

Air Emission Event Report Winter Storm Jan. 2024 Texas

Total events: 92		Events caused by freeze = 35			Other cause = 57	
Total emissions: 2.14 M lbs		Total freeze emissions: 1.11 M lbs			Other emissions: 1.03 M lbs	
INCIDENT NO.	PLANT	COUNTY	TCEQ REGION	EST QUANTITY/OPACITY	UNITS	CAUSE
415694	CHEVRON PHILLIPS CHEMICAL CEDAR BAYOU PLANT	HARRIS	12	302,313	POUNDS	On or after January 17, 2024, Ethylene Unit EU-1594 is scheduled to be started up following an emission event, reported under STEERS No. 415692.
415571	REGENCY FIELD SERVICES PIPELINE WINKLER COUNTY	WINKLER	7	292,992.33	POUNDS	A pig became stuck in the line during pigging operations. To remove the pig the line needed to be blown down. Due to time constraints from incipient winter weather conditions it was decided to blow down to atmosphere rather than blowing down to a flare.
415608	FORMOSA POINT COMFORT PLANT	CALHOUN	14	264,455	POUNDS	Freeze; OL3 shutdown due to cold weather conditions and loss of downstream product users.
415676	EXXONMOBIL OIL BEAUMONT CHEMICAL PLANT	JEFFERSON	10	157,731.22	POUNDS	Freeze; freezing weather in Houston materially affected equipment in the refinery; the direct impacts of the extreme weather conditions resulted in upset emissions and the use of the refinery flare to safely manage excess material and minimizing potential emissions
415640	EXXONMOBIL BAYTOWN REFINERY	HARRIS	12	125,399.29	POUNDS	Freeze; Severe inclement weather associated with January 2024 freeze event resulted in impacts to multiple units and associated equipment, resulting in emissions to atmosphere and safe utilization of the flare system.
415607	FORMOSA POINT COMFORT PLANT	CALHOUN	14	119,233	POUNDS	Freeze; Due to extreme cold weather and loss of downstream Ethylene users, OL3 Ethylene production had to be flared.
415553	CHOCOLATE BAYOU PLANT	BRAZORIA	12	72,367	POUNDS	Freeze; As part of the contingency for upcoming severe weather event, process adjustments are being made, and some process streams will be vented to the flare for proper combustion.
415612	FORMOSA POINT COMFORT PLANT	CALHOUN	14	70,349.06	POUNDS	Freeze; Due to extreme cold weather and loss of downstream Ethylene users, OLI Ethylene production had to be flared.
415575	BORGER CARBON BLACK PLANT	HUTCHINSON	1	61,688.93	POUNDS	Freeze; Due to the freezing temperatures, the plant is unable to control unit 2 off-gas blower valve, resulting in unit 2 flaring.
415681	PORT ARTHUR REFINERY	JEFFERSON	10	60,906.56	POUNDS	Freeze; Shut down due to a sudden loss of electricity during Winter Storm Heather.
415602	GOLDSMITH GAS PLANT	ECTOR	7	57,087.13	POUNDS	Around 4:25 am, 3rd party power supplier had a power interruption on their end which caused the nearby substation to shutdown. The Plant electricity generators detected a power imbalance from 3rd party power supply and shut down. As a result, the Plant lost complete power supply and later on communications. These issues resulted in flaring on the 5# flare, residue compression flare and acid gas flare.
415646	1893 OIL AND GAS UNIT J1	LIVE OAK	14	51,715.80	POUNDS	Freeze; 2" gas injection line split due to freezing conditions.
415690	BASF TOTAL FINA NAFTA REGION OLEFINS COMPLEX	JEFFERSON	10	26,935.63	POUNDS	A plant upset caused flaring. The cause of the upset is under investigation.

415634	GREENWOOD COMPRESSOR STATION	MIDLAND	7	26,196.44	POUNDS	The Greenwood Compressor Station experienced an unexpected decrease in the fuel gas supply line causing the gas compressor units to shut down. This caused pressure on the field pipeline system to increase above the pressure relief valve (PRV) setpoint and inlet gas was vented to the atmosphere.
