EPA United States Environmental Protection Agency

Region 6 Compliance Assurance and Enforcement Division

INSPECTION REPORT

Inspection Date(s):	05/01/2018 – 05/03/2018		
Media:	Air		
Regulatory Program(s)	Clean Air Act Section 112(r) and 40 C.F.R. Part 68 Chemical Accident Prevention Provisions		
Company Name:	**Targa Midstream Services LP Parent Company: Targa Resources Inc.**		
Facility Name:	**Mont Belvieu Fractionator and Terminal**		
Facility Physical Location:	10319 Highway 146 North		
(city, state, zip code)	Mont Belvieu, Texas 77580		
Mailing address:	(same as above)		
(city, state, zip code)	(same as above)		
County/Parish:	Chambers		
Facility Contact:	Bryan Crismon	Director of Operations	
	bcrismon@targaresources.com		
FRS Number:	110054864036		
Identification/Permit Number:	Air Title V Permit No: O-00612		
Media Number:	RMP EPA Facility Identifier: 100000062969		
NAICS:	211112 = Natural Gas Liquid Extraction		
Personnel participating in inspection:			
Tony Robledo	US EPA/6EN-AS	Inspector	(214) 665-8182
Bryan Crismon	Targa Midstream Services LLC	Director of Operations	(281) 385-3122
EPA Lead Inspector Signature/Date	Tony Robledo		5/22/18 Date
Supervisor Signature/Date	Samuel Tates		5/22/2018 Date

Section I - INTRODUCTION

PURPOSE OF THE INSPECTION

United States Environmental Protection Agency (EPA) Region 6 inspector Tony Robledo arrived at the Targa Midstream Services LP (Targa), Mont Belvieu Fractionator and Terminal, at approximately 9:00 a.m. on May 1, 2018, for an announced inspection. I conducted an opening meeting with the following persons in attendance as identified in Table 1.

Table 1: Opening Meeting Attendance

Name	Position
Bryan Crismon	Director of Operations
Rick Brummett	Maintenance Inspector
Ken McGraw	Maintenance Supervisor
Jenen Barillas	Environmental Specialist
Brandon Thornhill	Safety Supervisor
Brittany Roca	Senior Environmental Specialist
Jarrod Gregg	ESH Manager Gulf Coast
Stephen Bland	Maintenance Manager
Mike Taylor	Operations Manager
Tony Robledo	Inspector & Enforcement Officer EPA Region 6

I presented my credentials to all attendees at the opening meeting, and informed them that this EPA inspection was to determine compliance with Clean Air Act Sections 112(r)(1) and 112(r)(7). The scope of the inspection was a partial compliance evaluation (PCE) and included evaluation of the compliance with 40 C.F.R. Part 68 – Chemical Accident Prevention Provisions.

FACILITY DESCRIPTION

The Mont Belvieu Complex is a facility which receives refinery products and raw natural gas liquids from pipelines, railcars, and trucks and fractionates it into ethane, propane, butanes, pentanes and other liquefied petroleum gas mixtures. The liquids are stored onsite in underground storage caverns and above ground storage tanks and then delivered to market via pipeline, railcars, and transport vehicles. There are no listed toxic substances which exceed their respective threshold quantities stored at this facility. The facility has 250 full-time employees.

Section II – OBSERVATIONS

I conducted a walk-through of the facility on May 2, 2018, accompanied by Targa personnel to observe the facility process, equipment, storage tanks, and operation. I observed no spills, leaks, or air emissions with the FLIR® Series GF320 infrared camera. The facility grounds appeared to be well maintained. I did observe the construction of a new fractionation unit called Train 6 which is expected to be completed early next year.

40 C.F.R. Part 68 – CHEMICAL ACCIDENT PREVENTION PROVISIONS

Subpart A – General

40 C.F.R. § 68.10 Applicability – Targa is an owner and operator of a stationary source that has more than a threshold quantity of regulated flammable substances, listed in 40 C.F.R. § 68.130, in a process, and as such is subject to these Chemical Accident Prevention Provisions. Targa listed the NAICS code (211112) natural gas liquid extraction, as the process in its Risk Management Plan (RMP). The Targa facility process is also subject to the Occupational Safety and Health Administration (OSHA) process safety management standard, 29 C.F.R. § 1910.119. These factors make the process at the Targa facility a Program 3 subject to 40 C.F.R. § 68.10(d).

