
To:	Justin Rieseberg	From:	Lindsay McDonough, Environmental Planner
	TEML Westpur Pipelines Ltd. (Westpur)		Stantec Consulting Ltd.
File:	Alida Terminal Pump Decommissioning Project	Date:	February 7, 2017

Reference: Alida Terminal Pump Decommissioning Project: Section 45.1 Application

INTRODUCTION

TEML Westpur Pipelines Ltd. (Westpur) Inc. is proposing to decommission two of its existing booster pumps at the Alida Terminal, located near Alida, Saskatchewan, pursuant to Section 45.1 of the Onshore Pipeline Regulations (OPR) (the Project). As detailed in Westpur's September 15, 2016 letter to the National Energy Board (NEB), the two booster pumps at the terminal are currently not being operated as they are not needed to meet current or foreseeable shipper requirements. Shipper requirements are being met in full by delivering volumes directly from the Steelman NGL Station.

As a result of the decommissioning, the capacity of Line 24 will be permanently reduced by approximately 7,600 bpd, which will reduce the capacity of Line 24 to approximately 17,400 bpd and Westpur's aggregate system capacity to approximately 247,400 bpd.

The Project and associated activities are not anticipated to interact with any of the valued components (VCs) identified in Table A-1 of the NEB Filing Manual (NEB 2016). However, although unlikely, there is potential for Project-related effects arising from unplanned accidents and malfunctions, which are discussed further in this memorandum. Please refer to the attached Interactions Table (Appendix 3) for rationale to explain why potential interactions with VCs are not predicted.

PROJECT DESCRIPTION

The Project involves decommissioning two 900 hp HPS booster pumps located at the Alida Terminal at 9-28-5-33 W1M. Minor modifications are required to facilitate decommissioning, including removal of the above-ground inlet and outlet piping to the two pumps (approximately 65 meters of 6 inch pipe) and associated electrical wiring (e.g., communication and power cables), with the exception of the main pump feeds. The two 900 hp HPS booster pumps and associated screw pile foundations will be decommissioned in place.

In general, the decommissioning activities will include:

- isolating the piping and components to be decommissioned (if not already isolated or capped). This includes closing the appropriate valves to block off incoming and outgoing flow from the segments
- draining the product from the piping and components to be decommissioned. If the pipe segments and components were drained previously, Westpur will confirm they are completely drained of product

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- installing flanges or caps at each isolation point to block off product flow into the isolated segments
- removing any residual products from the isolated segments by cleaning them with a cleaning pig and,
- physically separating the piping and components from any in-service piping. This involves cutting, capping, and plugging the pipe segments and components.

All Project activities will occur above-ground (i.e., no surface disturbance) and within the existing fence line. Construction equipment will include a tractor trailer and picker truck, with access to the site obtained via an existing all-weather access road. The number of workers to complete the activity is limited (i.e., approximately 12 workers).

Pending regulatory approval, Project activities will take approximately six weeks to complete and will be completed prior to October 2017. The remainder of the Alida Terminal, including other oil and gas infrastructure and a heavy truck terminal, will continue to operate and will be managed under Westpur's Operating and Maintenance Procedures.

ENVIRONMENTAL SETTING

The Project is located within the Alida Terminal, which is within the Aspen Parkland ecoregion of the Prairie ecozone. The ecoregion is considered transitional between the boreal forest to the north and the prairie grasslands to the south and represents some of the most productive agricultural land in the Prairies (SKCDC 2016a). A Saskatchewan Conservation Data Centre (SKCDC) search was conducted on October 19, 2016; no historical occurrences of vegetation or wildlife rare species within 2 km of the Project site were identified (SMPCS 2016, SKCDC 2016b). There are no fish bearing watercourses within 30 m or domestic groundwater wells within 200 m of the Project site (WSA 2016). Land use at the Alida Terminal is industrial, and is surrounded by cultivated fields, oil and gas development.

POTENTIAL INTERACTIONS

Decommissioning activities will cause minor short-term increases in human activity levels at the Alida Terminal, but are not expected to add materially to sensory disturbance already associated with site operations (e.g., operation of the existing heavy truck terminal). No surface disturbance is proposed and no activities will occur outside the existing graveled and fenced Terminal. As well, all construction equipment will access the site via an existing all-weather access road.

