FORM **27**Rev 3/16

State of Colorado Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 Phone: (303) 894-2100 Fax: (303) 894-2109



Document Number: 401466840

Receive Date: 11/22/2017

Report taken by: Jason Kosola

Site Investigation and Remediation Workplan (Initial Form)

This form shall be submitted to the Director for approval prior to the initiation of site investigation and remediation activities. However, this shall not preclude the Operator from taking immediate action to protect public health or safety, the environment, wildlife, or livestock

This Form 27 describes site conditions as currently understood by the Operator; approval of this Form 27 by COGCC is based on the site conditions accurately described herein; any changes in site conditions identified during or subsequent to the performance of the approved workplan may necessitate additional investigation or remediation which shall be described on a supplemental Form 27. This Form 27 is intended to provide basic information regarding the proposed site investigation and remediation actions, but the workplan may be more fully described in attached documentation.

Refer to Rules 340, 905, 906, 907, 908, 909, and 910

OPERATOR INFORMATON

Name of Operator: PIONEER NATURAL RESOU	RCES US	SA INC C	Operator	No:1	0084	_	Phone Number	rs
Address: 5205 N O'CONNOR BLVD STE 200						Phone:	(972) 969-373	38
City: IRVING	State:	TX	Zip:	75039		Mobile:	(469) 563-486	32
Contact Person: LaCretia White			. E	mail: lac	retia.wh	ite@pxd.c	com	
PROJE	CT, PU	RPOSE & SIT	E INFOI	RMATION	١			
PROJECT INFORMATION								
Remediation Project #: 10735		Initial Form 27	Docume	nt #:	40	01466840)	
PURPOSE INFORMATION								
901.e. Sensitive Area Determination		909.c.(5), Ru	le 910.b.(4): Remed	iation of i	mpacted g	round water	
X 909.c.(1), Rule 905: Pit or PW vessel closure		Rule 909.e.(2	2)A.: Notic	e completion	on of rem	ediation in	accordance with F	Rule 909.b.
909.c.(2), Rule 906: Spill/Release Remediation		Rule 909.e.(2	2)B.: Clos	ure of reme	ediation p	roject		
909.c.(3), Rule 907.e.: Land treatment of oily wa	aste	Rule 906.c.:	Director r	equest				
909.c.(4), Rule 908.g.: Centralized E&P Waste Management Facility closure		Other						
SITE INFORMATION N	Multiple	Facilites (in acc	ordance	with Rule	909.c.)			
SITE INFORMATION Pacility Type: PIT Facility ID:	·		cordance			ıme: LAS A	ANIMAS	
		P. API #:	e: 37.21	C	ounty Na	me: LAS A	-104.813495	
Facility Type: PIT Facility ID: Facility Name: MEYER 42-31	259172	P. API #:	e: <u>37.21</u>		ounty Na	me: LAS A		
Facility Type: PIT Facility ID: Facility Name: MEYER 42-31 ** correct	259172	API #: Latitud	e: 37.21		county Na	nme: LAS A	-104.813495	 No
Facility Type: PIT Facility ID: Facility Name: MEYER 42-31 ** correct	259172 t Lat/Long	API #: Latitud	e: 37.21	C 6058 5961	county Na	nme: LAS A	-104.813495 -104.813517	No No
Facility Type: PIT Facility ID: Facility Name: MEYER 42-31 ** correct QtrQtr: SENE Sec: 31	259172 t Lat/Long	API #: Latitud	e: 37.210 le: 37.211 66W	C 5058 5961 Meridia	county Na	LAS A Longitude: Longitude:	-104.813495 -104.813517	No No
Facility Type: PIT Facility ID: Facility Name: MEYER 42-31 ** correct QtrQtr: SENE Sec: 31 SITE CONDITIONS	259172 t Lat/Long	Latitud if needed: Latitud	e: 37.210 de: 37.211 66W	C 6058 5961 Meridia	county Na	LAS A Longitude: Longitude:	-104.813495 -104.813517	 No
Facility Type: PIT Facility ID: Facility Name: MEYER 42-31 ** correct QtrQtr: SENE Sec: 31 SITE CONDITIONS General soil type - USCS Classifications CL	259172 t Lat/Long	Latitud if needed: Latitud 2S Range:	e: 37.210 de: 37.211 66W	C 6058 5961 Meridia	county Na	LAS A Longitude: Longitude:	-104.813495 -104.813517	No No
Facility Type: PIT Facility ID: Facility Name: MEYER 42-31 ** correct QtrQtr: SENE Sec: 31 SITE CONDITIONS General soil type - USCS Classifications CL Is domestic water well within 1/4 mile? Yes	259172 t Lat/Long Twp: 32	Latitud if needed: Latitud 2S Range:	e: 37.210 de: 37.211 66W	C 6058 5961 Meridia	county Na	LAS A Longitude: Longitude:	-104.813495 -104.813517	No No
Facility Type: PIT Facility ID: Facility Name: MEYER 42-31 *** correct QtrQtr: SENE Sec: 31 SITE CONDITIONS General soil type - USCS Classifications CL Is domestic water well within 1/4 mile? Yes Is groundwater less than 20 feet below ground surface?	259172 t Lat/Long Twp: 32	Latitud if needed: Latitud 2S Range:	e: 37.210 de: 37.211 66W	C 6058 5961 Meridia	county Na	LAS A Longitude: Longitude:	-104.813495 -104.813517	No No
Facility Type: PIT Facility ID: Facility Name: MEYER 42-31 ** correct QtrQtr: SENE Sec: 31 SITE CONDITIONS General soil type - USCS Classifications CL Is domestic water well within 1/4 mile? Yes Is groundwater less than 20 feet below ground surface? Other Potential Receptors within 1/4 mile	259172 t Lat/Long Twp: 32	Latitud if needed: Latitud 2S Range:	e: 37.210 de: 37.211 66W	C 6058 5961 Meridia	county Na	LAS A Longitude: Longitude:	-104.813495 -104.813517	No No

