ENVIROMENTAL SITE ASSESSMENT WORKPLAN

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Submit 3 Copies Submit 3 Copies Appropriate Kistrict Uffice State of New Mexico Energy, Minerals and Natural Resour	res Department
DISTRICT 1 P.O. Box 1980, Hobbs, NM 88240 310 Old Santa Fe Trail, Ro	DIVISION om 206 WELL API NO.
DISTRICT II P.O. Drawer DD, Artesia, NM 88210	5. Indicate Type of Lease
DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410	6. State Oil & Gas Lease No.
SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR P DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)	LUG BACK TOA 7. Lease Name or Unit Agreement Name H. C. Posey "A" Lease
1. Type of Well: OIL WELL GAS Emergency Overflow Pit OTHER	
2. Name of Operator	8. Well No.
Amerada Hess Corporation	
Dration D. Monument New Merrice 99265	9. Pool name or wildcal
4. Well Location	- Case uprack our oncen
Unit Letter Feet From The	Line and Feet From The Line
Section 11 Township 12S Range 10. Elevation (Show whether DF, I	32E NMPM Lea County IKB, RT, GR, etc.)
11. Check Appropriate Box to Indicate Natu	re of Notice. Report. or Other Data
NOTICE OF INTENTION TO:	SUBSEQUENT REPORT OF:
	MMENCE DRILLING OPNS. DPLUG AND ABANDONMENT
OTHER:	HER:
12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and giv work) SEE RULE 1103. It is our intent to remediate the	e pertinent dates, including estimated date of starting any proposed e emergency overflow pit which was associ-
ated with the East Caprock SWD System which was lo	ocated on the H. C. Posey "A" Lease. The
approximate dimensions of the pit are thirty-nine	(39) by one hundred seventeen (117) feet.
The pit is characterized as containing oilfic	and gas pro-
crusty top layer with a semi-solid layer to approx	ximately three (3) feet with a heavy motal
Petroleum Hydrocarbon (TPH) contamination in the	envelope layer to approximately six (6)
fact A gite aggregment of conducted on the menor	etu utilizing a rotaru goro rig utich

feet. A site assessment as conducted on the property utilizing a rotary core rig which blocked out the area of contamination. The TPH contamination did not move laterally outside of the confines or boundaries of the pit. The contamination of the pit reached the 25 feet level, at a point as close to the center proximity of the pit as possibly from the edge of the pit with a built pad, that would have to be addressed under the OCD guidelines for pit closures. The average depth of contamination of the pit contamination was fourteen (14) feet for TPH. The Benzene and BTEX limits were not of any significance, and well within closure

I hereby certify that the information above is true and complete to the best of my knowledge SIGNATURE	me <u>me District Superintendent</u> date
TYPE OR PRINT NAME Sam Small	TELEPHONE NO. 505/393-2144
(This space for State Use) APPROVED BY CONDITIONS OF APPROVAL, IP ANY:	- TITLE DISTINCT 1 SUPERVISOF

Continuation Page - Form C-103 (Amerada Hess - Emergency Overflow Pit Closure)

limits of 10 ppm and 50 ppm, respectively.

We request the following methods be allowed for closure of the pit:

(1) The heavy contamination layer, including the crusty layer and the semi-solid layer, envelope layer, along with several small piles of contaminated soil associated with the pit be excavated and remediated on-site utilizing the landfarming techniques of bioremediation.

(2) The remainder of the contaminated soil remaining in the pit be excavated and diluted with fresh soil and the soil from the berm around the pit, to conform within the guideline closure limits, and placed back into the pit. The depth to ground water in the area is in the 80 feet range and the pit is not in an inhabited area, for that matter close to an area. It further, is not in any sensitive or vulnerable area. Utilizing the ranking score, we request that the limit for TPH be 1,000 parts per million, for closure.

There is a berm in place on the low sides of the property to the east and south. Our procedure to implement the above, would be to excavate the heavy contamination, the first six (6) feet and stockpile the excavation in the southeast corner of the fenced area and stabilize the semi-solid material with fresh sand fill to prevent sagging or movement of the material. We would then excavate the remainder of the pit and dilute and backfill with the diluted material to grade. The entire area would then be leveled and the heavy contaminated material be spread to the south and east of the property inside the fence berm on a six (6) inch to twelve (12) inch lift for bioremediation.

We will place a freshwater frac tank on the southwest corner of the property to water the area for moisture content to control dust and enhance the bioremediation process. The watering of the area will be on a timer system with sprinklers and monitored periodically to make certain that ponding or run-off is not allowed.

