District I 1625 N. French Dr., Hobbs, NM 88240 District II

WIND CONSERVATION State of New Mexico MM OIL CONSERVATION MAR 21 ZULE Minerals and Natural Resource ARTESIA DISTRICT

Form C-141 Revised April 3, 2017

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

Oil Conservation Division

MAR **2**ulmt016 copy to appropriate District Office in accordance with 19.15.29 NMAC.

1000 Rio Brazos Road, Aztec, NM 87410 District IV

1220 South St. Francis Dr.

1220 S. St. Fran	cis Dr., Sant	a Fe, NM 87505	RECI	Sa	nta F	e, NM 875	505 R	RECEI	VFD					
Release Notification and Corrective Action														
NAB18	n2242	21107		_		OPERATOR								
Name of Company: Marathon Oil Permian LLC 202048						Contact: Callie Karrigan								
Address: 2423 Bonita St, Carlsbad, NM 88220							Telephone No. 405-202-1028 (cell) 575-297-0956 (office)							
Facility Nar	ne: Rock 1	Island 16 Sta	te 1H		Facility Typ	e: oil well								
Surface Owner Ovivate Mineral Owner							(0)		API No	30-015-	38461			
34.1400 3 11	PV	10000				N OF DE	NOF RELEASE							
Unit Letter	Section	Township	Range	Feet from the		/South Line	Feet from the	Fact/\	Vest Line	County				
G	16	18S	26E	2260	North		2310	East	vest Line	Lea	Edd	ч		
Latitude_32.748924)		
NATURE OF RELEASE														
Type of Release: oil							Volume of Release: 66 bbls Volume Recovere							
Source of Release: oil tank							Date and Hour of Occurrence Date and Hour of Discovery					′		
Was Immediate Notice Given?						03/06/2018 time unknown 03/06/2018 11:45 am If YES, To Whom?								
✓ Yes ☐ No ☐ Not Required						Mike Bratcher and Crystal Weaver - email								
By Whom? Callie Karrigan						Date and Hour: 03/06/2018 04:37 pm								
Was a Watercourse Reached?						If YES, Volume Impacting the Watercourse. N/A								
☐ Yes ☒ No If a Watercourse was Impacted, Describe Fully.*							1, 11, 11, 11, 11, 11, 11, 11, 11, 11,							
N/A														
Describe Cau	Describe Cause of Problem and Remedial Action Taken.*													
	At approximately 11:45 am, the site Operator reported standing fluids in lined tank containment due to a suspected tank leak. Approximately 66 barrels of													
oil was released inside containment and remained onsite. The tank was isolated.														
		and Cleanup a												
							ted, emptied and to libe used to recover							
also be asses	-	t K300. THE II	nei wiii bi	e power wasned a	nu auso	ibeni paus wi	ii de useu to ieco	vei auui	iloliai iesiu	ue. III add	ition, the	liner win		
I hereby cert	ify that the	information g	iven above	e is true and comp	lete to 1	he best of my	knowledge and u	ındersta	nd that pur	suant to N	MOCD	rules and		
regulations a	ll operators	are required t	o report a	nd/or file certain r	elease r	notifications a	and perform correct	ctive act	ions for rel	eases whi	ch may e	endanger		
public health	or the envi	ronment. The	acceptan	ce of a C-141 repo	ort by th	ne NMOCD m	narked as "Final R ion that pose a thr	Report" (loes not rel	ieve the o	perator o	of liability		
							we the operator of							
		ws and/or regi												
							OIL CON	SERV	ATION	DIVIS	<u>ION</u>			
Signature: C	allie Kai	rriaan.							Δ.	. 1 (
oignature: e		1 09 00110	Approved by Environmental Specialist:											
Printed Nam	e: Callie Ka	arrigan		MSWXW										
Title: HES Professional						Approval Da	ite: 3 23	18	Expiration	pate: N	1A			
E-mail Address: cnkarrigan@marathonoil.com						Conditions of Approval:								
						See attached Attached ARP-4670								
Date: 03/20/2	2018		Phone: 4	05-202-1028		&\(\)	ou which will the							

^{*} Attach Additional Sheets If Necessary

Operator/Responsible Party,

The OCD has received the form C-141 you provided on 3/21/18 regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number ARP 4070 has been assigned. Please refer to this case number in all future correspondence.

It is the Division's obligation under both the Oil & Gas Act and Water Quality Act to provide for the protection of public health and the environment. Our regulations (19.15.29.11 NMAC) state the following,

The responsible person shall complete <u>division-approved corrective action</u> for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC. [emphasis added]

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District II office in Artesia on or before 4/21/18. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.

