



March 14, 2016

**Hand Delivery**

Mr. Darrell Nitschke  
Executive Director  
North Dakota Public Service Commission  
600 E. Boulevard, Dept. 408  
Bismarck, ND 58505-0480

In re: ONEOK Bakken Pipeline, L.L.C.  
Lonesome Creek NGL Pipeline Project  
McKenzie County  
Case No. PU-15-137  
Our File No. 72-591-003

Dear Mr. Nitschke:

Enclosed for filing are eleven copies of the Tree Mitigation Plan and the Post Construction Follow-Up in the captioned case.

Please call should you have any questions. Thank you.

Very truly yours,

John W. Morrison

lh  
enc.

cc: Michael Dailey (via email)



March 11, 2016

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

**Case No. PU-15-137**  
**LONESOME CREEK NGL PIPELINE**  
**TREE MITIGATION**

ONEOK Bakken Pipeline, L.L.C. ("OBP") has completed construction of the Lonesome Creek NGL pipeline. In accordance with our application, orders, and construction plans, OBP was able to avoid removal of trees and shrubs to the greatest extent feasible. A small area of trees/shrubs was required to be cleared on a single tract of land. These trees are included on the attached Tree Removal Inventory.

OBP has partnered with the McKenzie County Soil Conservation District for executing tree mitigation on our projects. The attached inventory was provided to Jacquelyn Heins at the Soil Conservation District and they have agreed to facilitate all landowner discussions, planting, monitoring, and reporting.

Once the Soil Conservation District has successfully negotiated a replacement strategy with the landowner and provided that plan to OBP, we will forward the plan and replacement schedule to the PSC.

If you have any questions, please do not hesitate to contact me at (918) 732-1472 or [todd.kelvington@oneok.com](mailto:todd.kelvington@oneok.com)

Sincerely,

A handwritten signature in blue ink, appearing to read "TK", written over a horizontal line.

Todd Kelvington, CEP  
Environmental Project Manager

Enclosures (Tree Removal Inventory\_Lonesome Creek NGL)

cc: Tulsa Large Construction – ONEOK Bakken PL – Lonesome Creek NGL  
John Morrison – Crowley Fleck

ONEOK Partners, L.P.  
100 West Fifth Street  
Tulsa, OK 74103  
[www.oneokpartners.com](http://www.oneokpartners.com)

Tree Removal Inventory  
 Lonesome Creek NGL  
 PU-15-137

Station	Landowner	Species	Removed	Replace	Date Complete
116+00	James & Carol G. Norgard Revocable Trust	<i>Elaeagnus angustifolia</i> (Russian Olive)	13	26	Pending

Notes: Inventory provided to NRCS/McKenzie County Soil Conservation Service. Jacquyn Heins and Kyle Hartel are contacting landowner and will provide execution plan and schedule for planting.  
 McKenzie County Contact Jacquyn Heins (701) 842-3628 jacquyn.heins@nd.nacdn.net  
 ONEOK Contact: Todd Kelvington (918) 732-1472 todd.kelvington@oneok.com



**ONEOK**

BAKKEN PIPELINE

A SUBSIDIARY OF ONEOK PARTNERS

**February 16, 2016**

Julie Prescott  
Compliance and Competitive Markets  
North Dakota Public Service Commission  
600 East Boulevard, Dept. 408  
Bismarck, ND 58505-0480

**Case No PU-15-137  
LONESOME CREEK PIPELINE  
POST CONSTRUCTION FOLLOW-UP**

As required by the State of North Dakota Public Service Commission Certification Relating to Order Provisions for Transmission Facility Siting, ONEOK Bakken Pipeline, L.L.C. ("OBP"), submits the attached as-built information for the recently constructed Lonesome Creek Pipeline.

Sincerely,

Matthew Turpin  
Engineering Supervisor, Construction Projects

Enclosures (Disk, Centerline and Corridor Map)

