<u>District I</u> 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

* Attach Additional Sheets If Necessary

State of New Mexico Energy Minerals and Natural Resources

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

Form C-141

Revised August 8, 2011

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

Release Notification and Corrective Action

						OPERATOR Initial Report Final Rep					
Name of Company Caza Operating LLC						Contact Tony Sam					
Address 200 N. Lorraine St. #1550, Midland, TX 79701						Telephone No. 432-682-7424					
Facility Name Igloo 19 State 4H						Facility Type Battery					
Surface Ow	ner Fee			Mineral O	wner	State API No. 30-025-42356					
LOCATION OF RELEASE											
Unit Letter	Section	Township	Range			South Line	Feet from the	East/West Line	County		
Р	19 20S 35E 200 s		south		660	east	L	ea			
Latitude 32.551936 Longitude -103.490180											
NATURE OF RELEASE											
Type of Release oil Volume of Release 4bbls Volume Recovered 0bbls											
Source of Release Heater Treater						Date and Hour of Occurrence 11/04/20 Date and Hour of Discovery 12/24/2017 07:30					
Was Immediate Notice Given? ■ Yes □ No □ Not Required						If YES, To Whom? On call phone number					
By Whom?						Date and Hour					
Was a Water	course Read	ched?		1		If YES, Volume Impacting the Watercourse.					
☐ Yes ■ No											
If a Watercourse was Impacted, Describe Fully.* RECEIVED By Olivia Yu at 9:49 am, Dec 26, 2017											
Describe Cause of Problem and Remedial Action Taken.* Dump valve on heater was open slightly and leaked oil (approx 4bbls) staring a fire. Fire department was dispatched and fire was suppressed. Dump valve was closed properly after fire was suppressed.											
Describe Area Affected and Cleanup Action Taken.* Pumper was nearby and saw when the fire ignited. He shut down the battery and called the fire department. Clean up of burnt material to commence December 27. Once cleaned up the liner will be inspected to see if it was breached. If the liner was breached soil samples will be taken.											
regulations al public health should their or or the environ	Il operators or the envi- operations hament. In a	are required tronment. The nave failed to a	to report are acceptant adequately OCD accept	e is true and completed of file certain respective of a C-141 report investigate and respective of a C-141 res	lease not by the mediat	otifications as e NMOCD m e contaminati	nd perform correct arked as "Final Ro on that pose a thre	tive actions for rele eport" does not rele eat to ground water	eases which ieve the oper r, surface wa	may endanger rator of liability ter, human health	
							OIL CONS	SERVATION	DIVISIO	<u>N</u>	
Signature:							an .				
						Approved by Environmental Specialist:					
Title: Contract Engineer						Approval Date: 12/26/2017 Expiration Date:					
			 @mojo	energy.com							
						see attached directive Attached					

1RP-4902

nOY1736035740

pOY1736036009

Operator/Responsible Party,

The OCD has received the form C-141 you provided on _12/24/2017_ regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number _1RP-4902__ 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 _1_ office in __Hobbs____ on or before _1/26/2018_. 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



