



**Subpart 4. Background information.**

**Each application must contain the following information:**

**A. the applicant's complete name, address and telephone number:**

North Dakota Pipeline Company LLC  
1100 Louisiana, Suite 3300  
Houston, Texas 77002  
(713) 821-2000

**B. the complete name, title, address, and telephone number of the authorized representative or agent to be contacted concerning the applicant's filing:**

NDPC Senior Legal Counsel	NDPC External Counsel
James Watts	Kevin Walli
Enbridge Pipelines (North Dakota) LLC	Fryberger, Buchanan, Smith & Frederick
119 N. 25 <sup>th</sup> Street E.	380 St. Peter Street, Suite 710
Superior, Wisconsin 54880	St. Paul, Minnesota 55102
218-464-5600	651-221-1044
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- C. the signatures and titles of persons authorized to sign the application, and the signature of the preparer of the application if prepared by an outside representative or agent;

This application is submitted by North Dakota Pipeline Company LLC.

A handwritten signature in blue ink, appearing to read 'Bruce Stevenson', written over a horizontal line.

Bruce Stevenson  
Corporate Secretary  
North Dakota Pipeline Company LLC

**D. a brief description of the proposed project which includes:**

**(1) general location;**

The Sandpiper Pipeline Project (“Project” or “Sandpiper”) will be constructed from the NDPC,<sup>1,2</sup> Beaver Lodge Station south of Tioga, North Dakota to an existing Enbridge affiliate terminal in Superior, Wisconsin; a total Project length of approximately 616 miles. Approximately 302 miles will be located in Minnesota, beginning at the North Dakota border in Polk County, and extending east to Clearbrook, Minnesota. In Minnesota, the Project comprises 73 miles of 24-inch outside diameter (“OD”) pipe west of Clearbrook, Minnesota and 229 miles of 30-inch OD pipe east of Clearbrook. The preferred route is co-located, to the extent practicable, with NDPC’s existing right-of-way or other third-party rights-of-way in Minnesota. In Minnesota, the preferred route follows the NDPC System from the North Dakota border south of Grand Forks, North Dakota to Clearbrook, Minnesota. The preferred route then turns south and generally follows the existing Minnesota Pipe Line Company right-of-way to Hubbard, Minnesota. From Hubbard, the preferred route turns east, following parts of existing electrical transmission and railroad lines and pipeline rights-of-way before terminating in Superior, Wisconsin. The preferred route in Minnesota will traverse Polk, Red Lake, Clearwater, Hubbard, Cass, Crow Wing, Aitkin, and Carlton counties.

In addition to the new pipeline, the Project involves adding a new terminal with two 150,000 barrel (“bbl”) tanks and a new pump station near Clearbrook, Minnesota; mainline valves at major waterbody crossings and over the length of the preferred route; and Pipeline Inspection Gauge (“PIG”) launcher and receiver traps along with a mainline valve at a site near Pine River, Minnesota.

**(2) planned use and purpose;**

The purpose of the Project is to transport growing supplies of oil produced in North Dakota to the terminals in Clearbrook, Minnesota and Superior, Wisconsin. From these terminals, the crude oil can be shipped on various other pipelines, eventually providing refineries in Minnesota, and other states in the Midwest and the East Coast with crude oil. To meet the need for safe and economical transportation capacity, the Project will provide up to 225,000 barrels per day (“bpd”) of new crude oil capacity from North Dakota.<sup>3</sup> NDPC’s

<sup>1</sup> For the purposes of this application, it is understood that NDPC replaces EPND in previous submissions.

<sup>2</sup> NDPC is a joint venture between Enbridge Energy Partners, L.P. and Marathon Petroleum Corporation (“MPC”). Enbridge Energy Partners, L.P. (“EEP”) is a Delaware master limited partnership. Enbridge Energy, Limited Partnership, a wholly owned subsidiary of EEP and an affiliate of Enbridge Inc., owns and operates the U.S. portion of the existing Enbridge Mainline System. Collectively, the affiliated entities *excluding* NDPC are referred to as “Enbridge” in this document.

