Acronyms (add to list as needed for your project)

Targa	Targa Terminals
VOC	volatile organic compounds
02	Oxygen
bbls	barrel
lb	pound
hr	hour
MMBtu	million British thermal units
bbls/day	barrels per day
bbls/yr	barrels per year
tpy	tons per year
psia	pounds per square inch absolute
mg/L	milligram per liter
gpm	gallons per minute
scf/yr	standard cubic feet per year
ppmw	parts per million by weight
ppbw	parts per billion by weight

lb/MMBtu	pounds per million British thermal units
MMBtu/hr	million British thermal units per hour
EPN	emission point number
MSS	maintenance, startup and shutdown
LAER	Lowest Achievable Emission Rate
AVO	audio, visual and olfactory
DRE	destruction efficiency
LEL	lower explosive limit
LPG	Liquefied petroleum gas
AGO	Atmospheric gas oil
MLSS	mixed liquor total suspended solids
VCU	vapor combustor unit
IFR	internal floating roof
VFR	vertical fixed roof
HFR	horizontal fixed roof

Facility Information

Targa Terminals LLC		
Channelview Terminal		
Targa operates the Channelview Terminal in Harris County, Texas. The site is able to refine up to 38,000 bbls/day of condensate. The condensate is received via pipe, truck and/or barge. The condensate is refined into LPG, light and heavy naphtha, kerosene, diesel and residual fuel oil; the products are transferred from the site via pipe, truck and/or barge. The site uses a series of separation towers, collectively known as a condensate splitter. The separation towers are heated via three crude process heaters and one hot oil heater. The hot oil heater is also a control facility that is able to handle off-gas as refinery fuel. Emissions vapors from daily operations and MSS activities are controlled either by a VCU or the site's flare. A retrospective review was conducted on the initial authorization of the Channelview Terminal and determined that the project changes to the site exceed severe nonattainment thresholds for VOC as ozone (25 tpy). Please see below for the control methods for VOC emitting facilities.		
Harris		
Mr Vincent J Dicosimo, (713) 584-1235		
Ms. Miranda Duncan, (512) 239-3402, Miranda.Duncan@tceq.texas.gov		
124662 and N262		
Not Yet Available		
Modify Existing Process at Existing Facility		
02/28/2018		
04/02/2018		
4226		
493190		
Not found		
Caney Creek, AR		
Greater than 250 km		
th this action		

Source of emis	ssions	Flare - Refinery	lare - Refinery					
Process code for listed above	or emission source	19.330	9 330					
	red (if applicable)	Natural Gas						
Throughput wi blank if confide	th units (leave	10,410,099 scf/yr						
Source n	otes (optional)	Authorized for the control of normal operations and MSS produced waste gas.						
-Can select -List all appli and subpart	cable subchapters	 NSPS: Subpart A, Gen NESHAP N/A MACT N/A Ch. 115 or 117 N/A 	eral Provisions and Subpart Ja, Petroleum Refineries					
Pollutant	Test Method Blank = unspecified	Control Method (select more than one as needed)	Control Method Description	Other factors considered (health effects, etc.) Blank = none	Numeric Limit with units (required)			
VOC	40 CFR §60.18	*Pollution Prevention *Add On Control *No control	The flare designed to meet 40 CFR §60.18 with a VOC DRE of 98% for compounds with four carbons and more, and 99% for compounds with three or less. The flare has installed a continuous flow monitor and composition analyzer. Operation conditions and flaring of off-gas shall be re-evaluated every two-years.		Pilot Gas – 0.01 tpy for VOC Normal Operations – 4.00 tpy for VOC Planned MSS – 3.08 tpy for VOC			

Source of emis	ssions	Hot Oil Heater	lot Oil Heater					
Process code for listed above	or emission source	19.800	19.800					
	red (if applicable)	Natural Gas/Refinery Fu	el					
	ith units (leave	N/A						
Source n	otes (optional)	Hot oil heater	provides supplemental heat to the condensate splitter. T	he hot oil heater is able to com	bust natural gas or refinery fuel.			
-Can select -List all appl and subpart	icable subchapters	 NSPS: Subpart A, Gen NESHAP N/A MACT N/A Ch. 115 or 117 N/A 	eral Provisions, Subpart Dc, Small Industrial Steam Generati	ng Units and Subpart Ja, Petroleu	m Refineries			
Pollutant	Test Method Blank = unspecified	Control Method (select more than one as needed)	Control Method Description	Other factors considered (health effects, etc.) Blank = none	Numeric Limit with units (required)			
VOC	Stack testing required within 60 days of achieving the maximum operation rate.	*Pollution Prevention *Add On Control *No control	The heater has a maximum heating capacity of less than 100 MMBtu. Good combustion practices will be used to reduce VOC including maintain proper air-to-fuel ratio, necessary residence time, temperature and turbulent. Fuel usage is monitored continuously.		0.002 lb/MMBtu for VOC			