40 C.F.R. § 68.12 General Requirements – Targa re-submitted a RMP five-year update on June 20, 2014. This submittal lists a covered process for Program 3. This requires the facility to develop and implement a management system, conduct a hazard assessment, implement the prevention requirements of 40 C.F.R. § 68.65 - § 68.87, develop and implement an emergency response program, and submit the data elements from 40 C.F.R. § 68.175 in their RMP.

40 C.F.R. § 68.15 Management – Targa has an established management system to oversee the implementation of the risk management program elements, and has assigned a qualified person or position that has the overall responsibility for the development, implementation, and integration of the risk management program elements. Targa facility personnel provided an organization chart which documents the persons responsible for implementing individual requirements of the RMP as required by this subpart.

Subpart B – Hazard Assessment

40 C.F.R. § 68.20 Applicability – Targa is an owner or operator of a stationary source subject to this subpart with a Program 3 process that must prepare an offsite consequence analysis as provided in § 68.25 of this subpart, complete the five-year accident history as provided in § 68.42, and comply with all sections in this subpart for this process.

40 C.F.R. § 68.22 Offsite Consequence Analysis Parameters – I requested documentation of the offsite consequences analysis. I reviewed the documentation provided and had a discussion with appropriate Targa facility personnel. Targa applied the offsite consequence analysis parameters as required by this subpart.

40 C.F.R. § 68.25 Worst-Case Release Scenario Analysis – Targa identified and reported a worst-case release scenario analysis for the RMP covered flammable substances. I requested documentation of the worst-case release scenario analysis. I reviewed the documentation provided and had a discussion with appropriate Targa facility personnel. Targa selected butane well number 25 for the worst-case release scenario. Targa used EPA's RMP Offsite Consequence Analysis Guidance to determine the distance to the endpoint in the worst-case release scenario. Targa used the proper endpoints for flammables as required by this subpart.

40 C.F.R. § 68.28 Alternative Release Scenario Analysis – Targa identified and reported an alternative release scenario for the RMP covered flammable substances. I requested documentation of the alternative release scenario analysis. I reviewed the documentation provided and had a discussion with appropriate Targa facility personnel. Targa selected its propane loading terminal as its alternative

release scenario. Targa used EPA's RMP* Comp to calculate the distance to the endpoint in the flammables alternative release scenario. Targa used the proper endpoints for flammables as required by this subpart. No mitigation systems were considered by the facility. The five-year accident history in 40 C.F.R. § 68.42, and the failure scenarios identified in 40 C.F.R. § 68.50 were considered in selecting the alternate release scenario.

40 C.F.R. § 68.30 Defining Offsite Impacts – Population – The documentation I reviewed contained a map with the circles delineating the areas covered by the offsite impact. Population numbers were verified with appropriate mapping software. Targa reported these numbers to two significant figures.

40 C.F.R. § 68.33 Defining Offsite Impacts – Environment – The maps I reviewed identified the potential offsite impacts and any identified public receptors.

40 C.F.R. § 68.36 Review and Update – Targa reviewed and updated its RMP on June 20, 2014. This RMP submittal identified process chemicals of ethane, propane, isobutene, ethylene, butane, propylene, isopentane, pentane, ethyl mercaptan, and flammable mixtures. Targa reported no changes, to include any increases or decreases, of its process chemicals.

40 C.F.R. § 68.39 Documentation – I reviewed documentation for the worst-case scenarios that contained a description of the vessel or pipeline and substance selected as worst case, assumptions and parameters used, and the rationale for selection. The documentation also included the anticipated effect of the controls and mitigation on the release quantity and rate. Targa's documentation of the alternative release scenarios included a description of the scenario identified, assumptions and parameters used, and the rationale for the selection of the specific scenario. The documentation of estimated quantity released, release rate, duration of release, methodology used to determine distance to endpoints, and data used to estimate population and environmental receptors potentially affected was included in the reviewed materials during this inspection.