<sup>3</sup> The Project will have a capacity of 375,000 bpd between Clearbrook, Minnesota and Superior, Wisconsin. Total new capacity, however, is 225,000 bpd as the 150,000 bpd that will enter Sandpiper at Clearbrook is currently transported to Clearbrook on NDPC’s existing Line 81 and to Superior, Wisconsin on the Enbridge Mainline System.

shippers will use the Sandpiper pipeline for the transportation of crude oil to Enbridge's breakout tankage facilities at Clearbrook, Minnesota or Superior, Wisconsin. At Clearbrook, the crude oil will be delivered to interconnected facilities operated by Minnesota Pipe Line Company for delivery to the Flint Hills and St. Paul refineries in Minnesota. At Superior, the crude oil will be delivered into the Enbridge Mainline System and other third-party pipelines for delivery to refineries in the Midwest and the East Coast.

**(3) estimated cost;**

The estimated cost for the Project is US \$2.6 billion. The estimated cost for the Minnesota portion of the Project is US \$1.2 billion.

**(4) planned in-service date; and**

NDPC plans to begin construction of the Project in the fourth quarter of 2014 with an anticipated completion and in-service date of first quarter 2016.

**(5) general design and operational specifications for the type of pipeline for which an application is submitted.**

The Project will have an annual capacity of 250,000 bpd in North Dakota between Beaver Lodge and Berthold, an annual capacity of 225,000 bpd from Berthold, North Dakota to Clearbrook, Minnesota and an annual capacity of 375,000 bpd from Clearbrook, Minnesota to Superior, Wisconsin. Within Minnesota, the 24-inch-diameter segment from the North Dakota border to Clearbrook, Minnesota will have an annual average capacity of 225,000 bpd. At Clearbrook, Minnesota, Sandpiper will receive up to an additional 150,000 bpd from the existing NDPC Line 81. The segment from Clearbrook, Minnesota to the Wisconsin border will be a 30-inch diameter pipeline and will have an annual average capacity of 375,000 bpd. Additionally, Sandpiper will have the ability to provide redundant service<sup>4</sup> at Clearbrook to the existing NDPC Line 81 deliveries in order to ensure reliable deliveries of 60,000 bpd annual capacity into the Minnesota Pipe Line Company system for delivery to Minnesota refineries.

Liquids pipelines are generally designed at a specified capacity for a known liquid. Most liquids pipelines transport a variety of liquids. The change in fluid characteristics (e.g., density and viscosity) of the transported liquids will affect the capacity of the pipeline. Liquids are also batched, meaning that different liquids, or in this case, grades of crude oil, are shipped at different times, generally in a repeatable sequence. Both the fluid characteristics and batch sequence will affect the capacity of the pipeline. Table 7852.2100-D provides design data pertinent to the new 24-inch and 30-inch portions of the pipeline.

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<sup>4</sup> Redundant service is indicative of system design that allows for duplication of delivery if one component is unavailable.

Two definitions are used to describe pipeline capacity: Design Capacity and Annual Capacity.

- **Design Capacity:** The theoretical capacity of the pipeline and pumping facilities, at its current or proposed design state for given types of liquids and their batch sequence. Design Capacity is calculated assuming theoretically ideal operating conditions.
- **Annual Capacity:** The average sustainable pipeline throughput over a year. Annual Capacity is calculated assuming historic average annual operating conditions. These operating conditions include scheduled and unscheduled maintenance, normal operating issues and crude supply availability. Annual Capacity of a pipeline is typically 90% of Design Capacity, and represents the capacity requested in this application.

<b>Table 7852.2100-D            Sandpiper Pipeline Project Capacity Definitions</b>			
		<b>24-inch Pipeline            from Berthold, ND            to Clearbrook, MN            (barrels per day)</b>	<b>30-inch Pipeline            from Clearbrook,            MN to Superior, WI            (barrels per day)</b>
Ultimate Design Capacity	Maximum economic expansion capacity of individual line. Requires additional pumping horsepower over current design to meet this capacity.	406,000	711,000
Ultimate Annual Capacity	Maximum economic expansion capacity of individual pipeline that is sustainable average daily rate per day over a year.	365,000	640,000
Initial Design Capacity	Theoretical capacity.	250,000	417,000
Initial Annual Capacity (90%)	Average sustainable rate: average barrels per day over a year (90% of Design Capacity).	225,000	375,000