Source of emi		Crude Process Heaters	Crude Process Heaters					
Process code f	or emission source	19.330						
	red (if applicable)	Natural Gas only						
	ith units (leave	N/A						
Source r	notes (optional)	Crud	e Process heaters (EPNs: H-1, H-2 and H-3) provide hom	ogeneous heat to the pre-flash	, LPG and crude towers.			
-Can select -List all appl and subpar	licable subchapters	* NSPS: Subpart A, Ger * NESHAP N/A * MACT N/A * Ch. 115 or 117 N/A	neral Provisions, Subpart Dc, Small Industrial Steam Generat	ing Units and Subpart Ja, Petrole	um Refineries			
Pollutant	Test Method Blank = unspecified	Control Method (select more than one as needed)	Control Method Description	Other factors considered (health effects, etc.) Blank = none	Numeric Limit with units (required)			
VOC	Stack testing required within 60 days of achieving the maximum operation rate.	*Pollution Prevention *Add On Control *No control	The heaters have a maximum heating capacity of less than 100 MMBtu/hr. Good combustion practices will be used to reduce VOC including maintain proper air-to-fuel ratio, necessary residence time, temperature and turbulent. Fuel usage is monitored continuously.		0.0013 lb/MMBtu			

Source of emis	sions	Internal Combustion En	nternal Combustion Engine					
Process code fo	r emission source	17.210	7 210					
	ed (if applicable)	Diesel						
Throughput wit	th units (leave	N/A						
Source no	otes (optional)	Firewater pump engines and emergency generator.						
Other applicable requirements * NSPS: Subpart A, General Provisions, Subpart Dc, Small Industrial Steam Generating Units, Subpart Ja, Petroleum Refineries and Ignition Internal Combustion Engines. -Can select multiple * NESHAP N/A -List all applicable subchapters and subparts * MACT Subpart A, General Provisions and Subpart ZZZZ, Reciprocating Internal Combustion Engines * Specify pollutants, if needed * Ch. 115 or 117 N/A				Refineries and Subpart IIII, Compression				
Pollutant	Test Method Blank = unspecified	Control Method (select more than one as needed)	Control Method Description	Other factors considered (health effects, etc.) Blank = none	Numeric Limit with units (required)			
VOC	N/A	*Pollution Prevention *Add On Control *No control	O2 monitor installed. Emergency use only.		0.34 tpy for VOC			

Source of emis	ssions	Storage Tank – Internal	Floating (IFR)			
Process code for listed above	or emission source	42.006				
	red (if applicable)	42.000 N/A				
Throughput wi	th units (leave	31,830,071 bbls/yr				
Source n	otes (optional)	products of the conde	received and stored in an IFR storage tanks (EPNs: 604, ensate splitter are stored in several other IFR tanks as fo y virgin naphtha; EPN 705 is authorized for kerosene and	llows: EPN 500 is authorized fo	r diesel and AGO/residual oil; EPN 704 is	
-Can select -List all appli and subpart	cable subchapters	 * NSPS: Subpart A, General Provision and Subpart Kb, VOC Liquid Storage Vessels * NESHAP N/A * MACT Subpart A, General Provision and Subpart Y, Marine Tank Vessels Loading Operations * Ch. 115 or 117 N/A 				
Pollutant	Test Method Blank = unspecified	Control Method (select more than one as needed)	Control Method Description	Other factors considered (health effects, etc.) Blank = none	Numeric Limit with units (required)	
voc	Seal visual inspections	*Pollution Prevention *Add On Control *No control	IFR tanks are equipped with welded decks as well as a mechanical shoe and rim-mounted secondary seal systems. During tank landings, the vapor space is routed to a vapor recovery system and limited to 30% LEL. Store materials with less than 11.0 psia.		500 - 0.18 tpy for VOC 604 - 1.40 tpy for VOC 700 - 1.23 tpy for VOC 701 - 1.23 tpy for VOC 702 - 1.23 tpy for VOC 703 - 4.72 tpy for VOC 705 - 0.12 tpy for VOC 706 - 2.38 tpy for VOC	