There are five previously disturbed Class II wetlands and one previously disturbed Class III wetland immediately adjacent to the Alida Terminal based on the Stewart and Kantrud classification system (Stewart and Kantrud 1971). However, the Project's proposed activities will occur entirely within the existing Alida Terminal site and approximately 10 m from the nearest wetland. Standard erosion and sediment control measures outlined in TEML's Environmental Guidelines for Construction (Revision 0.2, 2016) will be implemented, where warranted. As a result, the Project is not predicted to interact with wetlands.

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The Project does not interact with any VCs identified in Table A-1 of the NEB Filing Manual (NEB 2016). However, although unlikely, there is potential for project interactions arising from accidents and malfunctions, which are discussed below.

ACCIDENTS AND MALFUNCTIONS

The NEB Filing Manual requires that the environmental assessment for a project consider the effects of accidents, malfunctions, or unplanned events that might occur. Accidents, malfunctions, and unplanned events are events or conditions that are not planned as a part of routine project activities during any project phase. These events or conditions could occur as a result of abnormal operating conditions, process upsets, wear and tear, acts of nature, extreme weather events, human error, equipment failure, or other possible causes. Many accidents, malfunctions, and unplanned events may be avoided or mitigated by good planning, design, equipment selection, hazards analysis and corrective action, emergency response planning, and security management.

The scenarios outlined below represent credible, higher-consequence events, which also adequately address the consequences of less likely or lower-consequence scenarios. Based on the experience and professional judgment of the assessment team, the following accidents, malfunctions and unplanned events could occur:

- Spill, Rupture or Hazardous Materials Release: Releases of fuel, residual petroleum products or other chemicals present on site that could occur during decommissioning.
- Fire: Includes an explosion and/or fire in a Project component or facility.
- Vehicle Accident: Any Project-related vehicle accident that may occur on a road transportation network, including vehicle accidents involving wildlife.
- Damage: damage could occur to existing pipelines and/or facilities nearby during construction.

During decommissioning, TEMPL will implement the mitigation measures outlined in the Corporate Environmental Guidelines for Construction (Revision 0.2, 2016) and associated contingency and management plans, including an Emergency Response Plan, Spill Response Plan, and the Operations and Maintenance Manual. These plans will reduce the likelihood and consequences of unplanned events and serve to protect the general public, the environment, company personnel and property, and workers. The plans are prepared in consultation with appropriate regulatory agencies, municipalities and communities to allow effective and timely response to any potential emergencies.

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CLOSING

Pursuant to Guide A, Section A.2 of the NEB's Filing Manual (NEB 2016-02), all environmental and socio-economic elements were considered during preparation of the section 45.1 Application. All potentially affected industry third parties were notified by Westpur. To date, no concerns have been raised.

Decommissioning activities will cause minor short-term increases in human activity levels at the site, but are not expected to add materially to sensory disturbance already associated with site operations (e.g., operation of the existing heavy truck terminal). No surface disturbance is proposed and no activities will occur outside the existing terminal site. As well, all construction equipment will access the site via an existing all-weather access road.

No adverse residual environmental or socio-economic effects are anticipated as a result of the proposed decommissioning activities associated with the Project. Measures outlined in TEMPL's Corporate Environmental Guidelines for Construction (Revision 0.2, 2016), Emergency Response Plan, Spill Response Plan, and Operations and Maintenance Manual will reduce the likelihood and consequence of any unplanned events.

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Attachment: Interactions Table

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REFERENCES

National Energy Board (NEB). 2016. National Energy Board Filing Manual, 2016-02. Available at: <http://www.neb-one.gc.ca/clf-nsi/rpblctn/ctsndrgltn/flngmnl/flngmnl-eng.html>.

Saskatchewan Conservation Data Centre (SKCDC). 2016a. Prairie Ecozone. Available online at: http://www.biodiversity.sk.ca/ecoregions/Aspen_Parkland.htm. Accessed on October 19, 2016.

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Saskatchewan Ministry of Parks, Culture and Sport (SMPCS). 2012. Developers' Online Screening Tool <http://www.pcs.gov.sk.ca/SensitiveLocations>. Accessed October 19, 2016.

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Stewart and Kantrud (1971). Classification of natural ponds and lakes in the glaciated prairie region. Resource Publication 92, Bureau of Sport Fisheries and Wildlife, U.S. Fish and Wildlife Service, Washington, D.C. Jamestown, ND: Northern Prairie Wildlife Research Center Online. <http://www.npwrc.usgs.gov/resource/wetlands/pondlake/index.htm> (Version 16APR1998).

