

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Form C-141
Revised April 3, 2017

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit 1 Copy to appropriate District Office in
accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	ADVANCE ENERGY PARTNERS HAT MESA, LLC	Contact	David Harwell	Jimmy Smith
Address	11490 Westheimer Rd. STE 950, Houston, TX 77077	Telephone No.	832-672-4604	575-703-9921
Facility Name	Merchant/Dagger Containments to Merchant State 503H	Facility Type	Transfer Pipe	
Surface Owner	Merchant Land and Cattle	Mineral Owner	State of NM	API No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
27 K & L 35D	27 & 35	21S	33E					

Latitude See attached Longitude NAD83

NATURE OF RELEASE

Type of Release	Volume of Release- Unknown	Volume Recovered None
Source of Release Leakage of PW transfer pipe during stimulation	Date and Hour of Occurrence 1/18 through 1/24 (approx.)	Date and Hour of Discovery Various
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	
If a Watercourse was Impacted, Describe Fully.*		

RECEIVED

By Olivia Yu at 10:23 am, Feb 06, 2018


Describe Cause of Problem and Remedial Action Taken.*

During the transfer of produced water from the Dagger Containment to Merchant Containment thence to the Merchant State 503H well for hydraulic stimulation five separate releases occurred from the transfer pipe. Because the fluid infiltrated into the sand, no immediate response was possible in the sand. The volumes of fluid pooled on roads was sufficiently small (after infiltration) that removal was not practical.

Describe Area Affected and Cleanup Action Taken.* The areas affected are:
Caliche roads and some pasture at site West of MC at Jnct
Caliche road and sand dune pasture was impacted at site 32 26 50, 103 33 50
Caliche road and limited pasture at Battle 34 Fed 4H Junction

32.44136, -103.55036
32.44637, -103.56636
32.44722, -103.56389

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature:		OIL CONSERVATION DIVISION	
Printed Name: David Harwell		Approved by Environmental Specialist: 	
Title: Vice President		Approval Date: 2/6/2018	Expiration Date:
E-mail Address: DHarwell@advanceenergypartners.com		Conditions of Approval: see attached directive	Attached <input checked="" type="checkbox"/>
Date: 2/2/18 Phone: 832-672-4604			

* Attach Additional Sheets If Necessary

1RP-4953

nOY1803738762

fOY1803738493

pOY1803739595

Operator/Responsible Party,

The OCD has received the form C-141 you provided on 2/2/2018 regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number 1RP-4953 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 division-approved corrective action 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 1 office in Hobbs on or before 3/6/2018. 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

R. T. HICKS CONSULTANTS, LTD.

901 Rio Grande Blvd NW ▲ Suite F-142 ▲ Albuquerque, NM 87104 ▲ 505.266.5004 ▲ Since 1996
Artesia ▲ Carlsbad ▲ Durango ▲ Midland

February 2, 2018

Olivia Yu
NMOCD District 1
1625 N. French Dr.
Hobbs, NM 88240

RE: Advance Energy – Merchant Containment/Merchant State 503H Release(s)

Dear Ms. Yu:

Produced water transfer contractors for Advance Energy caused five (5) reportable releases during the transfer of treated produced water for the hydraulic stimulation of the Merchant State 503H. Because all of the releases are associated with the same event, will be addressed in a similar manner at the same time by the same people, we are submitting only one C-141 in an attempt to minimize paperwork. Three of the leaks occurred at the same location at slightly different times during the hydraulic stimulation. The attached images show provide information on each of the release sites as well as two sites where less than 5 bbls of produced water escaped form the transfer line.

If one C-141 for three sites that occurred during the same event poses a problem for OCD, please let us know. This method of bundling all of the releases into a single release ‘event’ was acceptable to Merchant Land and Cattle, the surface owner upon which all 5 leaks occurred.

I would like to thank Brad Blevins for providing the photographs of the releases when they were still wet.

Sincerely,
R.T. Hicks Consultants, Ltd.



Randall Hicks
Principal

Copy: Ed Martin, NM State Land Office
Merchant Livestock

Clabe Pearson (clabe@merchantlivestock.com)
Brad Blevins (bblevins5252@gmail.com)

February 2, 2018

Page 4

This leak is identified in samples as West of MC Jct and is on Merchant Land and Cattle surface. This release is probably more than 5 bbls but the quantity is unknown. Lat 32.44136, -103.55036



At this location, three separate releases occurred during the hydraulic stimulation. Samples at this site are identified as Battle 34 Fed 4H Jct. The aggregate of the three events is probably more than 25 bbls, but the volume is unknown. Merchant Land and Cattle is the surface owner. Lat 32.44637, Long. -103.56636



February 2, 2018

Page 4

The location of this release is the identifier on the samples: 32 26 50, -103 33 50. The volume of this event is greater than 5 bbls and may be as large as 25 bbls, but the actual volume is unknown. The surface owner is Merchant Land and Cattle.



This release is on State Surface and is less than 5 bbls, therefore it is NOT listed on the attached C-141. We will characterize this release and work with the State Land Office to resolve any environmental issues.



This probable diesel release from a contractor's truck is less than 5 bbls and Advance will address this release in an appropriate manner in cooperation with Merchant Cattle. This release is NOT listed in the attached C-141.