The microbes, nutrients, biocatalysts, etc, will be placed on the lift as soon as possible after speading (initial application). The lift will be disked on a minimum of one time every two weeks (biweekly) to enhance biodegradation of contaminants. Subsequent applications of nutrients and

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Continuation

biocatalysts will be applied on an as needed basis. Any further microbe applications will be approved by your office prior to application.

Monitoring

We will obtain background soil samples from the landfarming area prior to spreading contaminated material for analysis of TPH, BTEX, and heavy metals. Subsequent three (3) feet treatment zone samples will be taken \overline{arr} a monthly basis until the lift is below the 0.0 guideline limits. For this area, we request that the total TPH be at 1,000 parts per million range with the Benzene and BTEX below the 10 ppm and 50 ppm range, respectively.

When the landfarming limits have been reached, we will discontinue monitoring, reseed for vegetation cover and discontinue watering.

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Carl Carl





SITTE SURVEY

DATE: 03/04/93	
CLIENT: Amerada Hess	ORDERED BY: Mr. Sam Small
FACILITY: Caprock Pit	WELL #: <u>Pit</u>
*****	***********
DATE OF SPILL:	TIME OF SPILL:: AM PM
# OF BARRELS:	
DATE CONTACTED: 03/01/93	TIME CONTACTED: AM PM
DATE ON LOCATION: 03/04/93	_ TIME ON LOCATION: 7:00 AM PM
SUPERVISOR: Allen Hodge	CLIENT CONTACT:Mr. Sam Small
SUPERVISOR PHONE: 392-6167	CLIENT PHONE:393-2144
********	**********
REMEDIAT	ION METHOD
DILUTION	# OF CU. YDS. USED:
	SOURCE OF SOIL:
ENHANCED REMEDIATION	BACTERIA TYPE:
	AMOUNT USED:
OFF-SITE DISPOSAL	DISPOSAL SITE NAME:
	MANIFEST #:
	MINOR PERMIT #:
_XOTHER	This was a test project to check
	for depth of TPH contamination.
1.0 1	
Man	*************************
SUPERVISOR SIGNATURE	CUSTOMER SIGNATURE