INTERACTIONS TABLE									
Element	Interaction (Y/N)	Description of Interaction(s) (If no interaction is predicted, provide justification)	Status of Element-Specific Study or Survey (Complete, Underway, Date Expected, or N/A)	Description of Potential Effects	Mitigation Will Be Implemented to Resolve Potential Adverse Effect (Y/N)	Specify the Mitigation	Description of Residual Effects after Mitigation	Description of the Cumulative Effects	Monitoring Plan/Details
Physical and Meteorological Environment	N	The Project is not in an area of unstable terrain, erosion-prone land, or permafrost. The Project will not affect the meteorological environment.	N/A	None	N	N/A	None	None	N/A
Soil and Soil Productivity	N	Project activities will be completed on an existing graveled site, with previously-disturbed soils with no planned ground disturbance. The Project is not predicted to interact with soil and soil productivity.	N/A	None	N	N/A	None	None	N/A
Vegetation	N	Project activities will be completed on an existing graveled site, with no vegetation ¹ . Any weed occurrences are managed under the facility's existing Operating and Maintenance Procedures. The Project is not predicted to interact with vegetation.	N/A	None	N	N/A	None	None	N/A
Water Quality and Quantity	N	There are no watercourses within 30 m of the Project. There are no documented water wells ² within 200 m of the Project. Water withdrawals are not required for the Project activities. The Project is not predicted to interact with water quality and quantity.	N/A	None	N	N/A	None	None	N/A
Fish and Fish Habitat	N	There are no fish bearing watercourses within 30 m of the Project. Water withdrawals are not required for Project activities. The Project is not predicted to interact with fish and fish habitat.	N/A	None	N	N/A	None	None	N/A
Wetlands	N	Project activities will be contained entirely on the existing terminal site. The area within the terminal site where activities will be undertaken is approximately 10 m from the nearest wetland ¹ . Standard erosion and sediment control measures outlined in TEML's Environmental Guidelines for Construction will be implemented, where warranted. As a result, the Project is not predicted to interact with wetlands.	N/A	None	N	N/A	None	None	N/A

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Wildlife and Wildlife Habitat	N	Project activities will take place within the existing fenced terminal site, which has already been disturbed and is actively used. The site has negligible value for potential wildlife habitat'. Equipment traffic will be minimal (1 tractor trailer and 1 picker truck, approximately six week's duration). Access to the site will be gained via an existing all-weather access road. All other existing operations will continue at the site, which includes a heavy truck terminal. The Project is not predicted to interact with wildlife and wildlife habitat.	N/A	None	N	N/A	None	None	N/A
Species at Risk, or Species of Special Status, and related habitat	N	Project activities are not predicted to interact with species at risk. See the vegetation and wildlife and wildlife habitat elements for further information.	N/A	None	N	N/A	None	None	N/A
Air Emissions and Greenhouse Gas (GHG) Emissions	Y	Project activities are not expected to change atmospheric conditions at the existing terminal site. Emissions of criteria air contaminants and GHGs from equipment are anticipated but will be temporary (2 vehicles for approximately six weeks), transient and negligible in magnitude. There are limited predicted interactions with air and greenhouse gas emissions.	N/A	None	N	N/A	None	None	N/A
Acoustic Environment	N	Overall noise generated at the Project site will not be changed due to the Project activities. Noise generated by equipment and vehicles during Project activities is anticipated, but will be temporary (2 vehicles for approximately six weeks) and negligible in magnitude.	N/A	None	N	N/A	None	None	N/A
Human Occupancy and Resource Use	N	Project activities will occur within the fence line of an existing terminal. The land is already held by TEML. Disturbance to other land users during Project activities is not anticipated. The Project is not predicted to interact with human occupancy and resource use.	N/A	None	N	N/A	None	None	N/A

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Heritage Resources	N	Project activities will occur within the fence line of an existing terminal site, which has been previously disturbed. The Project is not predicted to interact with heritage resources.	N/A	None	N	N/A	None	None	N/A
Navigation and Navigation Safety	N	Project activities will not be undertaken in or near navigable waterways.	N/A	None	N	N/A	None	None	N/A
Aboriginal Traditional Land and Resource Use	N	Project activities will occur within the fence line of an existing terminal site. The land is already held by TEML and is used for industrial purposes. Disturbance to other land users during construction is not anticipated. The Project is not predicted to interact with traditional land and resource use.	N/A	None	N	N/A	None	None	N/A
Socio and Cultural Well-Being	N	The Project has a limited scope, small workforce, and short duration (approximately six weeks). The Project is not predicted to interact with social and cultural well-being.	N/A	None	N	N/A	None	None	N/A
Human Health or Aesthetics	N	Project activities will occur on an existing terminal site, which has been previously disturbed. Interactions with air quality, noise and water quality and quantity are not predicted. As a result, the Project is not predicted to interact with human health and aesthetics.	N/A	None	N	N/A	None	None	N/A
Infrastructure and Services	N	The Project has a limited in scope, small work force (approximately 12 workers) and short duration of approximately six weeks. No new access roads or construction camps are required for this Project. The Project is not predicted to interact with infrastructure and services.	N/A	None	N	N/A	None	None	N/A
Employment and Economy	N	The Project has a limited scope, relatively small workforce (approximately 12 workers), and short duration (approximately six weeks). There are limited predicted interactions with employment and economy.	N/A	None	N	N/A	None	None	N/A

