

OCCIDENTAL PERMIAN LTD.

Event ID:

114702

Reporting Employee:

RICHARD ALVARADO

Lease Name:

NORTH HOBBS UNIT RCF/WIB

Account Number:

2415

Equipment:

RCF FLARE

NSR Permit Number:

2656-M5

EPN:

RCF - FLR - SSM

Title V Permit Number:

EPN Name

RCF FLARE SSM EVENTS

Reg Lease Number:

Flare Point:

RCF-FLR-SSM

Explanation of the Cause:

THE NORTH PLANT FLARED DUE TO TRAIN "E" BEING SHUT DOWN TO CHANGE OUT BAD COMPRESSOR VALVES.

Event Type

Scheduled Maintenance
Scheduled Maintenance
Scheduled Maintenance

Corrective Actions Taken to Minimize Emissions:

OPERATIONS WORKED EFFICIENTLY TO GET THE UNIT BACK ONLINE AFTER THE WORK WAS DONE TO MINIMIZE FLARING FOR THIS EVENT.

Actions taken to prevent recurrence:

OPERATIONS WORKED EFFICIENTLY TO GET THE UNIT BACK ONLINE AFTER THE WORK WAS DONE TO MINIMIZE FLARING FOR THIS EVENT.

Emission Start Date	Emission End Date	Duration
7/1/2021 12:12:00 PM	7/1/2021 2:53:00 PM	2:41 hh:mm

NMED

Pollutant	Duration (hh:mm)	Avging Period	Excess Emission	Number of Exceedances	Permit Limit	Average Emission Rate	Total Pounds	Tons Per Year		
								Total	Next Drop off Date	Date Permit Exceeded
CO	2:41	1	0 LBS	0	152.10	17.84 LBS/HR	47.89	0.023948	7/13/2021	
H2S	2:41	1	0 LBS	0	14.60	1.08 LBS/HR	2.9	0.001453	7/13/2021	
NOX	2:41	1	0 LBS	0	27.10	2.08 LBS/HR	5.58	0.002793	7/13/2021	
SO2	2:41	1	0 LBS	0	1372.10	99.85 LBS/HR	267.95	0.133976	7/13/2021	
VOC	2:41	1	0 LBS	0	216.70	8.62 LBS/HR	23.15	0.011577	7/13/2021	

Reporting Status: Non-Reportable

NMOCD

Flare Stream Total	Total MCF	EPN	Latitude	Longitude	Reporting Status
206 MCF	247 MCF	RCF FLARE SSM EVENTS	32°43'14.96"	103°11'59.65"	Minor release

LEPC

Total MCF	H2S %	Unit Letter	Section	Township	Range
247	0.786	H	25	18 S	37 E

Pollutant	Emission rate	Reportable Qty
SO2	267.95 LBS/DAY	500 LBS/DAY
SO2	267.95 LBS/DAY	500 LBS/DAY
SO2	267.95 LBS/DAY	500 LBS/DAY

Reporting Status: Non-reportable

Emissions Calculations:

NOx = MCF flared x NOx factor from RG-109 x BTU/scf x 1000 scf/MCF x MMBTU/1000000 BTU
CO = MCF flared x CO factor from RG-109 x BTU/scf x 1000 scf/MCF x MMBTU/1000000 BTU
Gas was flared to reduce the hydrocarbon and/or H2S emissions to the atmosphere.
NMNE NG = MCF flared x 50 lb/mole x mole/.379 MCF x mol % NMNE NG x 0.02
NMNE NG % = 100% - Methane % - Ethane % - Carbon Dioxide % - Nitrogen %
H2S = MCF flared x 34 lb/mole x mole/.379 MCF x mol % H2S/100 x 0.02
SO2 = MCF flared x 64 lb/mole x mole/.379 MCF x mol % H2S/100 x 0.98

