## **EVENT SPECIFIC JUSTIFICATIONS FORM**

Facility: South Hobbs Unit

Cause: THE SOUTH PLANT FLARED DUE TO SHUTTING DOWN "B" TRAIN FOR SCHEDULED

MAINTENANCE.

**Duration of event: 0:08 hours** 

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 the ensure flame is lit and meeting opacity requirements.

This event was a scheduled event that was planned ahead of time to prevent a malfunction or shutdown. The South Hobbs Plant brought down "B" Train to perform preventive maintenance work. At this time Archrock mechanics tore into the compressor to investigate the compressor, and check clearances. Roto Versal is also servicing the lubrication system. Oxy mechanics also checked all pumps associated with the compressor. OXY operators assisted with shutting down the unit, and this shut down of the compressor unit triggered a flaring event. 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 the 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 by quickly contacting the field, to immediately send out production techs to shut in wells in the field triggered a flaring event. In addition to shutting in wells, 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 compressor unit, the plant operators 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 the ensure the flame is lit and meeting opacity requirements.

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 has a strong and positive compression equipment preventative maintenance program in place. 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.

# OCCIDENTAL PERMIAN LTD.

**Event ID:** 114758 **Reporting Employee:** RICHARD ALVARADO

Lease Name:SOUTH HOBBS UNIT RCFAccount Number:33207Equipment:Plant InletNSR Permit Number:5418-R2

EPN: RCF - FLARE - SSM Title V Permit Number:
EPN Name RCF flare - SSM Reg Lease Number:

Flare Point: Plant Inlet

#### **Explanation of the Cause:**

THE SOUTH PLANT FLARED DUE TO SHUTTING DOWN "B" TRAIN FOR SCHEDULED MAINTENANCE.

**Event Type** 

Scheduled Maintenance Scheduled Maintenance Scheduled Maintenance

#### **Corrective Actions Taken to Minimize Emissions:**

OPERATIONS WILL LINE THE UNIT BACK UP WHEN THE MAINTENANCE IS COMPLETED TO REDUCE FLARING FOR THIS EVENT.

#### Actions taken to prevent recurrence:

OPERATIONS WILL LINE THE UNIT BACK UP WHEN THE MAINTENANCE IS COMPLETED TO REDUCE FLARING FOR THIS EVENT.

Emission Start Date	Emission End Date	Duration
7/7/2021 6:24:00 AM	7/7/2021 6:32:00 AM	0:08 hh:mm

### **NMED**

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Pollutant	Duration	Avging	Excess	Number of	Permit	Permit Average Emission		Total	Tons Per Year		
	(hh:mm)	Period	Emission	Exceedances	Limit	Rat	e	Pounds	Total	Next Drop off Date	Date Permit Exceeded
CO	0:08	1	0 LBS	0	168.20	153.27	LBS/HR	20.43	0.010218	7/16/2021	
H2S	0:08	1	0 LBS	0	14.60	3.36	LBS/HR	0.44	0.000225	7/16/2021	
NOX	0:08	1	0 LBS	0	29.70	17.87	LBS/HR	2.38	0.001192	7/16/2021	
SO2	0:08	1	0 LBS	0	1372.10	310.78	LBS/HR	41.43	0.020719	7/16/2021	
VOC	0:08	1	0 LBS	0	195.10	33.87	LBS/HR	4.51	0.002259	7/16/2021	

Reporting Status: Non-Reportable

## **NMOCD**

Flare Stream Total	Total MCF	EPN	Latitude	Longitude	Reporting Status
40 MCF	70 <b>MCF</b>	RCF flare - SSM	32°40'40.890	103°9'35.360	Minor release

Range

## **LEPC**

**Total MCF** 

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70		0.626	E	09	19	S	39	Е	-	
	Pollutant		Emissi	ion rate			Report	able Qt	у	
	SO2		41.43 LBS/DAY				į	500 LBS	S/DAY	
	SO2	41.43 LBS/DAY			į	500 LBS	S/DAY			
	SO2		41.4	3 LBS/DAY			į	500 LBS	S/DAY	

H2S % Unit Letter Section Township

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

<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 Phone:(575) 393-6161 Fax:(575) 393-0720 District II

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720 District III

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

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 36507

#### **QUESTIONS**

Operator:	OGRID:
OCCIDENTAL PERMIAN LTD	157984
P.O. Box 4294	Action Number:
Houston, TX 772104294	36507
	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 addional guidance.						
Was or is this venting or flaring caused by an emergency or malfunction	No					
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						
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 <b>ANY</b> 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 occuring at a facility that does not have an Facility ID (f#) yet.				
Facility or Site Name Not answered.				
Facility Type	Not answered.			

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.	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 (C02) percentage, if greater than one percent	0				
Oxygen (02) 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 Sufide (H2S) PPM quality requirement	Not answered.				
Carbon Dioxide (C02) percentage quality requirement	Not answered.				
Oxygen (02) percentage quality requirement	Not answered.				

Date(s) and Time(s)		
Date venting or flaring was discovered or commenced	07/07/2021	
Time venting or flaring was discovered or commenced	06:24 AM	
Is the venting or flaring event complete	Yes	
Date venting or flaring was terminated	07/07/2021	
Time venting or flaring was terminated	06:32 AM	
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: Repair and Maintenance   Other (Specify)   Natural Gas Flared   Spilled: 70 Mcf   Recovered: 0 Mcf   Lost: 70 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 36507

## **CONDITIONS**

Operator:	OGRID:
OCCIDENTAL PERMIAN LTD	157984
P.O. Box 4294	Action Number:
Houston, TX 772104294	36507
	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.	7/15/2021