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Accidents and Malfunctions	Y	There is the potential for unanticipated spill, rupture or hazardous materials release, fire, vehicle accident, and damage to existing infrastructure.	N/A	<p>A spill, rupture or hazardous materials release could occur during Project activities due to improper handling, use or storage.</p> <p>Fire could occur during Project activities due to explosion, lightning or other natural event.</p> <p>A vehicle accident could occur during Project activities during movement of vehicles to and from the Project site or on-site.</p> <p>Damage to existing pipelines and/or facilities near the Project site could occur during Project activities.</p>	Y	<p>Spills, Ruptures and Hazardous Materials Release</p> <ul style="list-style-type: none">• Conduct regular maintenance as outlined in the Operations and Maintenance Manual• Guidelines for Spill Prevention and Management are outlined in TEML's Environmental Guidelines for Construction document.• Guidelines for the safe handling, storage, use and disposal of potentially hazardous materials are provided in the Waste Storage and Waste Transportation Sections of TEML's Operations and Maintenance Policy.• Maintain appropriate spill equipment at all worksites. Assess the risk potential for site-specific spills to determine the appropriate type of response equipment to be stored onsite and suitable location for storage.• Following a leak, rupture or hazardous materials release, implement the Emergency Response Plan and the Spill Response Plan.• Report spills immediately to the TEML Construction Manager or designate and the Environmental Inspector. <p>Fire</p> <ul style="list-style-type: none">• Guidelines for fire prevention and control are outlined in TEML's Environmental Guidelines for Construction document.• Follow the measures identified within the project-specific Environmental Protection Plan and/or Emergency Response Plan, if prepared, in the event of an accidental fire.• All activity project personnel and Contractors' vehicles will be equipped with firefighting equipment in accordance with applicable regulations.	None	None	Monitoring /Inspection will occur during Project activities.

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						<ul style="list-style-type: none">• Ensure all motorized equipment carries a fully charged fire extinguisher with inspection documentation.• Ensure that exhaust and engine systems of equipment are in good working condition and inspect undercarriages periodically to ensure that grasses do not accumulate.• Do not leave vehicles idling for extended periods of time when the fire hazard is high.• Ensure that personnel are made aware of proper disposal methods for welding rods, cigarette butts and other hot or burning material. Vehicle Accident <ul style="list-style-type: none">• Utilize multi-passenger vehicles for the transport of construction crews to/from the facility, where practical, to minimize air emissions and potential for wildlife mortality.• Confine construction equipment and vehicles to the designated construction footprint, temporary work space, existing public roads and approved temporary access roads to reduce potential environmental impacts.• Adhere to posted speed limits on access roads to reduce the risk of collisions with wildlife. Damage to Existing Pipelines and/or Facilities <ul style="list-style-type: none">• Prior to beginning activities, survey the site and flag nearby above and below ground utilities.			

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Effects of the Environment on the Project	N	Project activities are not predicted to be affected by the environment due to the location of the Project on an existing site and short duration of activities (approximately six weeks).	N/A	None	N	N/A	None	None	N/A
<p>NOTE:</p> <p>TEML confirms that all environmental mitigation noted in the above table is included in TEML's Corporate Environmental Guidelines for Construction, the Emergency Response Plan, Spill Response Plan, and the Operations and Maintenance Manual standards for the Project.</p> <p>REFERENCES:</p> <p>¹ Saskatchewan Ministry of Parks, Culture and Sport (SMPCS). 2012. Developers' Online Screening Tool http://www.pcs.gov.sk.ca/SensitiveLocations. Accessed October 19, 2016.</p> <p>² Saskatchewan Water Security Agency (WSA). 2016. Water wells information database. Available online at: https://gis.wsask.ca/html5A/Index.html. Accessed October 19, 2016.</p>									