The goals of a characterization effort are: 1) determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact. 4) The characterization of any other adverse impacts that may have occurred (examples: impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.). To meet these goals as quickly as possible, the following items must, at a minimum, be addressed in the release characterization workplan and subsequent reporting:

- Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C₆ thru C₃₆), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.
- Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C₆ thru C₃₆), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.
- Nominal detection limits for field and laboratory analyses must be provided.
- Composite sampling is not generally allowed.
- Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

for laboratory analysis from each borehole or test pit (highest observed contamination and deepest depth investigated). Copies of the actual laboratory results must be provided including chain of custody documentation.

- •Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.
- If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.
- Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

Nothing herein should be interpreted to preclude emergency response actions or to imply immediate remediation by removal cannot proceed as warranted. Nonetheless, characterization of impacts and confirmation of the effectiveness of remedial efforts must still be provided to the OCD before any release incident will be closed.

Jim Griswold

OCD Environmental Bureau Chief 1220 South St. Francis Drive Santa Fe, New Mexico 87505 505-476-3465 jim.griswold@state.nm.us

Weaver, Crystal, EMNRD

From: Karrigan, Callie N. (MRO) <cnkarrigan@marathonoil.com>

Sent: Wednesday, March 21, 2018 8:41 PM

To: Weaver, Crystal, EMNRD; Bratcher, Mike, EMNRD

Cc: MNaranjo@slo.state.nm.us; Honea, Tammy; Castro, Isaac (MRO)

Subject: RE: Rock Island 16 State 1H - 24 hour notice

Attachments: C141 Initial.doc

Thank you Crystal. The initial C141 is attached.

Please let me know if you have any questions.

Callie

From: Weaver, Crystal, EMNRD < Crystal. Weaver@state.nm.us>

Sent: Wednesday, March 21, 2018 4:33 PM

To: Karrigan, Callie N. (MRO) <cnkarrigan@marathonoil.com>; Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>

Cc: MNaranjo@slo.state.nm.us; Honea, Tammy < thonea@slo.state.nm.us>

Subject: [External] RE: Rock Island 16 State 1H - 24 hour notice

Beware of links/attachments.

No problem Callie. I show this location to involve State minerals so when you send make sure to include Mark Naranjo and Tammy Honea from the State Land Office. I included them above so you have their email addresses.

Thanks,

Crystal Weaver

Environmental Specialist
OCD – Artesia District II
811 S. 1st Street
Artesia, NM 88210

Office: 575-748-1283 ext. 101

Cell: 575-840-5963 Fax: 575-748-9720

From: Karrigan, Callie N. (MRO) [mailto:cnkarrigan@marathonoil.com]

Sent: Wednesday, March 21, 2018 10:55 AM

To: Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>; Weaver, Crystal, EMNRD <Crystal.Weaver@state.nm.us>

Subject: Fwd: Rock Island 16 State 1H - 24 hour notice

Mike, Crystal,

I have the C141 completed but had an out of state family emergency. I brought my computer with me so I will send this likely late this evening or tomorrow morning. My apologies on this.

Callie

Sent from my iPhone

Begin forwarded message:

From: "Karrigan, Callie N. (MRO)" < cnkarrigan@marathonoil.com

Date: March 6, 2018 at 5:36:48 PM CST

To: "Bratcher, Mike, EMNRD" < mike.bratcher@state.nm.us >, "Weaver, Crystal, EMNRD"

<<u>Crystal.Weaver@state.nm.us</u>>

Subject: Rock Island 16 State 1H - 24 hour notice

Crystal, Mike,

At approximately 11:45 am, the site Operator reported standing fluids in lined tank containment due to a suspected tank leak. Approximately 66 barrels of oil was released inside containment and remained onsite. A vac truck was immediately dispatched to recover all standing fluids. The incident is under investigation.

Rock Island 16 State 1H API 30-015-38461 32.748966 -104.38237

Please let me know if you have any questions. A C141 will be completed shortly.

Callie

Bratcher, Mike, EMNRD

From: Karrigan, Callie N. (MRO) <cnkarrigan@marathonoil.com>

Sent: Tuesday, March 6, 2018 4:37 PM

To: Bratcher, Mike, EMNRD; Weaver, Crystal, EMNRD

Subject: Rock Island 16 State 1H - 24 hour notice

Crystal, Mike,

At approximately 11:45 am, the site Operator reported standing fluids in lined tank containment due to a suspected tank leak. Approximately 66 barrels of oil was released inside containment and remained onsite. A vac truck was immediately dispatched to recover all standing fluids. The incident is under investigation.

Rock Island 16 State 1H API 30-015-38461 32.748966 -104.38237

Please let me know if you have any questions. A C141 will be completed shortly.

Callie