

STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION

Targa Badlands LLC
8-Inch Crude Pipeline Project – McKenzie County
Siting Application

Case No. PU-16-695

Late-Filed Exhibit 3
Worst Case Discharge Information

As part of a Facility Response Plan prepared by Targa Badlands LLC (“Targa”) for submission to the Department of Transportation, Targa reviewed worst case discharge scenarios for Targa’s North Dakota systems. According to 49 CFR 194.105, the Worst Case Discharge (“WCD”) is defined as the largest volume, in barrels (cubic meters), of the following:

- (1) The pipeline’s maximum release time in hours, plus the maximum shutdown response time in hours (based on historic discharge data or in the absence of such historic data, the operator’s best estimate), multiplied by the maximum flow rate expressed in barrels per hour (based on the maximum daily capacity of the pipeline), plus the largest line drainage volume after shutdown of the line section(s) in the response zone expressed in barrels (cubic meters); or
- (2) The largest foreseeable discharge for the line section(s) within a response zone, expressed in barrels (cubic meters), based on the maximum historic discharge, if one exists, adjusted for any subsequent corrective or preventive action taken; or
- (3) If the response zone contains one or more breakout tanks, the capacity of the single largest tank or battery of tanks within a single secondary containment system, adjusted for the capacity or size of the secondary containment system, expressed in barrels (cubic meters).
- (4) Operators may claim prevention credits for breakout tank secondary containment and other specific spill prevention measures as follows:

PREVENTION MEASURE (PERCENT)	STANDARD	CREDIT
Secondary containment > 100%	NFPA 30	50
Built/repaired to API standards	API STD 620/650/653	10
Overfill protection standards	API RP 2350	5
Testing/cathodic protection	API STD 650/651/653	5

Tertiary containment/drainage/treatment	NFPA 30	5
Maximum allowable credit		75

Three tanks operated by Targa are associated with the Johnsons Corner to Alexander Pipeline (“Project”). As defined in 49 CFR 194, each tank was considered when determining the worst case discharge for the Targa facilities. Credit was taken for containment exceeding 100% of the tank, tanks being built to API standards, tanks having an overfill protection system according to the applicable standard, tanks having cathodic protection and the tertiary containment or drainage treatment. As shown in the below tables, these tanks have a worst case discharge greater than that determined for the pipelines.

Table 1: Worst Case Discharge - Tanks

Tank	Volume	Secondary Containment > 100% (50% Credit)	Built / repaired to API Standard (10% Credit)	Overfill Protection Standards (5% Credit)	Testing / CP Protection (5% Credit)	Tertiary Containment / Drainage Treatment (5% Credit)	WCD
Alexander	30,000	15,000	3,000	1,500	1,500	0	9,000
Johnsons Corner (2 tanks – values for each tank)	20,000	10,000	2,000	1,000	1,000	0	6,000

Table 2: Targa Pipeline Worst Case Discharge Results

LATERAL NAME	CURRENT WORST CASE DISCHARGE (IN BBLs)
Alexander Trunk*	4,950
Smokey Lateral Crude*	3,273

* The Alexander Trunk and Smokey Lateral Crude pipelines together comprise the pipeline associated with the Project that Targa is requesting be converted from a gathering line to a transmission line.