



January 22, 2016

Julie Prescott
North Dakota Public Service Commission
600 East Boulevard Avenue, Dept. 408
Bismarck, ND 58505-0480

Dear Mrs. Prescott:

Carlson McCain, Inc. (CMI) conducted an onsite inspection of the Vantage West Spur Lateral Pipeline Project (Case No. PU-15-142) on January 21, 2016, on behalf of the North Dakota Public Service Commission (PSC). The project consists of installing 47.8 miles of pipelines, which will connect the Stateline II Gas Processing Plant to the existing Vantage ethane pipeline system near Stady, North Dakota.

CMI Inspector Michael Fettes met with David Goodspeed, Pembina, Safety Manager, and Garrett Pletcher, Pembina, Construction Manager at the Project Management field office to review construction progress of the project. Tomahawk Pipeline Construction, Inc (Tomahawk) is the contracted pipeline installer.

Construction progress outlined in weekly reports submitted since project construction commenced the week of September 14th, 2015, was reviewed and discussed. In the latest construction progress report ending December 5, 2015, Pembina reported 100% of the Right-of-Way (ROW) has been cleared and graded, and 91% of the pipeline has been installed and backfilled. Between 8 and 12 inches of topsoil was reported to have been stripped during the clearing of the ROW. Mr. Goodspeed discussed the safety practices being implemented on the site.

Mr. Goodspeed and Mr. Fettes proceeded to the ROW to view safety practices, construction, and verification of avoidance areas being protected. Inspection notes and photos taken along the ROW are attached to this letter.

Field Review

Weather conditions at the time of the field visit were sunny, 20 degrees, with light wind. Soils were completely frozen with the entire ROW blanketed with 5-10 inches of snow. As noted in the weekly progress reports, multiple phases of construction were either finishing up or already completed.

Locations of roadway and stream crossing of horizontal directional drill (HDD) were observed. Test Lead cathode protection was in place for the bored pipe. To determine if there are any internal obstructions, bends, or buckles in the pipe, a method called pipeline "pigging" was being done for a certain segment of the pipeline. Both the initial feed and the ending feed were visited during the inspection. Potholing near the OneOK pipeline running parallel to where the new pipe was being installed was also observed.

45 **PU-15-142** Filed: 1/25/2016 Pages: 6
Construction inspection report


The entire ROW was specifically marked with stakes within the areas where construction was still being done to show the precise working space and to prevent any vehicle travel or disturbance outside of the purchased ROW. The ROW width going through a windbreak and under a couple wetland/stream areas were minimized to only the necessary crossing with of construction equipment. Wooden matting was appropriately placed within the wetland/stream area to minimize compaction and additional surface disturbance.

Silt fence was established in appropriate areas along the ROW. No areas along the project site were observed to have any soil erosion or sediment transfer into sensitive areas outside of the staked ROW. It is was suggested and discussed that regular inspections and utilization of Best Management Practices for the Storm Water Pollution Prevention Plan (SWPPP) be utilized in order to decrease any potential issues come spring snowmelt. With the project near completion, no issues were observed.

Construction procedures appeared to be in compliance with the siting laws and rules, and the applicable Findings of Fact, Conclusions of Law, and Order.

Please contact me at 701-595-7005 if you have any questions or comments.

Respectfully submitted,



Michael Fettes
Natural Resources Specialist

cc: Mr. Garrett Pletcher – Construction Manager, Pembina
Mr. David Goodspeed – Safety Manager, Pembina

Attachments: Figures, notes and correspondence



Figure 1. Photo taken of ROW looking north from 64th Street NW. Test lead for cathode protection and reclamation are visible.



Figure 2. Overhead protection in place while working around the powerlines and preparing to bore under the road. Wooden matting was also installed for easier access onto the site.



Figure 3. Beginning location for the pipeline's "pigging" process. The pipeline was pressurized and the "pig" was being sent north to the very end of the pipeline. Proper indicators and safety practices were in place.



Figure 4. The northern end of the pipeline where the tie-in is located into the already existing Vantage pipeline. Also where the "pig" was being directed to for the pipeline's quality inspection. A monitor observing the process is always present.



Figure 5. Open trench and compressor tank on the back of the truck where the pipeline inspection for the “pigging” process was being done.



Figure 6. Installed silt fence that is in place separating the construction ROW from a small wetland. The silt fence is partially buried to prevent any soil from escaping underneath the silt fence into the wetland.



Figure 7. Silt fencing around the construction area to prevent soils from eroding off the ROW during the initial ground breaking activities and during spring snowmelt.



Figure 8. View of the travel route onto a construction site, the topsoil pile that is laid off to the side, and construction equipment that are all entirely found within the 100-ft wide ROW.