40 C.F.R. § 68.42 Five Year Accident History – Targa reported no accidents for the five-year accident history in its RMP re-submittal, and no accidents were reported up to the date of this inspection.

Subpart D – Program 3 Prevention Program

40 C.F.R. § 68.65 Process Safety Information – Targa indicated that process safety information is managed using an electronic online system. I reviewed process safety information for all six units which included the Cedar Bayou Fractionation (CBF), CBF 4, CBF5, Low Ethane Propane (LEP) 1, LEP 2, and the Terminal. I also reviewed facility material safety data sheets, safety data sheets, block flow diagrams, process flow diagrams, and piping and instrumentation diagrams.

40 C.F.R. § 68.67 Process Hazard Analysis – I reviewed Targa's Process Hazard Analysis (PHA) process and procedures for all six units. Targa used the hazard and operability study (HAZOP) analysis technique to conduct its PHAs. Targa reported its initial PHA for all its processes and conducted an updated and revalidated PHA for each process over a different five-year cycle. The PHA recommendations for CBF 4 conducted in June 2017 stated, "Ensure that all recommendations from previous PHA have been resolved. Specifically, items 53, 56, and 101 have not been resolved." The previous PHA for CBF 4 conducted in June 2012, had recommendations that were not resolved in a timely manner, and carried over into the June 2017 PHA. The three PHA June 2012 recommendations were completed on September 25, 2017. I reviewed documentation for the other PHA's that indicated that all findings and recommendations had been closed and addressed in a timely manner.

40 C.F.R. § 68.69 Operating Procedures – Targa uses a paper and electronic document management system to maintain its operating procedures. I reviewed and discussed with Targa personnel randomly selected operating procedures from all six units, and lockout/tagout. I observed that Targa certified annually that the operating procedures were current, accurate, and that the procedures had been reviewed as often as necessary. Targa provided documentation that its operating procedures were certified annually, current, accurate, and that procedures had been reviewed as often as necessary as required by this subpart. I observed that Targa operating procedures did not use the term "consequences of deviations," as stated in this subpart, but instead used the term "Evidence of Good Operations." Targa facility personnel stated that this will be corrected prior to the next annual operating procedures certifications. I did recommend to Targa personnel that it should use, for its annual operating procedures certifications the "Operating Procedure Certification Form" as noted in its Environmental Health and Safety Process Safety Management Manual dated January 1, 2012 (revised).

40 C.F.R. § 68.71 Training – I discussed with Targa personnel their training program to include training for new employees and how they insure that the three-year refresher training requirements are met. I requested and received the training records for three full-time employee operators who work at the facility. Some training records did not include the year the training was completed just the month and day. Targa personnel were able to identify the year the training was completed and made an on-the-spot correction to add the year the training was completed. Targa personnel were to review all operator training records to ensure that the day, month, and year was annotated for all training completion dates.

40 C.F.R. § 68.73 Mechanical Integrity – I requested and was provided a procedure used to maintain the ongoing integrity of process equipment. Targa indicated that the mechanical integrity of its process equipment is managed using a hardcopy spreadsheet and an electronic system. I discussed mechanical integrity with Targa personnel.

Targa personnel claimed to maintain the on-going mechanical integrity of process equipment by following recognized and generally accepted good engineering practices to include the American Petroleum Institute (API) standards. Targa specifically used *API 510, Pressure Vessel Inspection Code: In-service Inspection, Rating, Repair, and Alteration,* 10th Edition, May 2014. Targa used this standard to determine the frequency of inspections and testing requirements for its vessel storage tanks with an external surface visual inspection (EVT) to be conducted every five years, and an ultrasonic thickness measurement (UTT) to be conducted every ten years. I requested and was provided vessel inspections performed on the following process equipment: number four boiler (vessel identification number BW-22418), T-10 Tower (vessel identification number 140283-01), and T-8 reboiler A (vessel identification number J-190-1). I requested and was provided recent inspections and testing documents performed on these pressure vessels to include the date of the inspection or test, the name of the person who performed the inspection or test, the identification number of the pressure vessel on which the inspection or test was performed, a description of the inspection or test performed, and the results of the inspection or test.