Source of emis	sions	Storage Tank – HFR	Storage Tank – HFR					
Process code fo	r emission source	42.005	2.005					
	ed (if applicable)	N/A						
Throughput wit blank if confide	th units (leave	201 bbls						
Source no	Source notes (optional) HFR storage tank EPNs 902, 903 and 904 store diesel to fuel the site's emergency engines.				<i>r</i> engines.			
-Can select n -List all applic and subparts	cable subchapters	 NSPS: Subpart A, Gent NESHAP N/A MACT N/A Ch. 115 or 117 N/A 	eral Provision and Subpart Kb, VOC Liquid Storage Vessels					
Pollutant	Test Method Blank = unspecified	Control Method (select more than one as needed)	Control Method Description	Other factors considered (health effects, etc.) Blank = none	Numeric Limit with units (required)			
voc	N/A	*Pollution Prevention *Add On Control *No control	The tanks are painted white and will store materials below 0.5 psia or will be less than 25,000 gallon capacity. Each tanks is required to loaded via submerge fill.		0.01 tpy of VOC for each tank			

Source of emis	sions	Storage Tank – VFR			
Process code for listed above	or emission source	42.005			
	ed (if applicable)	N/A			
Throughput wi	th units (leave	5,754,659 bbls			
Source n	Source notes (optional) VFR tank EPNs 707 and 703 are heated tanks. The tanks are authorized to store refined diesel where EPN 703 is also authorized to store atmospheric and gas oil. Tank EPN 900 store caustic chemical used in the LPG tower's product wash and tank EPN 901 stores the spent cau				
Other applicable requirements * NSPS: Subpart A, General Provision and Subpart Kb, VOC Liquid Storage Vessels -Can select multiple * NSPS: Subpart A, General Provision and Subpart Kb, VOC Liquid Storage Vessels -List all applicable subchapters and subparts * MACT Subpart A, General Provision and Subpart Y, Marine Tank Vessels Loading Operations -Specify pollutants, if needed * Ch. 115 or 117 N/A			Operations		
Pollutant	Test Method Blank = unspecified	Control Method (select more than one as needed)	Control Method Description	Other factors considered (health effects, etc.) Blank = none	Numeric Limit with units (required)
VOC	N/A	*Pollution Prevention *Add On Control *No control	The tanks are painted white and will store materials below 0.5 psia or will be less than 25,000 gallon capacity psia. Each tanks is required to loaded via submerge fill.		703 – 4.72 tpy for VOC 707 – 2.20 tpy for VOC

Source of emi	ssions	Cooling Tower	Cooling Tower					
Process code for listed above	or emission source	99.009						
	red (if applicable)	N/A						
	ith units (leave	2,000 gpm						
	Source notes (optional) The cooling tower (EPN: CT) provides cooling for the process units.							
Other applicable requirements * NSPS: Subpart A, General Provision and Subpart QQQ, Petroleum Refinery Wastewater Systems -Can select multiple * NSPS: Subpart A, General Provision and Subpart QQQ, Petroleum Refinery Wastewater Systems -List all applicable subchapters and subparts * MACT N/A -Specify pollutants, if needed * Ch. 115 or 117 N/A			water Systems					
Pollutant	Test Method Blank = unspecified	Control Method (select more than one as needed)	Control Method Description	Other factors considered (health effects, etc.) Blank = none	Numeric Limit with units (required)			
voc	Monthly sampling for VOC and quarterly sampling for PM	*Pollution Prevention *Add On Control *No control	Non-contact design. The cooling towers are equipped with drift eliminators with a drift less than 0.001%.		50 ppbw for VOC 5,500 ppmw for PM			

listed above	r emission source	Truck Loading 50.999			
Throughput wit		N/A 554,800 bbl/yr			
blank if confidential) 554,800 bbl/yr Source notes (optional) Truck loading (EPN L-2) is authorized for LPG only.					
-Can select r -List all appli and subparts	cable subchapters	* NSPS: N/A * NESHAP N/A * MACT N/A * Ch. 115 or 117 N/A			
Pollutant	Test Method Blank = unspecified	Control Method (select more than one as needed)	Control Method Description	Other factors considered (health effects, etc.) Blank = none	Numeric Limit with units (required)
VOC	Leak check via 49 CFR §180.407	*Pollution Prevention *Add On Control *No control	Pressurized loading required and minimize loading line disconnections.		3,200 trucks per 12-rolling months 0.17 tpy for VOC