415583	TARGA MIDSTREAM SERVICES PIPELINE WARD COUNTY	WARD	7	24,975.10	POUNDS	Pipeline failure at fitting.
415625	DUKE ENERGY FIELD SERVICES PIPELINE ANDREWS COUNTY	ANDREWS	7	19,359.89	POUNDS	Pipe line failure resulted in the release of air emissions.
415617	FHR CORPUS CHRISTI WEST REFINERY	NUECES	14	18,804	POUNDS	Freeze; On January 15, 2024, certain Flint Hills Resources Corpus Christi, LLC ("FHR") West Refinery equipment, including instrumentation and analyzers, experienced significant impacts due to frigid temperatures, wind chills, and freezing rain/sleet associated with Winter Storm Heather.
415692	CHEVRON PHILLIPS CHEMICAL CEDAR BAYOU PLANT	HARRIS	12	18,476	POUNDS	The Cracked Gas Compressor unexpectedly shut down resulting in cracked gas being routed to the flare. The event is ongoing.
415578	BROOKING COMPRESSOR STATION	HOWARD	7	18,084.97	POUNDS	Initially, the unplanned shutdown of several field compressors from high discharge pressure resulted in elevated field pressures; Brooking compressors #5 shut down on high discharge pressure, compressors #1 and #4 shut down for unplanned maintenance, and the downstream gas plant shut down unexpectedly.
415591	LANE A PAD 2	DEWITT	14	17564	POUNDS	Casing valve on well head was left open at the end of the day.
415698	SAND HILLS GAS PLANT	CRANE	7	16,945.51	POUNDS	Sweet inlet gas was routed to the flare, FLR-1, when amine train A heater shut down unexpectedly.
415766	DOW TEXAS OPERATIONS FREEPORT	BRAZORIA	12	16,287.10	POUNDS	Freeze; A process upset caused by extreme freezing conditions resulted in the product stream going off-specification for Acetylene. To reduce adverse impact on the environment and ensure safe operation, this product stream was routed to the flare as soon as it became off-spec.
415576	SAND HILLS GAS PLANT	CRANE	7	15,512.93	POUNDS	Gas was routed to the flare when an emergency shutdown was activated.
415588	GREENWOOD COMPRESSOR STATION	MIDLAND	7	15,267.17	POUNDS	The Greenwood Compressor station had multiple gas compressors shut down due to low discharge pressure, causing the pressure on the field pipeline system to increase above the pressure relief valve (PRV) setpoint and inlet gas was vented to the atmosphere.
415689	VALERO THREE RIVERS REFINERY	LIVE OAK	14	15,210	POUNDS	Temporary process unit upset.
415614	OUTBACK COMPRESSOR STATION	MARTIN	7	15,011.57	POUNDS	The Outback Compressor station had multiple gas compressors shut down. Unit CM-5 shut down due to no lubricating oil flow within the unit, Unit CM-6 was shut down due to low oil pressure, and Unit CM-8 shut down due to high discharge pressure. The pressure on the field pipeline system increased above the pressure relief valve (PRV) setpoint and inlet gas was vented to the atmosphere.
415589	EXXONMOBIL CHEMICAL BAYTOWN CHEMICAL PLANT	HARRIS	12	14,676.51	POUNDS	The unplanned shutdown of the MPF ethylene recovery compressor (C-9201) resulted in safe utilization of the flare system.

415679	ENTERPRISE MONT BELVIEU COMPLEX	CHAMBERS	12	14,600	POUNDS	Freeze; Refrigeration compressor A shutdown due to cold weather which caused an upset in the ethane system resulting in process streams being routed to the flare.
415611	FORMOSA POINT COMFORT PLANT	CALHOUN	14	13,420.92	POUNDS	Freeze; Unit shutdown due to cold weather conditions and loss of downstream product users.
415585	OUTBACK COMPRESSOR STATION	MARTIN	7	11,913.63	POUNDS	The Outback Compressor station had multiple gas compressors shut down due to low discharge pressure, causing the pressure on the field pipeline system to increase above the pressure relief valve (PRV) setpoint and inlet gas was vented to the atmosphere.