40 C.F.R. § 68.75 Management of Change (MOC) – I reviewed Targa's written procedure for MOC and discussed the MOC process with Targa personnel to include one supervisor. I reviewed two specific MOC documents numbered 2018-18, and 2018-25. I also reviewed P&ID diagrams associated with the completed MOC's.

40 C.F.R. § 68.77 Pre-startup Review – I reviewed Targa's written Pre-Startup Safety Review (PSSR) procedures. The standard operating procedures for PSSR were final documents.

40 C.F.R. § 68.79 Compliance Audits – I was provided and reviewed one certified RMP compliance audit signed and dated in April 2015. Targa personnel informed me that it had just completed its most recent RMP compliance audit last month, and will provide EPA a copy to review once it's finalized in May 2018. The 2015 compliance audit evaluated compliance with the provisions of this subpart, and was conducted by at least one person knowledgeable in the process. A report of the findings of the audit was developed. The audit report consisted of actual completion dates to identify that recommendations had been completed.

40 C.F.R. § 68.81 Incident Investigation – I reviewed Targa's completed OSHA form 300 of work related Injuries and illness for the past five years, and determined that none of the injuries reported were the result of an accidental release. Targa reported no incidents within the past five years from any accidental releases.

40 C.F.R. § 68.83 Employee Participation – I reviewed a written plan of action regarding the implementation of employee participation. This plan was to insure consultation with employees on the conduct and development of process hazards analyses; the development of the other elements of process safety management; to provide the employees with access to process hazard analyses; and to provide all other information required to be developed under this rule. I discussed this document and employee participation with Targa personnel. I also interviewed one full-time operator.

40 C.F.R. § 68.85 Hot Work Permit – I reviewed hot work permits that had been issued by Targa prior to this inspection. The permits met the requirements of this subpart.

40 C.F.R. § 68.87 Contractors – I discussed with Targa personnel the contractor selection process. This discussion included taking into account the contractor's safety performance, safety programs, training, and qualifications. Targa personnel stated that they use an outside contractor, ISNetworld® to assist in its contractor evaluation process and that contractors it selects must have a high rating. Targa documents that contractors have site-specific safety training.

Subpart E – Emergency Response

40 C.F.R. § 68.90 Applicability – Targa is designated as a "first responder" in case of an accidental release of a regulated substance, and its employees can respond to releases and fires.

40 C.F.R. § 68.95 Emergency Response Program – I was provided, reviewed, and discussed with Targa personnel their emergency response plan. Targa reported that it has coordinated response actions with the local fire department, and appropriate mechanisms are in place to notify emergency responders when there is a need for a response. I was provided and did review third-party inspections conducted on a variety of emergency response equipment. I did observe that Targa's emergency response plan did not contain procedures for the use of emergency response equipment and for its inspection, testing, and maintenance as required by this subpart.

Subpart G—Risk Management Plan

40 C.F.R. § 68.190 Updates – Targa submitted its most recent plan as a five-year update on June 20, 2014. A new five-year update will be due on or before June 13, 2019, or sooner if an update is required by 40 C.F.R. § 68.190 (b)(2) through (b)(7). Updates are required no later than three years after a newly regulated substance is first listed by EPA; no later than the date on which a new regulated substance is first present in an already covered process above a threshold quantity; no later than the date on which a regulated substance is first present above a threshold quantity in a new process; within six months of a

change that requires a revised PHA or hazard review; within six months of a change that requires a revised offsite consequence analysis as provided in § 68.36; and within six months of a change that alters the Program level that applied to any covered process.

40 C.F.R. § 68.195 Required Corrections – Targa will have to submit corrections of their RMP, if there is new accident history information, for any accidental release meeting the five-year accident history reporting criteria of § 68.42 and within six months of the release, or by the time the RMP is updated under § 68.190, whichever is earliest. Also, if the emergency contact information changes a submission to correct that information has to be submitted within one month.

Close Out Meeting – A close out meeting was held on May 3, 2018, at 11:00 a.m. to discuss areas of concern, recommendations, and the timing of the completion of the inspection report. The following persons attended as identified in Table 2.