EVENT SPECIFIC JUSTIFICATIONS FORM**Facility:** North Hobbs Unit**Start Date:** 07/01/2021 @ 12:12 PM**End Date:** 07/01/2021 @ 02:53 PM**Cause:** Train "E" was shut down to change out bad compressor valves.**Duration of event:** 29 minutes**Method of Flared Gas Measurement:** Flare Meter

1. Reason why this event was beyond Operator's control:

The emissions event was caused by the unforeseen, unexpected, sudden, and unavoidable breakdown of equipment or process that was beyond the owner/operator's control, and did not stem from activity that could have been foreseen and avoided, and could not have been avoided by good design, operation, and preventative maintenance practices. It is OXY's policy to route all stranded sales gas to a flare during an unforeseen and unavoidable emergency or malfunction, in order to minimize emissions as much as possible. The flare is regularly monitored to ensure flame is lit and meeting opacity requirements.

This event was a sudden and unforeseeable compressor malfunction of Train "E" due to faulty valves on the compressor unit. Oxy operators quickly contacted the compressor contract workers, Archrock, to immediately send out a compressor mechanic. An Archrock compression mechanic quickly arrived at the facility and began to immediately inspect the unit and reading the alarm pressures. Archrock compression mechanic determined that the compressor unit would need to be shut down so that he could perform a thorough inspection of the unit to determine exact cause involving the malfunction alarms. OXY operators assisted with shutting down the unit, and this shut down of the malfunctioning compressor unit triggered a flaring event. After thoroughly inspecting the compressor unit, Archrock compressor mechanic determined the cause of the malfunction was due to faulty and broken valves. Valves can become faulty and broken suddenly and without warning, regardless of good preventative maintenance practices and programs. Archrock compressor mechanic replaced the faulty and broken valves and inspected the compressor unit thoroughly for any other possible reasons the compressor unit might be shutting down. After inspecting and troubleshooting the compressor unit, the compressor mechanic brought the unit back to normal working service. OXY personnel were in place and available at the facility location when compressor unit was returned to working service.

Notwithstanding proper gas compressor design and operation, various forms of mechanical or technical issues can be sudden, reasonably unforeseeable and unexpected which can cause compressor unit malfunctions to occur without warning or advance notice. OXY made every effort to control and minimize emissions as much as possible during this event.

2. Steps Taken to limit duration and magnitude of venting or flaring:

The emissions event was caused by the unforeseen, unexpected, sudden, and unavoidable breakdown of equipment or process that was beyond the owner/operator's control, and did not stem from activity that could have been foreseen and avoided, and could not have been avoided by good design, operation, and preventative maintenance practices. It is OXY's policy to route all stranded sales gas to a flare during an unforeseen and unavoidable emergency or malfunction, in order to minimize emissions as much as possible. The flare is regularly monitored to ensure flame is lit and meeting opacity requirements.

In this case, the steps taken to limit duration and magnitude of flaring was for Oxy operators to quickly respond to the compression equipment malfunction alarms by quickly contacting the compressor unit, Archrock, to immediately send out a compressor mechanic, as the malfunction alarm was occurring. An Archrock compression mechanic quickly arrived at the facility and began to immediately inspect the unit and reading the alarm pressures. Archrock compression mechanic determined that the compressor unit would need to be shut down so that he could perform a thorough inspection of the unit to determine exact cause involving the alarms. OXY operators assisted with shutting down the unit, and this shut down of the malfunctioning compressor unit triggered a flaring event. In addition to shutting down the gas compressor unit, OXY routed all the stranded sales gas to a flare with a 98% combustion efficiency in order to lessen emissions as much as possible. The flare is regularly monitored to ensure the flame is lit and meeting opacity requirements. After thoroughly inspecting the malfunctioning compressor unit, Archrock compressor mechanic determined the cause of the malfunction was due to faulty and broken valves. Valves can become faulty and broken suddenly and without warning, regardless of good preventative maintenance practices and programs. Archrock compressor mechanic replaced the faulty and broken valves on the compressor unit thoroughly for any other possible reasons the compressor unit might be getting shut down alarms. After inspecting and troubleshooting the compressor unit, the compressor mechanic brought the unit back to normal working service.

