

FedEx Tracking Number #770863804823

November 29, 2017

Chase Settle, Rep Safety & Environmental II EOG Resources 105 S. 4<sup>th</sup> Street Artesia, NM 88210

RE:

Compromise SWD #1 Produce Water Release on ONEOK Seven Rivers Lateral Index 20009

Dear Mr. Settle:

This responds to the email received on November 1, 2017 from Chase Settle (the Email) to Sandra Adcox of ONEOK Permian NGL Operating Co., L.L.C. (ONEOK). The Email indicates that EOG Resources (EOG) received approval from New Mexico Oil Conservation Division (NMOCD) related to the work plan submitted for the release event that occurred on ONEOK right-of-way (ROW)/pipeline, Seven Rivers Lateral Index 20009 (the Pipeline). The release was discovered by a ONEOK Operator on May 5, 2017. The Email requested ONEOK to provide any concerns regarding EOG's proposed work plan to install a 20 millimeter synthetic liner at 4 feet below ground surface (bgs) and backfill with caliche. As set forth in more detail below, ONEOK requests that EOG remove the impacted soils from the release, and not install the proposed liner out of concerns for negative effects on the continued integrity of the pipeline.

Per EOG, the release consisted of approximately 10-bbls of produce water which impacted an area of ONEOK's ROW approximately 20' X 20' (GPS coordinates: 32.7224007, -104.311996). In response to the event, EOG only conducted surface cleaning through a third party contractor to EOG. Sampling was performed by EOG to delineate the area of impact and the samples were split with ONEOK Environmental. The samples were delivered to a laboratory in Midland, Texas and were analyzed for chlorides. The lab results concluded the impacted soils had high levels of chlorides from the release.

ONEOK's Corrosion Supervisor reviewed the analytical report and recommended the chloride-impacted contaminated soils be excavated, removed and backfilled with clean soil to ensure the safety of the Pipeline. NGL maintains cathodic protection on regulated pipelines for the prevention of corrosion on pipeline systems, and the chloride-impacted soils can negatively affect the cathodic polarization of the pipeline.

In addition, the installation of a non-conductive liner in the space around or adjacent to the pipeline will result in electrical shielding, which will further reduce the effectiveness or eliminating of the cathodic protection's ability to protect the pipeline from corrosion. An electrical shield, as defined by Nace Document SPO-196 (2007), is any barrier such as the non-conductive liner that will prevent or divert the flow of cathodic protection current from the pipeline structure, for which protection is intended. The space between the barrier (liner) and the pipeline may be filled with earth or water. In the absence of effective cathodic protection, the exposed steel will be subject to corrosion.



For these reasons, ONEOK requests EOG remove the contaminated soils it released to pipeline depth and conduct verification sampling and testing to confirm the removal of the released chlorides. Once it's confirmed that the chlorides are removed from and at a safe level for the pipeline, EOG can then backfill the excavation. Please continue to provide advance notice to and coordination with ONEOK personnel on all further field activities at the release site.

As an addition safety measure, ONEOK requests EOG relocate the earthen berm at the site to the west of ONEOK ROW. NGL believes the addition of this safeguard will serve to minimize the potential of future release events on ONEOK ROW.

If you have any questions, please contact me at (432) 685-2401 or by email at <a href="mailto:sandra.adcox@oneok.com">sandra.adcox@oneok.com</a>.

Sincerely,

Sandra Adcox

**Environmental Engineer**