



8-inch Natural Gas Liquids Pipeline Construction Inspection Report

PU-10-554

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Prepared for:

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Commission**
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Table of Contents

1.0 Executive Summary 1
2.0 Background and Scope 2
3.0 Findings..... 3
4.0 References 5
5.0 Signatures 6

List of Tables:

Table 1: Project Specifications with Written or On-Site Verification Information

1.0 EXECUTIVE SUMMARY

The North Dakota Energy Conversion and Transmission Facility Act (North Dakota Century Code Chapter 49-22) authorizes the North Dakota Public Service Commission (Commission) to determine that the location, construction, and operation of jurisdictional energy conversion and transmission facilities will produce minimal adverse effects on the environment and the welfare of citizens of North Dakota.

The Commission retained E3 Environmental, LLC (E3) to conduct inspections on the Commission's behalf of the Hiland Operating, LLC (Hiland) 8-inch Natural Gas Liquids Pipeline Project (Project) located in McKenzie County, North Dakota. This project was assigned Commission Case Number PU-10-554. The purpose of the inspections is to ensure the Project complies with siting laws, rules, and the Commission Findings of Fact, Conclusions of Law, and Order.

On behalf of the Commission, E3 conducted three (3) inspections of the Project, two (2) during active construction and one (1) during the restoration phase of the project. The associated reports were prepared and filed with the Commission (Docket No. 101, 109, and 118). E3 has prepared this Construction Inspection Report (Report) utilizing information collected during field inspections as well as information provided in the public record. This Report documents E3's conclusions and recommendations as to whether this Project has been constructed in compliance with the siting laws, rules and applicable Commission orders.

Table 3.0 documents the Project specifications and provides the compliance status for each item. The Project was constructed as outlined in the application materials and efforts were undertaken to minimize impacts. E3 recommends that Hiland submit the Project's as-built drawings and documentation of final reclamation and establishment of vegetation in the spring of 2014 to fully satisfy the Commission's rules, laws and orders.

2.0 BACKGROUND AND SCOPE

Hiland submitted a Consolidated Application to the Commission on July 12, 2011 seeking a Certificate of Corridor Compatibility and a Route Permit for the Project. The Commission issued Certificate of Corridor Compatibility No. 125 and Route Permit No. 134 on November 2, 2011. On April 17, 2012 Hiland filed an amendment with the Commission requesting route modifications. The Commission reviewed and issued the First Amended Certificate of Corridor Compatibility No. 125 and First Amended Route Permit No. 134 on June 27, 2013. A Second Amended Certificate of Corridor Compatibility No. 125 and Second Amended Route Permit No. 134 were issued on November 5, 2012 in response to Hiland's request to increase the Project pipe diameter from 6-inch to 8-inch.

The Commission hosted a Pre-Construction Conference Call on October 5, 2012, and active construction commenced the week of October 19, 2012. Construction activities continued through the winter until the week of February 22, 2013 when construction was shutdown due to weather conditions. Construction activities resumed in the spring of 2013 and restoration activities were initiated in the fall of 2013.

The Project scope included approximately 14 miles of 8-inch steel pipe and associated aboveground appurtenances. The eastern 5 miles of the Project is located adjacent to Hiland's existing 8-inch natural gas pipeline.

To prepare this Report E3 reviewed the information on the Commission's website (NDSPC, 2013) and documented its findings in Table 3.0. Katie Schmidt, E3, met with Jason Pottridge and conducted a final inspection of the Project on September 24, 2013. At the time of inspection all construction activities had been completed and restoration activities had been implemented. Ground cover through areas of the Project, which were not in agricultural use, was satisfactory at the time of inspection. No compliance issues were identified during the inspection.

3.0 FINDINGS

Items of possible non-compliance are highlighted in grey.

Table 1: Project Specifications with Written or On-Site Verification Information

Project Document	Description of Project Specification	Verification Through Written Documentation	Verification Through On-Site Inspection
SITING AND LOCATION			
Findings of Fact 4, App p.2	Designated location in McKenzie County, North Dakota. Project extends from the Hiland Operating Watford City natural gas processing plant to the Hiland Operating rail loading facility located next to the Yellowstone Valley Railroad line.	N/A	The Project was built as proposed in the designated project area described in the Application and Order.
Findings of Fact 15, 16, 17, 17, 18, 20; Order 10, 12; App p. 15-18	Siting criteria analysis - exclusion, avoidance, selection, policy. Avoidance areas: historical resources, residences, wildlife management areas, wetlands and water bodies.	Docket #5-17 - Application	The Project was built as proposed and within the rights-of-way.
App p. 10	Total land disturbance of approximately 155 acres.	Docket #5 - Application	The project was constructed within the proposed rights-of way.
PROJECT DESIGN AND ENGINEERING			
Findings of Fact 5, App p.2	Project includes approximately 14 miles of 8-inch steel pipe and the maximum allowable operating pressure is 740 pounds per square inch gauge, with a maximum capacity of 600 gallons per minute or 864,000 gallons per day. The eastern 5.1 miles of the Project is located adjacent to Hiland Operating's existing 8-inch natural gas pipeline.	To provide as-builts within 3 months of construction and verify.	N/A
Findings of Fact 6, 7, App p.2	Surface facilities include project pumps, a "pig" launcher and receiver, block valves, pressure and flow controllers, isolation valves, main line valve settings, rectifiers, and test stations associated with cathodic protection system and pipeline markers.	To provide as-builts within 3 months of construction and verify.	N/A
Order 33	Provide copy of the as-builts within three (3) months of construction.	To provide as-builts within 3 months of construction.	N/A
PRE-CONSTRUCTION			
ND Century Code Ch. 49-22-07.1; ND Admin. Code Article 69-06-03	Letter of Intent.	Docket #1 – Letter of Intent	N/A
ND Century Code Ch. 49-22-08; ND Admin. Code Article 69-06-04	Application for a certificate of site or corridor compatibility.	Docket #5-17 – Application; Docket #56 - Supplement	N/A
ND Century Code Ch. 49-22-07	Certificate of site compatibility or route permit.	Docket #42 - Certificate	N/A
ND Century Code Ch. 49-22-04; ND Admin. Code Article 69-06-02	Ten-year plan (submit before July 1).	Hiland has filed 10-year plans with the ND Commission refer to ND Commission records PU-10-619, PU-11-391, PU-12-431, and PU-13-377	N/A
Order 2, 5	Hold pre-construction meeting. Inform Commission of intention to start construction prior to commencement of construction and provide weekly reports.	Docket #91-92, Preconstruction meeting minutes. No preconstruction notification found.	N/A
Order 31	Inform Commission of plans to modify facility and obtain approval.	Docket #54-55 – Modification to Route and Approval	N/A
App p. 23	Obtain permits and approvals from other agencies.	Docket #32 – Permits and Approvals Checklist	N/A