Source of emissions		Marine (Barge) Loading				
Process code for emission source		50.999				
	ed (if applicable)	N/A				
Throughput wi	th units (leave		d short-term loading per product			
Source notes (optional)		Inland barge vacuum loading only.				
Other applicable requirements -Can select multiple -List all applicable subchapters and subparts -Specify pollutants, if needed		 * NSPS: Subpart A, Gen * NESHAP N/A * MACT N/A * Ch. 115 or 117 N/A 	eral Provision and Subpart Y, Marine Tank Vessel Loading C	perations		
Pollutant	Test Method Blank = unspecified	Control Method (select more than one as needed)	Control Method Description	Other factors considered (health effects, etc.) Blank = none	Numeric Limit with units (required)	
VOC	Initial sampling after 60 days	*Pollution Prevention *Add On Control *No control	Limited marine loading throughput and required monthly emission recordkeeping. Barge marine loading is performed under a vacuum and materials with a vapor pressure greater than 0.1 psia at 95°F are routed to the marine VCU.		4.86 tpy for VOC	

Source of emissions		Marine Vapor Combusto	or (EPN: VC-1)			
Process code for listed above	or emission source	19.900				
	ed (if applicable)	N/A				
Throughput wi blank if confide	th units (leave	1,382,606 lb/yr				
Source notes (optional)		A	uthorized to control marine loading emissions for materi	als with a vapor pressure less th	nan 0.1 psia at 95°F.	
Other applicable requirements -Can select multiple -List all applicable subchapters and subparts -Specify pollutants, if needed		* NSPS: N/A * NESHAP N/A * MACT N/A * Ch. 115 or 117 N/A				
Pollutant	Test Method Blank = unspecified	Control Method (select more than one as needed)	Control Method Description	Other factors considered (health effects, etc.) Blank = none	Numeric Limit with units (required)	
voc	Stack testing required within 60 days of achieving the maximum operation rate.	*Pollution Prevention *Add On Control *No control	Control efficiency of 99.9% and temperature monitoring. AVO inspection.		1.25 tpy for VOC	

Source of emissions		Wastewater Treatment F	Facility/ CPI Separator			
Process code for emission source listed above		50.009				
	red (if applicable)	N/A				
	ith units (leave	N/A				
Source notes (optional)		N/A				
Other applicable requirements -Can select multiple -List all applicable subchapters and subparts -Specify pollutants, if needed		 * NSPS: Subpart A, Gen * NESHAP N/A * MACT N/A * Ch. 115 or 117 N/A 	eral Provision and Subpart QQQ, Petroleum Refinery Waster	water Systems		
Pollutant	Test Method Blank = unspecified	Control Method (select more than one as needed)	Control Method Description	Other factors considered (health effects, etc.) Blank = none	Numeric Limit with units (required)	
VOC	Samples collected via EPA 624.1 and 625.1.	*Pollution Prevention *Add On Control *No control	1000 mg/L minimum MLSS concentration, wastewater flow monitored daily, and CP separator vented to a carbon adsorption system.		0.34 tpy of VOC	

Source of emissions		Floating Roof and Tank	Convenience Landings, and Tank Degassing			
Process code for emission source listed above		42,0006				
	red (if applicable)	N/A				
Throughput w	ith units (leave					
blank if confid	ential)					
Source notes (optional)		Materials with a vapor pressure greater than 0.1 psia at 95°F only.				
Other applicable requirements -Can select multiple -List all applicable subchapters and subparts -Specify pollutants, if needed		 NSPS: Subpart A, Gen NESHAP N/A MACT N/A Ch. 115 or 117 N/A 	eral Provision and Subpart Kb, VOC Liquid Storage Vessels			
Pollutant	Test Method Blank = unspecified	Control Method (select more than one as needed)	Control Method Description	Other factors considered (health effects, etc.) Blank = none	Numeric Limit with units (required)	
VOC	Vapor space sampling via VOC analyzer	*Pollution Prevention *Add On Control *No control	Routed to a control device (flare or vapor combustor) until VOC concentration is 2,000 ppm or 2% of the LEL. May vent to atmosphere upon confirmation that the aforementioned LEL has been met.		0.02 tpy for VOC	