415742	GOLDSMITH GAS PLANT	ECTOR	7	11,877.51	POUNDS	The H2S to CO2 ratio in the acid gas is lower than usual due to lower inlet volumes. The combustion ratio and recovery efficiency of sulfur in the Sulfur Recovery Unit (SRU) was not normal and resulted in higher than permitted SO2 emissions from the Tail Gas Incinerator (TGI).
415616	WILDCAT GAS PLANT	WINKLER	7	11,024.16	POUNDS	Inlet gas and sweet inlet gas was routed to the flare, FLR-1, when a slug of liquids carried over to inlet separators.
415604	NUTRIEN US	HUTCHINSON	1	10,100	POUNDS	Unknown, under investigation
415598	BINGO CDP	REEVES	7	9,175.75	POUNDS	Freeze; The Bingo CDP Compressor #4 3rd-stage PSV relieved to atmosphere for approximately 45 minutes due to a freeze in the discharge cooler.
415639	GREENWOOD COMPRESSOR STATION	MIDLAND	7	9,133.84	POUNDS	Freeze; The Greenwood Compressor Station had multiple gas compressor units shut down due to the low ambient air temperature, causing pressure on the field pipeline system to increase above the pressure relief valve (PRV) setpoint and inlet gas was vented to the atmosphere.
415748	KING CANYON TANKLESS 5.0 & COMPRESSOR STATION	LOVING	7	9,096.10	POUNDS	High gas pressure caused the degasser separator to pop off and the pressure relieve valve (PRV) failed to work.
415586	GERMANIA COMPRESSOR STATION	MARTIN	7	8,950.30	POUNDS	The Germania Compressor Station experienced an unexpected loss of power causing both air compressors and all gas compressors to shut down. During this time, pressure on the field pipeline system increased above the pressure relief valve (PRV) setpoint and inlet gas was vented to the atmosphere.
415774	SALE RANCH GAS PLANT	MARTIN	7	8,716.20	POUNDS	The flaring of residue gas occurred when the plant received off specification gas, high in H2S, from producers.
415696	MOTIVA ENTERPRISES PORT ARTHUR CHEMICALS	JEFFERSON	10	7,855	POUNDS	Freeze; Port Arthur Manufacturing Complex (PAMC) experienced a process unit upset, due to the impacts from freeze conditions which impacted Southeast Texas, resulting in flaring.
415635	BRYANT G 41 CENTRAL TANK BATTERY	MIDLAND	7	7,800.93	POUNDS	Flash gas vapor recovery unit (VRU) went down unexpectedly, resulting in venting of tank vapors.
415610	FORMOSA POINT COMFORT PLANT	CALHOUN	14	7,204.10	POUNDS	Freeze; OL2 Shut down as a consequence of the forecasted inclement weather.
415613	OUTBACK COMPRESSOR STATION	MARTIN	7	7,009.30	POUNDS	The Outback Compressor station had multiple gas compressors shut down. Unit CM-5 shut down due to low discharge pressure and Unit CM-6 was shut down due to low oil pressure. The pressure on the field pipeline system increased above the pressure relief valve (PRV) setpoint and inlet gas was vented to the atmosphere.
415636	EMPEROR COMPRESSOR STATION	WINKLER	7	6,307	POUNDS	Freeze; Downstream capacity not available due to shut-in caused by inclement freezing temperatures.
415678	ENTERPRISE MONT BELVIEU COMPLEX	CHAMBERS	12	5,330	POUNDS	The Oleflex Reactor Heater tripped offline. The process unit was shut down resulting in process streams venting to the site flare for control.

415579	GOLDSMITH GAS PLANT	ECTOR	7	5,215.61	POUNDS	The actuator on bed switching valve 667 failed. Operators were able to manually open it while they got the actuator repaired. #1 reheater ignition also failed dropping the temperature inside the furnace required for normal recovery of sulfur. Less H2S concentration gas coming from the field also impacted normal operations of the Sulfur Recovery Unit (SRU). These issues resulted in higher than permitted SO2 emissions from the tail gas incinerator.