SITE INVESTIGATION PLAN

TYPE OF V	VASTE:			
X E&P	Waste	Other E&P W	aste Non-E&P Waste	
X Prod	luced Water	Workover Flui	ds	
Oil		Tank Bottoms		
Cond	densate	Pigging Waste	9	
Drilli	ng Fluids	Rig Wash		
Drill	Cuttings	Spent Filters		
		Pit Bottoms		
		Other (as des	cribed by EPA)	
DESCRIPT	ION OF IMPACT			
Impacted?	Impacted Media		Extent of Impact	How Determined
No	SOILS		0	soil sampling
INITIAL AC	TION SUMMARY			
		gency response m	easures take to abate, investigate, and/or remediate	e impacts associated with E&P Waste.
To inve	stigate the soil quality in	n and around the pro	oduction pit, we collected samples from top of pit and b	ottom of pit.
PROPOSE	D SAMPLING PLA	<u>N</u>		
Proposed S	Soil Sampling			
X Will soil sa	amples be collected a	s part of this invest	igation? (Number, type (grab/composite), analyse	s, and locations of samples):
	investigate the soil qua d for Table 910-1 stand		e production pit, we collected grab samples from top of	f pit and bottom of pit. These samples were
Proposed (Groundwater Sam	<u>pling</u>		
Will groun	ndwater samples be co	ollected as part of t	his investigation? (Number, analyses, and location	ns of samples):
	.			
	Surface Water San			
Will surface	ce water samples be o	collected as part of	this investigation? (Number, analyses, and locatio	ns of samples):
Additional	Investigative Action	ons ons		
Additional	alternative investigat	ive actions describ	ed in attached Site Investigation Plan (summary):	

SITE INVESTIGATION REPORT

Soil	NA/	ND
Number of soil samples collected 2		Highest concentration of TPH (mg/kg) 6.
Number of soil samples exceeeding 910-1 0	ND	Highest concentration of SAR
Was the areal and vertical extent of soil contamination delineated? No		BTEX > 910-1 No
Approximate areal extent (square feet) 0		Vertical Extent > 910-1 (in feet) 0
Groundwater		
Number of groundwater samples collected 0		Highest concentration of Benzene (μg/l)
Was extent of groundwater contaminated delineated? No		— Highest concentration of Toluene (μg/l)
Depth to groundwater (below ground surface, in feet)		—————————————————————————————————————
Number of groundwater monitoring wells installed		— Highest concentration of Xylene (μg/l)
Number of groundwater samples exceeding 910-1		Highest concentration of Methane (mg/l)
Surface Water		
0 Number of surface water samples collected		
Number of surface water samples exceeding 910-1		
If surface water is impacted, other agency notification may be required.		
THER INVESTIGATION INFORMATION		
Were impacts to adjacent property or offsite impacts identified?		
Were background samples collected as part of this site investigation?		
Was investigation derived waste (IDW) generated as part of this investigation?		
Volume of solid waste (cubic yards) Volume or	f liquid w	aste (barrels)
Volume of Solid Waste (Cubic Yards)		·