Project Document	Description of Project Specification	Verification Through Written Documentation	Verification Through On-Site Inspection
CULTURAL RESOURCES			
Findings of Fact 15, Exhibit 5; Order 17; App p.11-12, 43, 44	Avoidance of all identified sites potentially eligible and listed in the National Register of Historic Places. A total of six (6) cultural resources were documented during cultural resource surveys; avoidance of these sites was recommended.	None.	No impacts to those areas were documented.
CONSTRUCTION, RECLAMATION, AND SOILS			
Findings of Fact 15; App p.13, 15, 27	Townsendia excapa and Townsendia hookeri marked and avoided.	Docket #101, 103, 109, 118 – Inspection reports.	Sensitive species were marked and avoided.
Findings of Fact 20	Trees and shrubs replaced in accordance with mitigation specification.	Docket #28 - Tree and shrub inventory sampling method; Docket #32 – Tree and shrub specifications.	No trees or shrubs were removed during construction activities.
Findings of Fact 21; Exhibit 6; App p.13	No impacts to endangered, threatened or sensitive plant or animal species.	None reported.	N/A
Findings of Fact 26, App p.3	Temporary construction right-of-way of 125 feet, reduced to 50 feet in wooded areas. Permanent right-of-way of 100 feet.	N/A	E3 observed that the Project had been constructed within the 125 foot right-of-way.
Findings of Fact 26	No modifications to or construction of permanent roads.	N/A	None reported.
Findings of Fact 28	Environmental Inspector onsite during construction. Provide weekly inspection reports.	Docket #93-100, 102, 104-108, 110-112, 116 – Weekly reports.	N/A
Findings of Fact 29	Follow Emergency Response Plan approved by DOT Pipeline and Hazardous Materials Safety Administration.	N/A	N/A
Order 6	Pipeline buried to a minimum depth from the ground surface to the top of the pipe of 48 inches in range land, 48 inches for cultivates land, 48 inches at the bottom of a ditch for road crossings, and 72 inches across undeveloped section lines.	N/A	E3 did not visually confirm the depth of the pipeline.
Order 13	Buried facility crossings of graded roads bored unless open cutting permitted by responsible governing agency.	Docket #37-Exhibit contains a list of permits obtained for the project.	Road crossings were completed in compliance with permit conditions.
Order 14, 22, 23, 26; App p. 18, 21, 41	Restore pre-existing township and county roads and lanes used. Repairs or replacement to fences, gates, drain tile. Temporarily disturbed areas will be restored as soon as practicable.	Docket #116 – Weekly report.	No compliance issues were identified during inspection on 9/24/2013 (Docket #118).
App p. 19-20, App p. 20	Noxious and invasive weeds avoided, equipment visually inspected prior to leaving area, and vegetation and soils cleaned from equipment and vehicles.	Docket #101, 103, 109, 118 – Inspection reports.	Areas containing noxious and invasive weeds were flagged and construction crews were informed of these locations.
App p. 36, 41, 42	Reseeding done with appropriate seed mixes, application rates, and seeding dates.	Docket #101, 103, 109, 118 – Inspection reports.	
OPERATION			
Order 28, App p. 52	Report injuries or the death of any threatened or endangered species within five (5) business days.	None reported.	N/A
Order 27, 29	Provide safety measures for traffic control or to restrict public access to transmission facility. Procedure for handling complaints (sent to Hiland).	Docket #92 – Preconstruction meetings discuss procedures for handling complaints.	Roadway crossing signs observed during inspections.

4.0 REFERENCES

North Dakota Public Service Commission (NDPSC) 2013. Online Case Search. Available from: http://www.psc.nd.gov/database/docket_view_list.php. Accessed December 2013.

5.0 SIGNATURES

Recommendations and findings in this report are based upon current public information.

Katie Schmidt, E3, prepared this report and did so in a manner with care.

Katie Schmidt

Katie Schmidt, E3 Environmental, LLC

1/16/14

Date