415596	SOUTH TURNER 0-1206 HW TANK BATTERY	REAGAN	8	5,001	POUNDS	Freeze; The bulk separator pressure transducer froze causing vessel to overpressure and release gas through relief valve. Still under investigation.
415577	SEMINOLE GAS PROCESSING PLANT	GAINES	7	4,836	POUNDS	Reinjection compressor shutdown on seal gas supply valve fail.
415697	VALERO REFINING TEXAS CITY REFINERY	GALVESTON	12	4,565.98	POUNDS	Freeze; Emissions event caused by inclement weather (well below freezing temperatures).
415673	BORGER CARBON BLACK PLANT	HUTCHINSON	1	3,625.86	POUNDS	The plant lost the unit 2 off-gas blower due to low oil pressure, resulting in the flaring of Unit 2 for approximately 5.2 hours. Shortly after the plant also lost the turbo compressor when the PT102 discharge pressure switch and the PT105 oil switch failed resulting in the flaring of Unit 1 for approximately 3.6 hours. Both incidents were due to the extreme freezing temperatures from arctic blast.
415595	KEYSTONE GAS PLANT	WINKLER	7	3,277	POUNDS	Freeze; Downstream capacity not available due to shut-in caused by inclement freezing temperatures.
415582	DUKE ENERGY JUDKINS BOOSTER	ECTOR	7	3,148.35	POUNDS	Compressor units went down on low suction pressure due to compressing more gas from upstream gathering than was available. Both the compressor units shutdown, the field pressure increased above the flare setpoint and resulted in the flaring event.
415664	MONT BELVIEU COMPLEX	CHAMBERS	12	3,100.79	POUNDS	At approximately 9:00 pm on January 15, 2024, Targa Mont Belvieu experienced an unexpected shutdown at CBF 4 due to an instrument air transmitter failing on high. Then at approximately 6:00 am on January 16, 2024, T-14 tripped offline when a steam AOV transmitter failed. This caused several other units to shut down on low discharge pressure at the ethane machines. This resulted in venting to Flare 1 (EPN FLRN-1) and Flare 5 (EPN FLR-5).
415746	SWEENEY REFINERY AND PETROCHEMICAL COMPLEX	BRAZORIA	12	2,903.20	POUNDS	Freeze: A unit upset occurred due to inclement weather and winter storm conditions that resulted in safe utilization of the flare.
415693	SAND HILLS GAS PLANT	CRANE	7	2,743.84	POUNDS	Acid gas blended with residue quality enrichment fuel was routed to the flare when acid gas compressor C-6150 shut down unexpectedly flagging high suction pressure.
415752	WEST SEMINOLE SAN ANDRES UNIT RCF	GAINES	7	2,724	POUNDS	BOTH A AND B TRAIN SHUTDOWN ON LOW 3RD STAGE DISCHARGE PRESSURE, PRESSURE WAS 1325-1350 PSI. OPERATOR STARTED BOTH COMPRESSORS SHORTLY AFTER WITH NO ISSUES.
415695	PORT ARTHUR REFINERY	JEFFERSON	10	2,500.80	POUNDS	Freeze; Motiva Port Arthur Manufacturing Complex experienced an unexpected interruption and/or shutdown of several critical pieces of equipment associated with its refinery operations, (RN100209451; TCEQ Account JE-0095-D) due to the impacts from freeze conditions which impacted Southeast Texas.
415675	ANTON CO2 RE-INJECTION FACILITY	HALE	2	2,214.96	POUNDS	This is an ongoing flaring event. The slide valve is not working properly and causing oil/gas ratio to drop and turn off compressor.
415593	BLANCHARD REFINING GALVESTON BAY REFINERY	GALVESTON	12	2,089.49	POUNDS	RHU 600 train experienced unit upset causing an RV to lift to flare.

415750	FREEMPORT LNG LIQUEFACTION PLANT	BRAZORIA	12	1,836.86	POUNDS	During operation of Freeport LNG's Liquefaction Plant, the facility experienced a trip of the Liquefaction Train 3. Train 3 tripped due to 13K-30 propane compressor issue. This occurrence resulted in unavoidable venting to the Liquefaction Flare (LIQFLARE).