REMEDIAL ACTION PLAN

SOURCE REMOVAL SUMMARY	
Describe how source is to be removed.	
NA	
DEMEDIATION CHIMMADY	
REMEDIATION SUMMARY	
Describe how remediation of existing impacts to soil and groundwate brief narrative description including: technical justification, schedule specifications for the selected remedial action technology.	er is to be accomplished (i.e. summarize remedial action plan). Provide a for implementation, estimated time to attain NFA status, plus plans and
NA	
Soil Remediation Summary	
In Situ	Ex Situ
Bioremediation (or enhanced bioremediation)	Excavate and offsite disposal
Chemical oxidation	If Yes: Estimated Volume (Cubic Yards)
Air sparge / Soil vapor extraction	Name of Licensed Disposal Facility or COGCC Facility ID #
Natural Attenuation	Excavate and onsite remediation
Other	Land Treatment
	Bioremediation (or enhanced bioremediation)
	Chemical oxidation
	Other
Groundwater Remediation Summary	
Bioremediation (or enhanced bioremediation)	
Chemical oxidation	
Air sparge / Soil vapor extraction	
Natural Attenuation	
Other	
GROUNDWATER MONITORING	
	an, including # of wells or sample points, monitoring schedule, analytical
methods, points of compliance. Attach a groundwater monitoring loc	
NA	

REMEDIATION PROGRESS UPDATE

REMEDIATION I ROCKEGO OF DATE
PERIODIC REPORTING
Frequency: Quarterly Semi-Annually Annually Other
Report Type: Groundwater Monitoring Land Treatment Progress Report O&M Report
Other
WASTE DISPOSAL INFORMATION
Was E&P waste generated as part of this remediation? No
Describe beneficial use, if any, of E&P Waste derived from this remediation project:
Volume of E&P Waste (solid) in cubic yards
E&P waste (solid) description
COGCC Disposal Facility ID #, if applicable:
Non-COGCC Disposal Facility:
Volume of E&P Waste (liquid) in barrels
E&P waste (liquid) description
COGCC Disposal Facility ID #, if applicable:
Non-COGCC Disposal Facility:
RECLAMATION PLAN
RECLAMATION PLANNING
Describe reclamation plan. Discuss existing and new grade recontouring; method and testing of compaction alleviation; and reseeding program, including location of new seed, seed mix and noxious weed prevention. Attach diagram or drawing.
If liner is present, it will be removed and properly disposed of. Water will be removed from the pit using a vaccuum truck. If backberm of pit exists, this material will be utilized to backfill pit. Native fill material may be collected from the recontouring of cut and fill slopes. Fill material will be brought onsite, if needed, to adequately backfill pit. The top 3 feet of the pit will be filled with at least 25% native soil. If topsoil exists, this material will be overlain on the fill material. Backfilled material may be controured in a manner to be utilized as a stormwater BMP.
Is the described reclamation complete? No
Does the reclamation described herein constitute interim or final reclamation of the Oil and Gas Location?
Interim? Final?
Did the Surface Owner approve the seed mix? Yes
If NO, does the seed mix comply with local soil conservation district recommendations?

IMPLEMENTATION SCHEDULE

PRIOR DATES			
Date of Surface Ow	vner notification/cons	sultation, if required.	
Actual Spill or Rele	ase date, if known.		
SITE INVESTIGA	TION DATES		
Date of Initial Action	ns described in Site	Investigation Plan (start date). 04/24/2017	
Date of commence	ment of Site Investig	 pation. 04/24/2017	
Date of completion	of Site Investigation	. 11/22/2017	
REMEDIAL ACTI	ION DATES		
Date of commence	ment of Remediation	ո.	
Date of completion	of Remediation.		
SITE RECLAMAT	TION DATES		
Date of commence	ment of Reclamation	n.	
Date of completion	of Reclamation.		
OPERATOR COM	IMFNT		
OI LIVATOR COM			
I hereby certify al	I statements made	e in this form are to the best of my knowledge true, correct, and complete.	
Signed: LaCretia	White	Title: Staff Env. Spc.	
Submit Date:`	11/22/2017	Email: acretia.white@pxd.com	
Based on the inform Rules and applicate		erein, this Application for Site Investigation and Remediation Workplan comereby approved.	plies with COGCC
COGCC Approved	d: Jason Kosola	Date: 11/28/2017	
Remediation Pro	ject Number:	10735	
COA Type		<u>Description</u>	
		Operator has received COGCC approval to discontinue testing for A water pit closures. Operator must ensure that remaining pit contents minimum of 3 feet of backfill and soil. The soil horizons must be reporting original relative position, and reclaimed in accordance with 1000 Second	s are covered with a laced in their
		Attachment Check List	
	he approved Form 2 ced to the related Fa	7 and all listed attachments will be indexed to the Remediation Project file. Only the	approved Form 27
Att Doc Num	<u>Name</u>		
401466840	FORM 27-INI	TIAL-SUBMITTED	
101466848	ANALYTICAL	RESULTS	
Fotal Attach: 2 Files	S		
		General Comments	
Jser Group C	Comment		Comment Date
			Stamp Upon Approval

Total: 0 comment(s)