October 5, 2005

Larry Johnson New Mexico Oil Conservation Division – District I Energy, Minerals and Natural Resources Department 1625 N. French Drive Hobbs, New Mexico 88240

Re: Spill Investigation and Remediation Workplan, Dynegy Midstream Services, L.P., Unit Letter O (SW/4, SE/4), Section 16, Township 22 South, Range 37 East, Lea County, New Mexico (Latitude: 32.38683333 / Longitude: 103.16756167)

Dear Mr. Johnson:

Dynegy Midstream Services, L.P. (Dynegy) has retained Larson and Associates, Inc. (LA) to investigate potential impacts to soil from a natural gas pipeline rupture that occurred on August 19, 2005 in the southwest quarter (SW/4) of the southeast quarter (SE/4), Section 16, Township 22 South, Range 37 East, Lea County, New Mexico (Site). Approximately 1,887 million standard cubic feet (mscf) of field gas was released from the line and ignited, burning approximately three (3) to five (5) acres of vegetation. Dynegy submitted a Release Notification and Corrective Action form (Form C-141) to the New Mexico Oil Conservation Division (NMOCD) on August 29, 2005. Figure 1 shows the location of the Site. Appendix A provides a copy of the C-141 form.

#### **Proposed Investigation**

Dynegy proposes to collect soil samples using direct-push technology (Terraprobe®) to assess the vertical limits of the spill for defining the area of remediation. Seven (7) soil borings will be drilled at the Site, to a depth of approximately twelve (12) feet below ground surface (bgs) or until refusal is encountered. Samples will be collected immediately below the pipeline, at a depth of approximately 2-4 feet below ground surface (bgs) and approximately every four (4) feet thereafter (i.e., 2-4', 6-8', 10-12'), placed in clean glass sample jars, labeled, chilled in an ice chest and delivered under chain-of-custody control to Environmental Lab of Texas, located in Odessa, Texas, for laboratory analysis. Figure 2 shows the proposed location of the soil borings.

A portion of each sample will be collected in a separate glass sample jar for soil headspace gas analysis using the ambient temperature headspace (ATH) method. The ATH method involves placing a soil sample in a clean glass sample jar to approximately <sup>3</sup>/<sub>4</sub> full, sealing the top of the jar with aluminum foil before replacing the cap. After approximately 15 minutes at ambient temperature the concentration of organic vapors in

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the headspace of the sample jar is measured with a photoionization detector (PID). The probe of the PID is passed through the aluminum foil and measures the concentration of ionizable hydrocarbons in the headspace vapors. The NMOCD allows a PID measurement of 100 parts per million (ppm) or less to be substituted for a laboratory analysis of benzene, toluene, ethylbenzene, and xylene (commonly referred to as BTEX). The NMOCD usually requires laboratory confirmation for BTEX when a PID measurement exceeds 100 ppm. However, headspace analysis cannot replace a laboratory analysis for total petroleum hydrocarbons (TPH).

Based on published literature (1961) and well records of the New Mexico State Engineer, groundwater occurs at approximately 79 to 82 feet bgs in the wells located nearest the Site. No domestic water wells are located within 1,000 feet of the site. The NMOCD has established soil remediation action levels (RRAL) for benzene, total BTEX and TPH resulting from spills of natural gas liquids ("Guidelines for Remediation of Leaks, Spills and Releases, August 13, 1993"). Remediation levels for benzene, total BTEX and TPH were calculated using the following NMOCD criteria:

Criteria	Result	Ranking Score		
Depth-to-Groundwater	>100 Feet	0		
Wellhead Protection Area	No	0		
Distance to Surface Water Body	>1000 Horizontal Feet	0		
		Total: 0		

The following RRALs have been assigned based on NMOCD criteria:

Benzene	10 mg/kg
Total BTEX	50 mg/kg
ТРН	1,000 mg/kg

The NMOCD does not have an RRAL for chloride, but typically recommends an RRAL of 250 mg/kg.