415572	VALERO MCKEE REFINERY	MOORE	1	1,677.64	POUNDS	Freeze ; During extremely cold ambient conditions a pressure transmitter on the overhead accumulator of a debutanizer tower in Complex 3 froze, causing vent gases to relieve to the flare system as designed to minimize emissions.
415615	EXXON MOBIL CHEMICAL BAYTOWN OLEFINS PLANT	HARRIS	12	1,495.08	POUNDS	High liquid level alarm on knockout drum (RD-03) caused Butadiene Compressor (RC-01) to trip resulting in safe utilization of the flare system.
415597	SAND HILLS GAS PLANT	CRANE	7	1,281.11	POUNDS	Acid gas was routed to the flare when acid gas compressor C-6150 shut down unexpectedly flagging high scrubber level.
415729	WILDCAT GAS PLANT	WINKLER	7	1,057.02	POUNDS	Acid gas blended with residue quality enrichment fuel was routed to the flare, FLR-1, when acid gas booster compressor C-6152 shut down flagging high suction temperature.
415710	GEO SPECIALTY CHEMICALS	HARRIS	12	1,000	POUNDS	Freeze; OL2 Shut down as a consequence of the forecasted inclement weather.
415674	VALERO HOUSTON REFINERY	HARRIS	12	919.83	POUNDS	Freeze; Freezing weather in Houston materially affected equipment in the refinery; the direct impacts of the extreme weather conditions resulted in upset emissions and the use of the refinery flare to safely manage excess material and minimizing potential emissions.
415587	VALERO CORPUS CHRISTI REFINERY EAST PLANT	NUECES	14	917.52	POUNDS	A small pinhole on piping at the Complex 8 Unit 116 Reformer resulted in emissions exceeding a reportable quantity.
415609	FORMOSA POINT COMFORT PLANT	CALHOUN	14	834.06	POUNDS	OL2 Ethylene users shutdown and there is no alternative users.
415691	WILDCAT GAS PLANT	WINKLER	7	763.95	POUNDS	Acid gas blended with residue quality fuel was routed to the flare, FLR-1, when acid gas booster compressor C-6151 shut down unexpectedly flagging high vibration.
415749	ANTON CO2 RE-INJECTION FACILITY	HALE	2	757.9	POUNDS	Level loop on tanks on the field side froze up causing it to pressure up HP VRU and pop our flare open all the way.
415687	FLINT HILLS RESOURCES HOUSTON CHEMICAL	HARRIS	12	726.34	POUNDS	An investigation into the root cause is still ongoing.
415656	ENTERPRISE MONT BELVIEU COMPLEX	CHAMBERS	12	697.6	POUNDS	Frac XI Hot oil heater trip due to regen coil temperature alarm high-high; which resulted in flaring.
415765	LYONDELL CHEMICAL CHANNELVIEW	HARRIS	12	650	POUNDS	Freeze ; A suction pressure transmitter on the vent gas compressor froze, which shut down the compressor, causing the vent gas header to pressure up. The increased header pressure caused PVRV's on two tanks to release to atmosphere.
415702	SEMINOLE GAS PROCESSING PLANT	GAINES	7	640	POUNDS	Freeze; AS WELLS UNFROZE MORE GAS CAME TO THE PLANT
415660	TILDEN GAS PLANT	MCMULLEN	16	609.37	POUNDS	Freeze; Extreme winter weather conditions resulted in 04-ENG (Bigfoot#2) to go down on right bank high discharge pressure. AGI #2 went down due to AGI pumps being unable to prime caused by freezing temperatures.

415581	BORGER REFINERY	HUTCHINSON	1	600	POUNDS	Emissions from the SRU exceeded 500 lbs. SO ₂ and 100 lbs. H ₂ S. The event began on 01/14/2024 at approximately 05:00 hours and ended at approximately 10:00 hours. An investigation into the cause of the event will be conducted.
415601	MCELROY SECTION 199 EMERGENCY FLARE	CRANE	7	551.46	POUNDS	The Phillips 66 Goldsmith Gas Plant went down unexpectedly due to power issues. Our gas sales valve was shut and we began flaring due to this third party issue.