Notwithstanding proper gas compressor design and operation, various forms of mechanical or technical issues can be sudden, reasonably unforeseeable and unexpected which can cause compressor unit malfunctions to occur without warning or advance notice. OXY made every effort to control and minimize emissions as much as possible during this event.

3. Corrective Actions taken to eliminate the cause and reoccurrence of venting or flaring:

The emissions event was caused by the unforeseen, unexpected, sudden, and unavoidable breakdown of equipment or process that was beyond the owner/operator's control, and did not stem from activity that could have been foreseen and avoided, and could not have been avoided by good design, operation, and preventative maintenance practices. It is OXY's policy to route all stranded sales gas to a flare during an unforeseen and unavoidable emergency or malfunction, in order to minimize emissions as much as possible. The flare is regularly monitored to ensure the flame is lit and meeting opacity requirements.

Oxy cannot take any corrective actions to eliminate the cause and potential reoccurrence of compressor malfunctions as notwithstanding proper gas compressor design and operation, various forms of mechanical or technical issues can be sudden, reasonably unforeseeable and unexpected which can cause compressor unit malfunctions to occur without warning or advance notice. Oxy continually strives to maintain and operate its facility equipment in a manner consistent with good practices for minimizing emissions and reducing the number of emission events. Oxy Train "E" was working as designed and operated normally prior to the sudden and without warning malfunction of the compressor unit. Oxy has a strong and positive compression equipment preventative maintenance program in place. This incident was completely out of OXY's control to prevent from happening as it was determined the malfunction occurred due to a faulty and broken valves. Valves can become faulty and broken suddenly and without warning, regardless of good preventative maintenance practices and programs. OXY made every effort to control and minimize emissions as much as possible during this event. The only actions that Oxy can take and handle that is within its control, is to keep continue with its compression equipment preventative maintenance program for this unit.

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
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District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

QUESTIONS

Action 34542

QUESTIONS

Operator: OCCIDENTAL PERMIAN LTD P.O. Box 4294 Houston, TX 772104294	OGRID: 157984
	Action Number: 34542
	Action Type: [C-129] Venting and/or Flaring (C-129)

QUESTIONS**Determination of Reporting Requirements**

Answer all questions that apply. The Reason(s) statements are calculated based on your answers and may provide additional guidance.

Was or is this venting or flaring caused by an emergency or malfunction	Yes
Did or will this venting or flaring last eight hours or more cumulatively within any 24-hour period from a single event	No
Is this considered a submission for a notification of a major venting or flaring	Yes, minor venting or flaring of natural gas.
The operator shall file a form C-141 instead of a form C-129 for a release that includes liquid during venting or flaring that is or may be a major or minor release under 19.13.29.7 NMAC	
Was there or will there be at least 50 MCF of natural gas vented or flared during this event	Yes
Did this venting or flaring result in the release of ANY liquids (not fully and/or completely flared) that reached (or has a chance of reaching) the ground, a surface, a watercourse, or otherwise, with reasonable probability, endanger public health, the environment or fresh water	No

Unregistered Facility Site

Please provide the facility details, if the venting or flaring occurred or is occurring at a facility that does not have an Facility ID (##) yet.

Facility or Site Name	North Hobbs Unit
Facility Type	Compressor Station - (CS)

Equipment Involved

Primary Equipment Involved	Not answered.
Additional details for Equipment Involved. Please specify	Not answered.

Representative Compositional Analysis of Vented or Flared Natural Gas

Please provide the mole percent for the percentage questions in this group.

