locations were not installed as monitoring wells. They are recovery trench points, installed to monitor and recover product and are no longer useful.

**Comment 5:** *In the future, Product Thickness Trend Graphs and Groundwater Analytical Trend Graphs will be enlarged for better evaluation.*

**Response:** Plantation provides all reports in digital as well as paper format and requests that if SCDHEC would like to better see the graphs that the digital file be enlarged.

**Comment 6:** *Plantation Pipeline will provide iso-concentration maps and product thickness maps for the surficial aquifer and the bedrock aquifer for March 2017, September 2017, March 2018, September 2018, and henceforth going forward. These maps are anticipated by December 30, 2018.*

**Response:** Noted. As discussed via telephone with Mihir Mehta in December 2018, the maps mentioned above will be provided along with the next quarterly report, but as a stand-alone submittal. These semiannual maps will be provided henceforth.

**Comment 7:** *Monthly gauging of all existing wells with quarterly groundwater sampling of all monitoring wells with the exception of MW-7, MW-1 SB, MW-17B, MW-20, MW-26, MW-34, MW-36, MW-37, MW-38, MW-39, MW-40, and MW-41 which will be sampled monthly. An updated Groundwater Monitoring Well Plan Table is anticipated by December 30, 2018. The Department requests that groundwater collected from all newly installed monitoring wells be sampled monthly for the first 4 sampling events. Based upon those initial monthly events, sampling frequency would be evaluated.*

**Response:** Plantation agrees to sample newly installed monitoring wells monthly for the initial 4 samples events. Proposes to collect samples from the wells listed above every 6 weeks, right in between quarterly events. An updated Groundwater Monitoring Well Plan Table will be included in the next formal report instead of a stand-alone submittal. For newly installed monitoring wells, sampling frequency will be every six weeks. After 5 events, sampling frequency will be reevaluated.

**Comment 8:** *During annual maintenance of the air sparge system, when the system is turned off, groundwater sampling will be conducted.*

**Response:** Agreed.

**Comment 9:** *Surface water sampling and analysis will continue monthly at all surface water sampling locations with the exception of FP-1, FP-2, FP-3, and SW-6. FP-1, FP-2 and FP-3 have never had contaminant detections and surface water locations will continue to be monitored both upstream and downstream monthly. SW-6 has not had adequate water for sampling since this location was selected and other surface water locations are sampled downstream monthly.*

