

## Integrity Update July 2020

Since the “Stop Work” issued in October 2019, Mountain Valley Pipeline (MVP) has continued to ensure there are no integrity issues associated with corrosion of the already installed, buried pipe. MVP has accomplished this by taking a number of proactive approaches to cathodic protection (CP) and corrosion mitigation.

To date, MVP has installed four permanent impressed current system CP groundbeds. Of these, only one is currently energized. The currently energized groundbed, Groundbed [REDACTED] at MP [REDACTED] (b) (4), is protecting approximately 12 miles of pipe on Spread [REDACTED]. The remaining three beds are waiting on commercial power hookups from the utility company. Once the power hookups are completed, these three groundbeds will protect an additional 2.4 miles of pipe. However, until work is permitted to resume on MVP, the commercial power drops cannot be installed.

In addition to the four impressed current systems on the pipeline (1 operating, 3 awaiting power), the CP systems within the three compressor stations have been installed and are energized. To further maximize the amount of pipe receiving CP, jumpers were installed around isolation points within and near the (b) (4) Compressor station allowing the pipeline just outside of the station to be temporarily protected by the (b) (4) CP system. Installation of these jumpers resulted in an additional 2.8 miles of pipeline to be protected using an impressed current system.

As discussed in the March 2020 correspondence between PHMSA and MVP, coating surveys continue to be conducted along the pipeline. In addition to the three coating surveys conducted prior to March 2020, the corrosion specialist firm hired by MVP has performed DCVGs on all continuous sections of pipe greater than 3 miles in Spreads A and B. At this time, approximately 38 miles of pipe have undergone a coating survey. Once construction is permitted to resume, MVP will perform these investigations to determine the severity of the indications and if coating repairs are required. In the meantime, MVP plans to continue conducting coating surveys on all continuous pipe segments greater than 3 miles in length.

MVP completed a full pass of test station readings along the pipeline in late 2019 and early 2020. However, MVP will continue to monitor the test stations along the pipeline where areas of higher than expected potential readings were found during the initial monitoring of these test stations. The most recent test station readings, taken in April show no areas where immediate response is required, but the sooner protective systems can be installed the better. Once construction resumes, MVP plans to do further investigations in these areas to mitigate the corrosion risk and install localized temporary CP.

Given MVP’s request to install temporary CP during the “stop work” has not been approved, no additional temporary CP has been installed since the shutdown occurred in October 2019. MVP plans to prioritize installation of these anode beds at the locations identified when earth disturbance is permitted to resume. Installation of these additional anodes will protect the pipeline during the remainder of construction until the permanent CP systems can be installed and energized.

MVP currently plans to wait until the SWO is lifted and construction resumes before commencing with installation of the temporary CP systems. However, if the start of construction continues to be delayed, MVP plans to seek permission to install temporary CP to mitigate the risk of interference and corrosion occurring on the buried, unprotected pipe segments. Ideally, MVP would like to install these temporary

anode beds before the growing season ends to ensure the limited areas disturbed during installation are reclaimed during the growing season.

Once the pipeline is complete and all the groundbeds are installed and energized, the system will be rebalanced to ensure the entirety of the pipeline is received adequate permanent cathodic protection.

MVP is currently discussing when and MFL Inline Inspection is going to be completed. The line currently has multiple HCAs and will need to have an inspection within 10 years of being turned in line. The preference is to run the tool early in the pipeline's life to get a baseline to base corrosion growth rates and other potential anomalies. The plans have not been finalized.