415600	MCELROY MAIN WATER INJ STA & OIL TREAT FAC	CRANE	7	526.18	POUNDS	The Phillips 66 Goldsmith Gas Plant went down unexpectedly due to power issues. Our gas sales valve was shut and we began flaring due to this third party issue.
415590	COYANOSA GAS PLANT	PECOS	7	520.797	POUNDS	Amine Flash Tank overpressure due to the Rojo CS going down resulted in Flaring from the Acid Gas Flare.
415580	ALON USA BIG SPRING REFINERY	HOWARD	7	501	POUNDS	Freeze; Extreme weather freeze event resulted in exceeding the 500 lb./24hrs Reportable Quantity (RQ).
415573	JAMES HARDIE BUILDING PRODUCTS	JOHNSON	4	334.52	POUNDS	Freeze; In preparation for the upcoming arctic blast, the facility began the process of shutting down our processes on Friday, January 12th. As part of this process, the facility drained the water from the blowdown system to reduce the potential for larger emissions if the facility were to lose power and prevent the circulation of water to keep it from freezing, causing damage to the blowdown system. The blowdown system was bypassed as late in the day as the facility was able to reasonably anticipate to reduce emissions as much as possible and to reduce safety concerns for our employees that were draining the system.
415705	LYONDELL CHEMICAL BAYPORT CHOATE PLANT	HARRIS	12	306.69	POUNDS	Freeze; This incident is still under investigation and the root cause will not be fully determined until the investigation is complete. At this time, the best-known cause is that during a hard freeze, a meter froze, causing a spike in overhead pressure on Column D-2740 and the relief valve to lift to atmosphere.
415654	EQUISTAR CHEMICALS LA PORTE COMPLEX	HARRIS	12	120	POUNDS	Freeze; Severe weather resulted in electrical power interruption to process equipment and the subsequent flaring of material.
415584	LAKE HUBBARD STEAM ELECTRIC STATION	DALLAS	4	84.3	% OPACITY	Freeze; Cold weather caused a discrepancy between the field fuel pressure gauges and the control system, leading to incomplete combustion and excess opacity.
415574	VALERO MCKEE REFINERY	MOORE	1	42.39	% OPACITY	The McKee Refinery experienced an excess opacity-only event for a very limited duration on 01/13/2024 due to the north outlet transformer in the electrostatic precipitator tripping on low oil level. The Continuous Opacity Monitoring System (COMS) observed 1 six-minute average reading greater than 35% from 15:06-15:12.
415699	MARTIN LAKE STEAM ELECTRIC STATION	RUSK	5	36	% OPACITY	The loss of the 3G Mill caused a boiler draft upset which resulted in temporary re-entrainment of fly ash.
415682	ASCEND PERFORMANCE MATERIALS CHOCOLATE BAYOU PLANT	BRAZORIA	12	35.55	POUNDS	Air compressor tripped, leading to absorber off-gas venting to atmosphere. This release was called into NRC, Chemtel, and the LEPC as a reportable release. However, final engineering calculations show 0 lb acrylonitrile and 0.06 lb hydrogen cyanide was released. No RQ was reached. Report was submitted as a precaution and has been verified by engineering calculations to be under RQs.
415592	HAWKINS GAS PLANT	WOOD	5	35	POUNDS	Leak on expander suction flange. Repaired leak then LP unit 3000 would not restart. Attempting to keep plant running because of it's contribution to the power grid and extreme weather conditions. Gas was eventually cut.
415744	EASTMAN CHEMICAL TEXAS OPERATIONS	HARRISON	5	10	POUNDS	Operations discovered the emergency vent hatch open on a storage tank. The event is ongoing as of this time.

415701	BEAUMONT GAS TO GASOLINE PLANT	JEFFERSON	10	2.75976	POUNDS	Freeze; Cold front in Beaumont dropped temperature to 20 degrees F. The instrumentation compressor cooling system froze. Thus, the plant did not have instrumentation air.
415740	BUDA PLANT	HAYS	11	70% Opacity	% OPACITY	A leak appeared in the Kiln feed line.