DATE: 03	3/04/93	FACILITY: Caprock Pit				
CLIENT:Am	nerada Hess		ORE TESTS			
SUPERVISOR: AL	len Hodge	HOLE # : <u>1</u>				
	TPH		CL			
SAMPLE NO. 1:	2,930 PPM	Surface	<u>1200</u> PPM			
SAMPLE NO. 2:	25,390 PPM	_10'	<u>3400</u> PPM			
SAMPLE NO. 3:	2,460 PPM	20'	<u>1800</u> PPM			
SAMPLE NO. 4:	<u>206</u> PPM	<u> </u>	<u>800</u> PPM			
SAMPLE NO. 5:	PPM	<u> </u>	PPM			
SAMPLE NO. 6:	PPM		PPM			
SAMPLE NO. 7:	PPM		P PM			
SAMPLE NO. 8:	РРМ		PPM			
SAMPLE NO. 9:	PPM		РРМ			
SAMPLE NO. 10:	РРМ		PPM			
COMMENTS						
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DATE: 03/	/04/93	FACILITY: Caprock Pit			
CLIENT: Ame	erada Hess		CORE TESTS		
SUPERVISOR: All	len Hodge	HOLE # : _	2		
	трн		CL		
SAMPLE NO. 1:	<u>14,000</u> PPM	Surface	<u>1200</u> Р РМ		
SAMPLE NO. 2:	<u>18,500</u> PPM	10'	<u>2600</u> PPM		
SAMPLE NO. 3:	<u>40</u> PPM	20'	<u>600</u> PPM		
SAMPLE NO. 4:	<u>58</u> PPM	25'	<u> 600 </u> ₽РМ		
SAMPLE NO. 5:	PPM		PPM		
SAMPLE NO. 6:	PPM		PPM		
SAMPLE NO. 7:	PPM		PPM		
SAMPLE NO. 8:	PPM		PPM		
SAMPLE NO. 9:	РРМ	<u></u>	PPM		
SAMPLE NO. 10:	ррм		PPM		
COMMENTS:	-u	<u></u>			
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DATE: 03/04/93				FACILITY: Caprock Pit				
CLIENT:	Ame	rada Hess			CORE TESTS			
SUPERVISOR:	A11	en Hodge		HOLE # : _3				
		TPH			CL			
SAMPLE NO.	1:	2,590	PPM	Surface	1000	PPM		
SAMPLE NO.	2:	13,350	_PPM	<u>10'</u>	2100	PPM		
SAMPLE NO.	3:	105	PPM	20'	800	PPM		
SAMPLE NO.	4:	24	_PPM	25'	500	PPM		
SAMPLE NO.	5:		_PPM	••••••••••••••••••••••••••••••••••••••		PPM		
SAMPLE NO.	6:	_	_PPM			P PM		
SAMPLE NO.	7:		PPM			PPM		
SAMPLE NO.	8:		_PPM			PPM		
SAMPLE NO.	9:		_PPM		-	PPM		
SAMPLE NO. 1	0:		_PPM	<u> </u>	* 	PPM		
COMMENTS:								
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DATE: 03/04	4/93	FACILITY: Caprock Pit CORE TESTS HOLE # : 4				
CLIENT: Amera	ada Hess					
SUPERVISOR: Aller	Hodge					
	TPH		CL			
SAMPLE NO. 1: _	230 PPM	Surface	1000	PPM		
SAMPLE NO. 2: _	<u>5,270</u> PPM	10'	1400	PPM		
SAMPLE NO. 3:	<u>1,540 </u> PPM	20'	1200	PPM		
SAMPLE NO. 4:	<u>22</u> PPM	25'	800	PPM		
SAMPLE NO. 5: _	PPM			PPM		
SAMPLE NO. 6:	PPM		<u></u>	PPM		
SAMPLE NO. 7: _	PPM			PPM		
SAMPLE NO. 8: _	PPM			PPM		
SAMPLE NO. 9: _	PPM			PPM		
SAMPLE NO. 10: _	PPM			PPM		
Comments:						
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DATE: 03/04/93					FACILITY:	Cap	orock Pit	
CL	CLIENT: Amerada Hess				2	COR	E TESTS	
SUPERV	ISOR	: <u>Alle</u>	en. Hodge		HOLE # :	5		
			TPH				CL	
SAMPLE	NO.	1:	108	PPM	Surface		800	_PPM
SAMPLE	NO.	2:	57	PPM	<u>10'</u>		500	_PPM
SAMPLE	NO.	3:	39	PPM	20'		400	_PPM
SAMPLE	NO.	4:	ć	PPM				_PPM
SAMPLE	NO.	5:		PPM	<u></u>			_PPM
SAMPLE	NO.	6:		PPM	······			_PPM
SAMPLE	NO.	7:		PPM				_PPM
SAMPLE	NO.	8:		PPM				_PPM
SAMPLE	NO.	9:		PPM				_PPM
SAMPLE	NO.	10:		PPM	<u> </u>			_PPM
COMMENT	rs:							
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PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TEXAS 79603



FINAL ANALYSIS REPORT

Com Add Cit	pany: Amerada He ress: P.O. Drave y, State: Monume	sø r D nt NM 88	Date: 03/08/93 Lab#: H1166 :61						
Project Name: Caprock Pit Project Location: Tatum Sampled by: AH Analyzed by: MF Type of Samples: Soil			Date: 03/05/93 Time: Date: 03/05/93 Time: 1600 Sample Condition: GIST			00	Units: mg/kg, mg/l		
San #	p Field Code	TRPHC	BENZENE	TOLUENE	ETHYL BENZENE	PARA- Xylene	META- Xylene	ORTHO- Xylene	NTBE
1 2 3 4 5 6 7 8	<pre>#1 30 Feet #2 25 Feet #3 25 Feet #4 25 Feet #1 Surface #2 Surface #3 Surface #4 Surface</pre>		<0.001 <0.001 <0.001 <0.001 <0.001 0.009 0.010 <0.001	<0.001 <0.001 <0.001 <0.001 <0.001 0.009 0.017 <0.001	<0.001 <0.001 <0.001 0.002 <0.001 0.029 0.048 <0.001	<0.001 <0.001 <0.001 <0.001 <0.001 0.005 0.008 <0.001	<0.001 <0.001 <0.001 <0.001 <0.001 0.005 0.009 <0.001	<0.001 <0.001 <0.001 0.009 0.004 0.009 0.027 <0.001	<0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001
	C Recovery C Spike Accuracy Air Blank	••• ••• •••	1.996 2.015 99.1X <0.001	1.939 2.004 96.8X <0.001	2.148 1.992 107.8X <0.001	2.074 1.976 105.0% <0.001	2.134 2.032 105.0X <0.001	2.076 2.020 102.8X <0.001	1.502 1.645 91.3X <0.001

Methods - AUTOMATED HEADSPACE GC; INFRARED SPECTROSCOPY - EPA SW-846; EPA NETHODS 8020, 418.1, 3540 OR 3510

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3/3/4 Date

Michael R. Fowler

