NM OIL CONSERVATION
ARTESIA DISTRICT
APR 17 2017
RECEIVED

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

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

Form C-141
Revised August 8, 2011

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

fAB1710852858
nAB1710853071

Release Notification and Corrective Action

OPERATOR

X Initial Report Final Report

Name of Company: Lucid Energy Delaware 371960	Contact Kerry Egan
Address 326 West Quay Artesia, NM 88210	Telephone No. 575 513-8988
Facility Name: Palo Duro Gas Plant	Facility Type: Natural Gas Plant

Surface Owner: State Of New Mexico	Mineral Owner	API No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
	35	23S	27E					EDDY

Latitude 32.260791 **Longitude** -104.154352

NATURE OF RELEASE

Type of Release: Natural Gas/Condensate	Volume of Release: <50 MCF of gas, <2 bbl of condensate	Volume Recovered: None
Source of Release: Plant upset that allowed condensate into the amine system, to be released from the CO2 vent.	Date and Hour of Occurrence: 4/11/2017 5:30PM	Date and Hour of Discovery: 4/11/2017 5:30PM
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Verbal notification was given to Mike Bratcher the morning of 4/12/2017, once the details of the situation had been determined.	
By Whom? Kerry Egan	Date and Hour: 4/12/2017 8:30AM	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

On the afternoon of 4/11/17 the Palo Duro Gas Plant received a large "slug" of liquid due to a pipeline pig being run into the station. The volume of liquid received was greater than normally seen or expected. The plant was unmanned at this point, and the volume of liquid overwhelmed the inlet liquids handling process. This upset condition allowed condensate into the amine system. The condensate eventually made its way through the Amine regeneration system, and into the CO2 vent line, and finally out of the CO2 vent stack. At this point the plant had automatically triggered the ESD (Emergency Shut Down) system. By the time the condensate had made its way through the plant and to the CO2 vent stack, the emergency flare had already been triggered and was flaring the diverted inlet gas. As soon as the hydrocarbons were released from the CO2 vent, the stream was ignited by the flare, the flame of which was being blown toward the vent by a strong easterly wind.

At this time Lucid's engineering and operations departments are preparing to relocate the CO2 vent stack further away from the flare.

Describe Area Affected and Cleanup Action Taken.*

Almost the entire volume of gas and liquids released were combusted by the fire, leaving no contamination. The burning liquids did leave ash, and charred caliche on the pad. The fire affected approximately 30' by 50' of the plant's pad, no fire traveled beyond the fence line. There was a small amount of condensate overspray not combusted, located within the fence line, and was limited to the surface of the caliche pad. There is no evidence of contamination (either within or outside of the burned area) deeper than the surface (the top 1") of the pad. The only discernable evidence that any of the released material reached outside of the location was a light film on grass located 5'-10' outside the fence. This contamination was similarly limited to only the surface of the soil and grass, initial investigation shows no signs of migration past 0.5" in depth.

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: Kerry Egan	OIL CONSERVATION DIVISION
Printed Name: Kerry Egan	Signed By Mike Bratcher Approved by Environmental Specialist:

2RP-4175

Title: Environmental Tech	Approval Date: 4/18/17	Expiration Date: N/A
E-mail Address: KEgan@agaveenergy.com	Conditions of Approval: See attached	Attached ☐
Date: 4/12/2017 Phone: 575 810-6021		

* Attach Additional Sheets If Necessary

2RP-4174

Operator/Responsible Party,

The OCD has received the form C-141 you provided on 4/17/2017 regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number 2RP-4174 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 2 office in ARTESIA on or before 5/17/2017. 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; C_6 thru C_{36}), 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; C_6 thru C_{36}), 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

Bratcher, Mike, EMNRD

From: Kerry Egan <KEgan@agaveenergy.com>
Sent: Monday, April 17, 2017 10:03 AM
To: Bratcher, Mike, EMNRD
Cc: Weaver, Crystal, EMNRD; Groves, Amber
Subject: Palo Duro Release
Attachments: 2017Apr12_PaloDuro_C141(Initial).pdf; IMG_0165.pdf; IMG_0173.pdf

Mike,

I apologize for the delay in getting you the paperwork after discussing this release with you in the office on Wednesday (4/12/17). As I had mentioned we had a release at our Palo Duro Gas Plant on 4/11/17, which based on the volumes released would have been unreportable, but resulted in a fire on the location. The fire was limited to the pad inside of our fence line and resulted in no major damage beyond charred caliche. I've attached a picture of the area, approximately 30' by 50' in extent. The only apparent evidence of material making it past the fence is a very light film found on grass 5'-10' past the fence line. There is no evidence that material penetrated the surface of the soil. I have attached a picture of the north fence line, which is adjacent to the release point. As you can see there is only very minimal observable contamination As such Lucid is proposing to allow the material to naturally flash and attenuate to prevent doing more significant damage to the vegetation by excavation. The released hydrocarbons had already gone through a glycol dehydration process to remove water, so chlorides are not of concern with this release.

Please review the attached C141 form and pictures and let me know if there are any questions.

Thanks,
Kerry Egan
Environmental Technician

LUCID energy group

326 W. Quay
Artesia, NM Office: (575) 810-6021 | Cell: (575) 513-8988
Kegan@agaveenergy.com | www.lucid-energy.com