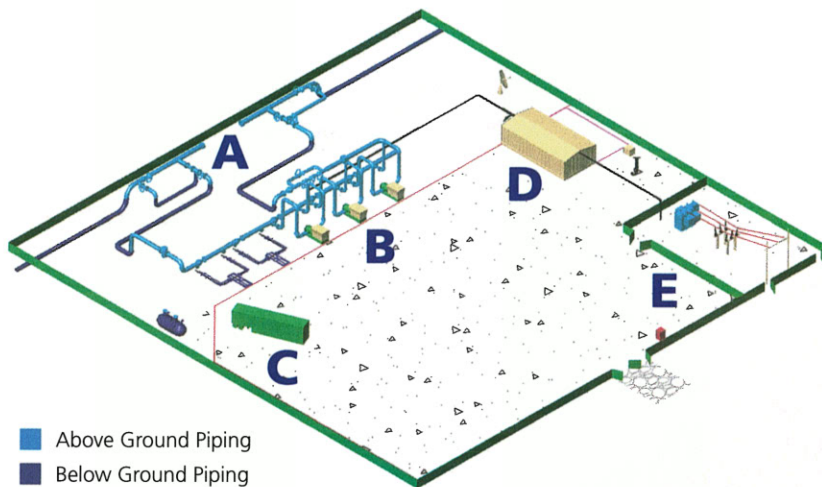


Keystone XL Pump Stations



Typical Pump Station

- A** Pipeline Launcher and Receiver (at selected sites)
- B** Electrically Driven Pumps
- C** Environmental Response Unit (at selected sites)
- D** Operations and Electrical Building
- E** Electrical Substation



The Keystone XL Pipeline will initially transport about 700,000 barrels per day of crude oil from Hardisty, Alberta to markets in the U.S. Midwest and to the Gulf Coast in Texas. Ultimately, the pipeline could move up to 900,000 barrels per day.

Keystone XL will use a series of 41 electrically driven pump stations to move oil through the line – 33 pump stations in the U.S. and 8 in Canada. Situated at approximately 80-kilometre (50-mile) intervals along the line, groups of pumps and supporting equipment are located in a small, secure facility referred to as a pump station.

Pump stations will be built on small parcels of land - approximately five acres - that Keystone XL will seek to purchase. A series of two to three electrically driven pump units will be installed at each station. The pumps are each supported by 6,500-horsepower motors, with each pump station initially having up to

19,500 horsepower of pumping power. Ultimately, the pump stations could have up to five pumps per station, with a total of up to 32,500 horsepower. At some stations, above-ground piping will include launching and receiving facilities for maintenance, cleaning and inspection equipment that is periodically run through the pipeline.

Pump station facilities will include an electrical sub-station and small buildings to house electrical, measurement and control system components. The pipeline and pump stations will be remotely monitored and controlled, 24 hours a day, seven days a week, from a control centre in Calgary.

Please refer to back page for answers to some frequently asked questions.

The proposed Keystone XL project is a partnership between TransCanada and ConocoPhillips.

Keystone XL Pump Stations

Frequently asked questions...



How many pump stations are proposed?

The proposed Keystone XL mainline project includes 41 pump stations, 8 eight in Canada and 33 in the United States.

How are the locations of pump stations determined?

Initial pump station locations are determined by pipeline hydraulics, taking into account such factors as pipe size, topography, frictional losses related to oil flow, and location of other pumps in the system. Selection of a specific pump station site also takes into account such factors as proximity to local roads, power supplies, land use and environmental characteristics. Final locations are subject to change based on engineering and route refinements, landowner agreements, public consultation and environmental field studies.

What permits and approvals are necessary for Keystone XL to build a pump station?

The Keystone XL pipeline project, including pump station facilities, requires many permits and approvals from federal, provincial/state and local regulators. Pump stations may also be subject to local ordinances and zoning requirements.

How will pump station construction occur?

A typical pump station will be constructed in seven to nine months. The work will commence on receipt of final regulatory approvals. Currently construction is anticipated to begin in the second quarter of 2010 and will be complete in the 4th quarter of 2011, which will include commissioning of each station. The final timing of construction activities, civil, mechanical, electrical, etc. for each specific pump station location has not yet been developed. Construction is expected to continue through all seasons.

What kind of noise does an operating pump station make?

Sources of sound at pump stations include components such as pumps, motors, valves and electrical transformers. Keystone XL will utilize electrically driven, centrifugal pumps which are the quietest type of pumps available. The facility will be designed to effectively manage operational noise, ensuring sound levels are at or below provincial/state and local regulatory requirements. Sound levels near the pump station will vary depending on the number of pumps in operation, background noise in the vicinity of the pump station, proximity to the station and weather conditions. In general, at a distance of about 0.8 kilometres (a half-mile), an operating station would have a constant hum, similar to a secondary highway.

Will pump stations be manned?

Pump stations are designed to be remotely operated and controlled and generally will not be manned. Keystone XL pump stations will be monitored at the TransCanada Control Center in Calgary, Alberta, which is staffed 24-hours-a-day, every day of the year. Technicians will be at pump station sites on a regular basis to perform routine maintenance and operation activities during normal working hours. Technicians will also be on-call to respond to emergencies or other operational events at any time.

How will pump stations be powered?

The pump station facilities will be served by high voltage electrical lines. At maximum pumping capacity, each pump station may consume up to 15 megawatts of electrical power per day, initially, and up to 25 megawatts at its ultimate capacity. Electrical transformers, located within an electrical substation on site, will transform the incoming voltage to the appropriate level for the pump motors. Power will be purchased from local electric suppliers.

What would happen to the pump station in the event of a power outage?

In the event of a power outage at a pump station, the pump station would safely shut down. Keystone XL operators could safely bypass the affected station, allowing the pipeline to continue to operate using upstream and downstream pump stations. Small, Uninterruptible Power Systems located at each pump station are designed to operate communications, control equipment and emergency lighting, but not the pumps themselves.

Will the local community benefit from hosting a pump station?

Construction and operation of a pump station will benefit the economy of a local community. It is estimated that each facility will cost approximately \$23.5 million (USD) to construct. During construction, there will be short term benefits resulting from food and lodging requirements of the construction personnel. There will also be additional local support services required such as fuel supply, hardware needs, parts, equipment, aggregate, and concrete suppliers, and the need for industrial supply depots and replenishment of other expendable goods. There will also be long-term economic benefits to the local communities. For instance, Keystone XL will become a large electrical customer, contributing significantly to the economic vitality of each of its power suppliers. In some cases, upgrades to the existing power infrastructure to serve the pump stations may actually increase the level of electrical service available to the adjacent landowners and community. Additional tax revenue will also be paid annually to counties where such tax requirements exist.

Contact

For more information, please call our toll free project number (1.866.717.7473) or use our project-specific email address keystone@transcanada.com

Alternatively, you can refer to our website at www.transcanada.com/keystone/kxl or write, attention to:

In Canada

TransCanada Keystone XL Project Team
450 – 1st Street S.W.
Calgary, Alberta
Canada T2P 5H1

In the U.S.

TransCanada Keystone XL Project Team
7505 NW Tiffany Springs Parkway
Northpointe Circle II Suite 400
Kansas City, MO 64153

Landowner Inquiries

Canada (toll free) 1.866.412.5263
U.S. (toll free) 1.866.585.7063