# ONEOK Lonesome Creek 8-inch NGL Pipeline Corridor and Centerline



**Design Basis Lonesome Creek 8" NGL Pipeline**

**Tables and Appendices:**

<b>TABLE 1 NGL Pipeline -- Baseline Design Basis Right of Way: Permanent / Temporary Workspace</b>
Permanent Workspace - 50' centered on the pipe as it lays
Temporary Workspace - 50' (total of 100' workspace). 50' on working side
Generally, construction will be completed from South to North, with the working side on the east side of workspace, and spoil side on the west side.
ETWS - ETWS will not be placed on existing hot lines unless necessary with 3 <sup>rd</sup> party operator approval. (1) Slick bore road crossings- none (2) Open cut streams- Working side 25'x200' both sides of drain/stream. (3) HDD- Working side 25'x200' both sides plus pull string area as necessary. (4) Single Foreign pipe crossings- Working side 25'x100' both sides. (5) Multiple Foreign line crossings- Working side 25x100' both sides. (6) Truck turnarounds- Working side 200' X 200' (7) PI's - Working side 25' X 200'
Routing to minimize tree clearing
Routing to avoid areas with private dwellings, industrial buildings, and places of public assembly to the extent practicable. (195.210)
Routing to be at least 50 feet from private dwellings, industrial buildings, and places of public assembly unless provided with at least 12 inches of cover in addition to that prescribed in 49 CFR 195.248. (195.210). One residence near MP 2 was within the 500' corridor.
Clearing Stumps: Stumps removed from ditch line only during construction. Outside ditch line stumps ground off at ground level for aerial patrols.
<b>Mainline Construction - General</b>
Pipeline buried to a standard depth of 48" (grade to top of pipe).
Overhead crossings and spans over ditches and gullies will not be permitted. (195.254)
<b>Mainline Construction - Offset Requirements</b>
25' offset to existing pipelines. Reduction requires Construction Manager approval. This approval will be recorded in the PDMT MOC tool.
Must be at natural grade within 5 feet of any pipe. Deviations require Construction Manager approval.
<b>Mainline Construction - Crossing Requirements</b>

Major HDD Crossings (Interstates / Rivers / RR): Horizontal Directional Drills at major crossings will be offset 25' from existing pipelines. Permitted depth of HDD shall meet the minimum permit requirements. Construction Depth of HDD will be a minimum of 5 feet. Deviations require Construction Manager approval.
Secondary crossings of county / state roads, etc. will be designed via slick bore, in accordance with permit requirements.
Small creeks, streams, and private two track roads will be open cut unless restricted by environmental or other permit requirements.
HDDs - Drills preliminary designed with a 800 ft radius of curvature (i.e. 100 ft / dia-in). 8 - 10 degree entrance and exit points. Special HDD designs reviewed on a case by case basis by ONEOK.
Slick Bore - Bored crossings (typically road) resulting in 0 ft radius of curvature.
Open Cut Crossings: Must maintain minimum 25' offset from existing pipelines at creeks / crossings that are open cut. An additional offset must be achieved if it is necessary to remove greater than 10' of creek bank on the parallel pipe side. Must achieve 2' additional offset for every 1' of bank that needs to be removed over 10'. Top of pipe must be 5' below grade at any location along the crossing.
Creeks / Waterways Open Cut: Permitted depth shall be per the minimum permit requirements. Constructed depth shall be a minimum of 5' depth (grade / stream bed to top of pipe).
No cased crossings.
Railroads will be bored at a minimum depth per permit requirements. (typically 5' below the lowest ditch line) – No railroad crossings.
<b>Mainline Construction - Other</b>
Top Soil method - Full ROW and TWS width; minimized where possible to mitigate restoration. Top soil replacement to be done by a reclamation contractor.
If crossing other ONEOK pipelines, must mat those lines for protection during construction. If crossing other foreign pipelines, must comply with Owner's requirements.
Test stations installed every 1 mile. Test stations installed at all crossings. Not to exceed three miles between test stations.
<b>Facilities / Valves</b>
Pig Trap Locations - Meter Station at Lonesome Creek Plant, Lonesome Creek Garden Creek Tie-in
Meter Site at Lonesome Creek Plant will require power - Source TBD
Mainline Block Valves – Due to the length of the pipeline and in keeping with ASME B31.4, no mainline block valves are being installed.
Valve locations to match existing pipeline valves locations where possible. Confirm with HCA Overview and DOT 195 requirements.
2 man gates in fence installed at opposite corners for all block valves.
No access roads for block valves unless remotely located.

All components installed above ground must be protected from forces exerted by anticipated loads. This includes scraper traps, block valves, and pipe in areas under the direct control of the operator or in an area inaccessible to the public. (195.254)
<b>Pipeline Requirements</b>
Line Pipe (0.72 DF) - 8.625" x 0.188", API 5L, X60, ERW, BEV, 14-16 mils FBE, DRL
Heavy Wall Pipe (crossings, wetlands, etc.) (0.6 DF) - 8.625" x 0.219", API 5L, X60, ERW, BEV, 14-16 mils FBE & 30 mill ARO, DRL
Butt weld fittings shall meet the requirements of ANSI B16.9 or MSS SP-75, be free of defects that may reduce the strength of the fitting, and be suitable for the piping system to which it is attached. (195.118)
Valves shall be built and tested in accordance with API 6D of materials compatible with components of the product stream (195.116)
Coating type per ONEOK Coating manual.
Induction bends will be to the nearest degree not seconds (No induction bends)
PIs are 1 degree per pipe diameter and 6' tangents.
Heavy Wall: (1) Extend to entry / exit points at all HDDs (2) Extend 20' beyond road (county, state) right of way for design (construct at minimum of right of way to right of way edge) (3) Extend 10' beyond private road / driveway
Follow section 419 of ASME B31.4 to provide for expansion and flexibility to anticipate external loads. (195.110(a))
Pipe attachments added to support the pipe must be designed to avoid added stress to the pipe wall or the added stress must be computed and compensated for. (195.110(b))
<b>Other</b>
Alignment sheets in accordance with ONEOK GIS Guidelines.