Methane (CH4) percentage	4
Nitrogen (N2) percentage, if greater than one percent	0
Hydrogen Sulfide (H2S) PPM, rounded up	1
Carbon Dioxide (CO2) percentage, if greater than one percent	0
Oxygen (O2) percentage, if greater than one percent	0
If you are venting and/or flaring because of Pipeline Specification, please provide the required specifications for each gas.	
Methane (CH4) percentage quality requirement	Not answered.
Nitrogen (N2) percentage quality requirement	Not answered.
Hydrogen Sulfide (H2S) PPM quality requirement	Not answered.
Carbon Dioxide (CO2) percentage quality requirement	Not answered.
Oxygen (O2) percentage quality requirement	Not answered.

Date(s) and Time(s)

Date venting or flaring was discovered or commenced	07/01/2021
Time venting or flaring was discovered or commenced	12:12 PM
Is the venting or flaring event complete	Yes
Date venting or flaring was terminated	07/01/2021
Time venting or flaring was terminated	02:53 PM
Total duration of venting or flaring in hours, if venting or flaring has terminated	0
Longest duration of cumulative hours within any 24-hour period during this event	0

Measured or Estimated Volume of Vented or Flared Natural Gas

Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Cause: Equipment Failure Valve Natural Gas Flared Spilled: 247 Mcf Recovered: 0 Mcf Lost: 247 Mcf]
Additional details for Measured or Estimated Volume(s). Please specify	Not answered.
Is this a gas only submission (i.e. only Mcf values reported)	Yes, according to supplied volumes this appears to be a "gas only" report.

Venting or Flaring Resulting from Downstream Activity

Was or is this venting or flaring a result of downstream activity	Not answered.
Date notified of downstream activity requiring this venting or flaring	Not answered.
Time notified of downstream activity requiring this venting or flaring	Not answered.

Steps and Actions to Prevent Waste

For this event, the operator could not have reasonably anticipated the current event and it was beyond the operator's control.	True
Please explain reason for why this event was beyond your operator's control	The emissions event was caused by the unforeseen, unexpected, sudden, and unavoidable breakdown of equipment or process that was beyond the owner/operator's control, and did not stem from activity that could have been foreseen and avoided, and could not have been avoided by good design, operation, and preventative maintenance practices. It is OXY's policy to route all stranded sales gas to a flare during an unforeseen and unavoidable emergency or malfunction, in order to minimize emissions as much as possible. The flare is regularly monitored to the ensure flame is lit and meeting opacity requirements.
Steps taken to limit the duration and magnitude of venting or flaring	The emissions event was caused by the unforeseen, unexpected, sudden, and unavoidable breakdown of equipment or process that was beyond the owner/operator's control, and did not stem from activity that could have been foreseen and avoided, and could not have been avoided by good design, operation, and preventative maintenance practices. It is OXY's policy to route all stranded sales gas to a flare during an unforeseen and unavoidable emergency or malfunction, in order to minimize emissions as much as possible. The flare is regularly monitored to the ensure flame is lit and meeting opacity requirements.
Corrective actions taken to eliminate the cause and reoccurrence of venting or flaring	The emissions event was caused by the unforeseen, unexpected, sudden, and unavoidable breakdown of equipment or process that was beyond the owner/operator's control, and did not stem from activity that could have been foreseen and avoided, and could not have been avoided by good design, operation, and preventative maintenance practices. It is OXY's policy to route all stranded sales gas to a flare during an unforeseen and unavoidable emergency or malfunction, in order to minimize emissions as much as possible. The flare is regularly monitored to the ensure the flame is lit and meeting opacity requirements.

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CONDITIONS

Action 34542

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Operator: OCCIDENTAL PERMIAN LTD P.O. Box 4294 Houston, TX 772104294	OGRID: 157984
	Action Number: 34542
	Action Type: [C-129] Venting and/or Flaring (C-129)

CONDITIONS

Created By	Condition	Condition Date
system	If the information provided in this report requires an amendment, submit a [C-129] Request to Amend Venting and/or Flaring Incident, utilizing your incident number from this event.	7/7/2021