Table 2: Close Out Meeting Attendance

Name	Position
Bryan Crismon	Director of Operations
Ken McGraw	Maintenance Supervisor
Brandon Thornhill	Safety Supervisor
Brittany Roca	Senior Environmental Specialist
Jarrod Gregg	ESH Manager Gulf Coast
Stephen Bland	Maintenance Manager
Mike Taylor	Operations Manager
Tony Robledo	Inspector & Enforcement Officer EPA Region 6

The areas of concern in the following section were discussed during the close out meeting which included compliance assistance and the potential enforcement process.

Section III – AREAS OF CONCERN

1. 40 C.F.R. § 68.67(e) Process hazard analysis

> *"(e) The owner or operator shall establish a system to promptly address the team's findings and recommendations; assure that the recommendations are resolved in a timely manner and that the resolution is documented; document what actions are to be taken; complete actions as soon as possible; develop a written schedule of when these actions are to be completed; communicate the actions to operating, maintenance and other employees whose work assignments are in the process and who may be affected by the recommendations or actions."*

Targa personnel were unable to promptly address three of the team's findings and recommendation in a timely manner from the June 2012 CBF 4 PHA.

2. 40 C.F.R. § 68.95(a)(2) Emergency response

> *"(a) The owner or operator shall develop and implement an emergency response program for the purpose of protecting public health and the environment. Such program shall include the following elements:*

(2) Procedures for the use of emergency response equipment and for its inspection, testing, and maintenance;"

Targa personnel were unable to provide within its emergency response plan the procedures for the use of emergency response equipment and for its inspection, testing, and maintenance

Section IV – FOLLOW UP

Targa agreed to provide a copy of its most recent compliance audit which was conducted in April 2018 and not finalized at the time of the inspection. Targa also agreed to provide a copy of its update emergency response plan which will include procedures for the use of emergency equipment and for its inspection, testing, and maintenance.

Section V – LIST OF APPENDICES

Appendix 1 – Sign in sheet from opening and closing meeting.

Meeting with Targa Midstream Services LP Date: 5/1/2018

Purpose of meeting: MONT Belvieu Fractionator and Terminal RMP Inspection

		Name	Title	Representing	e-Mail	Phone
✓	1	Tony Robledo	INSPECTOR	U.S. EPA	robledo.tony@epa.gov	214-665-6182
	2	Rick Brummett	Maint. Inspector	Targa	rbrummett@targaresources.com	
✓	3	Ken McLean	MAINT Supervisor	TARGA	KMcLean@TARGA Resources	281 385 3168
✓	4	Bryan Crismon	Director of Operations	TARGA	bcrismon@targaresources.com	281 385 3103
	5	Jenen Barillas	Environmental Specialist	Targa	jbarillas@targaresources.com	281-385-3146
✓	6	Brandon Thornhill	Safety Supervisor	Targa	BThornhill@Targaresources.com	281-385-3164
✓	7	Brittany Roca	Sr. Env. Specialist	Targa	bnroca@targaresources.com	281-385-3165
✓	8	Jarrod Gregg	ES+H Mgr. Gulf Coast	TARGA	Jgregg@targaresources.com	281-385-3228
✓	9	Stephen Bland	Maint Manager	Targa	sbland@targaresources.com	281-808-1588
✓	10	Mike Taylor	OPS Manager	Targa	Mtaylor@targaresources.com	281-385-3216
	11					
	12					
	13					
	14	✓= attended CLOSE-OUT Meeting				
	15	on 5/3/18				
	16	Ken McLean	TMS Supervisor	TARGA		
	17	Mike Taylor	Ops Manager	Targa		
	18	Stephen Bland	Maint Manager	Targa		
	19	Brandon Thornhill	Safety Supervisor	Targa		
	20	Bryan Crismon	Director of Operations	TARGA		
	21	Brittany Roca	Env Specialist	Targa		
	22	Jarrod Gregg	ES+H Mgr. Gulf Coast	TARGA		
	23	Tony Robledo	Inspector	U.S. EPA		
	24					
	25					