Source of emissions		Startup and Shutdowns	- Heaters		
Process code for emission source listed above		19.333			
Primary fuel	fired (if applicable)	N/A			
	with units (leave	N/A			
Source	notes (optional)		Startup and shutdown of crude process heaters (EPN:	H1, H2 and H3) and the hot oil	heater (EPN: H4).
Other applicable requirements -Can select multiple -List all applicable subchapters and subparts -Specify pollutants, if needed		* NSPS: N/A * NESHAP N/A * MACT N/A * Ch. 115 or 117 N/A			
Pollutant	Test Method Blank = unspecified	Control Method (select more than one as needed)	Control Method Description	Other factors considered (health effects, etc.) Blank = none	Numeric Limit with units (required)
VOC	N/A	*Pollution Prevention *Add On Control *No control	Vent to flare. CO emissions should not exceed either 0.037 lb/MMBtu for H1, H2 or H3, and 0.030 lb/MMBtu for H4; or 425 ppmv at 3% O ₂ . Startups and shutdowns should not exceed 8 and 4 hours, respectively.		3.08 tpy of VOC to the flare 0.63 tpy of VOC to atmosphere

Source of emissions		Startup and Shutdown -	- Other facilities			
Process code for emission source		50,999				
listed above Primary fuel fi	red (if applicable)	N/A				
	ith units (leave	IN/A				
blank if confid		N/A				
Source notes (optional)		N/A				
Other applicable requirements -Can select multiple -List all applicable subchapters and subparts -Specify pollutants, if needed		* NSPS: Subpart A, Gen * NESHAP N/A * MACT N/A * Ch. 115 or 117 N/A	eral Provision and Subpart Kb, VOC Liquid Storage Vessels			
Pollutant	Test Method Blank = unspecified	Control Method (select more than one as needed)	Control Method Description	Other factors considered (health effects, etc.) Blank = none	Numeric Limit with units (required)	
voc	N/A	*Pollution Prevention *Add On Control *No control	Vent to flare. Vent to atmosphere if impractical, no connection to the plant control system and less than 22 lb of VOC will be emitted. Records are maintained for emission vented without control. Minimize VOC emissions via good engineering practices.		3.08 tpy of VOC to the flare 0.63 tpy of VOC to atmosphere	

Source of emissions		Other MSS activities			
Process code for listed above	r emission source				
	ed (if applicable)	N/A			
Throughput with blank if confide		N/A			
Source notes (optional)		MSS act	ivities include but not limited to, barge sampling, tank w	ater wash, manual tank gauging	and tank seal inspections.
Other applicable requirements -Can select multiple -List all applicable subchapters and subparts -Specify pollutants, if needed		* NSPS: N/A * NESHAP N/A * MACT N/A * Ch. 115 or 117 N/A			
Pollutant	Test Method Blank = unspecified	Control Method (select more than one as needed)	Control Method Description	Other factors considered (health effects, etc.) Blank = none	Numeric Limit with units (required)
voc	N/A	*Pollution Prevention *Add On Control *No control	Vent to flare with the ability to vent to atmosphere upon less than 5% of the LEL confirmed. Otherwise, vented to the flare. Minimize VOC emissions via good engineering practices.		3.08 tpy of VOC to the flare 0.63 tpy of VOC to atmosphere

Source of emissions		Fugitives				
Process code for emission source listed above		50.999				
	red (if applicable)	N/A				
Throughput wi blank if confide	th units (leave	N/A				
	entian					
Source no	otes (optional)		N/A			
	le requirements	 NSPS: Subpart A, General Provisions and Subpart GGGa, Equipment Leaks of VOC in Petroleum Refineries NESHAP N/A 				
-Can select r						
and subpart	cable subchapters	* MACT N/A				
	utants, if needed	* Ch. 115 or 117 N/A				
Pollutant	Test Method Blank =	Control Method	Control Method Description	Other factors considered	Numeric Limit with units	
	unspecified	(select more than one as needed)		(health effects, etc.) Blank = none	(required)	
voc	Method 21 and AVO	*Pollution Prevention *Add On Control *No control	28 LAER Fugitives Program		7.50 tpy for VOC	