All samples collected from each boring will be analyzed for chloride, and the sample from each boring that exhibits the highest PID reading will be analyzed for TPH. The samples will also be analyzed for BTEX if PID readings exceed 100 ppm. The analysis will be compared to the RRALs established by the NMOCD to determine the need for remediation. A geologic log will be prepared for each boring, and an Investigation Report will be submitted to the NMOCD.

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Sampling equipment will be thoroughly cleaned between uses to minimize crosscontamination. Hand tools will be cleaned using a solution of laboratory-grade detergent and potable water, and rinsed with distilled water. The borings will be filled with bentonite.

#### **Proposed Remediation**

Dynegy proposes to conduct excavation of any soil with reported concentrations of TPH, Benzene or BTEX above the RRALs. Excavation will continue until confirmation samples report all soil at the Site as having TPH, Benzene and BTEX concentrations below the RRALs. A final report and closure request will be submitted to the NMOCD prior to backfilling the excavation.

Please feel free to call Mr. Cal Wrangham at (432) 688-0542 or me at (432) 687-0901 if you have any questions or need additional information. We may also be reached by email at <u>cwwr@dynegy.com</u> or <u>cindy@laenvironmental.com</u>.

Sincerely, Larson and Associates, Inc.

Cindy K. Crain, P.G. Project Manager

cc: Cal Wrangham, Dynegy James Lingnau, Dynegy

Form C-141 Revised October 10, 2003

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

# **Release Notification and Corrective Action**

	OPERATOR	X Initial Report	Final Report
Name of Company: Dynegy Midstream Services, L. P.	Contact: James Lingnau 505	394-2534 X226,Cal Wrar	ngham 432 688 0542
Address: PO Box 1909 Eunice, NM 88231	Telephone No. (505) 394-25	534	
Facility Name: Eunice Gathering System	Facility Type		

Surface Owner: State Mineral Owner: State Lease No.

## LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
SW1/4 <b>5</b> SE 1/4	16	228	37E					

27

Title: ES&H Specialist

Date: 8/29/05

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E-mail Address: cwwr@dynegy.com

Phone: (432) 688-0542

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### Latitude\_32.38683333\_Longitude\_103.16756167\_

## NATURE OF RELEASE

Type of Release: Sour Natural Gas & Fire	Volume of Release: 1887 mscf of	Volume Recovered: 0				
	gas with 3,610 ppm H2S which					
	combusted and converted to SO2.					
Source of Release: Pipeline Failure	Date and Hour of Occurrence:	Date and Hour of Discovery				
	8/19/05 8:35 am	same				
Was Immediate Notice Given?	If YES, To Whom?					
X Yes 🗌 No 📋 Not Required	Gary Wink, Hobbs OCD					
By Whom? Cal Wrangham	Date and Hour 8/19/05 8:50 am					
Was a Watercourse Reached?	If YES, Volume Impacting the Wate	ercourse.				
🗌 Yes X No						
If a Watercourse was Impacted, Describe Fully.*	- 1					
Describe Cause of Broklam and Demedial Action Takan *						
A 20 inches atheming line numbered and released 1997mass of field goe wi	high ignited European and annual annual	where an entroped and the line was				
A 20-men gamering line ruptured and released 100/msci of field gas, w	men ignited. Eunice emergency services	s were contacted and the line was				
$\Lambda$						
1.0263						
14 ALLE 1						
Describe Area Affected and Cleanup Action Taken.*						
acres of vegetation burned. Larson & Associates has been contracted to do soil sampling along impacted line to determine if any remediation						
activities are required.						
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 CONSERVA	TION DIVISION				
Signature.		4				
Printed Name: Cal Wrangham	Envieznae					
	Approved by District Supervisor:	Dipleson				

Approval Date: 5.23.67

Fina C 141 & Documentation application-pPAC0714533794

Conditions of Approval:

Expiration Date: 7.23.07

JR

Attached

RP# 1371