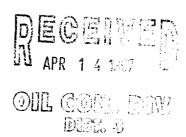
DEC 8 (1897

Approved

Meter Number:89519
Location Name:HILL #3A
Location:TN-29 RG-08
SC-10 UL-P
2 - Federal
NMOCD Zone:OUTSIDE
Hazard Ranking Score:00



RATIONALE FOR RISK-BASED CLOSURE OF PRODUCTION PITS LOCATED OUTSIDE OF THE VULNERABLE ZONE IN THE SAN JUAN BASIN

This production pit location was ranked according to the criteria in the New Mexico Oil Conservation Division's Unlined Surface Impoundment Closure Guidelines and received a ranking score of zero. The estimated depth to groundwater is greater than 100-feet beneath ground surface (bgs), the pit is not in a well head protection area, and there are no surface water bodies within 1,000 horizontal feet of the pit location.

The primary source, discharge to the pit has been removed. There has been no discharge to the pits for at least 4 years and the pits have been closed for at least one year.

Each pit was backfilled with clean soil and graded in a manner to divert precipitation away from the excavated area. Minimal infiltration of rainfall is expected. Any rainfall that does infiltrate the ground surface must migrate through clean backfill before reaching the residual hydrocarbons.

There is no source material at the ground surface, so direct contact of hydrocarbons with livestock and the populous is not likely.

In general, outside of the vulnerable area and alluvial valleys, bedrock material is generally encountered within 20 feet of the ground surface. Bedrock material in the San Juan Basin consists of interbedded sandstones, shales and clays. According to Freeze and Cherry, 1979, the hydraulic conductivity of the bedrock material are as follows:

Sandstone 10^{-9} to 10^{-13} cm/sec Shale 10^{-12} to 10^{-16} cm/sec Clay 10^{-12} to 10^{-15} cm/sec

Based on this information, the residual hydrocarbons should not migrate to groundwater.

Natural process (bioremediation) are degrading the residual hydrocarbon to carbon dioxide and water and will continue until the source is gone, therefore minimizing any impact to the environment.

Based on the above information, it is highly unlikely that any source material will impact groundwater or ever find an exposure pathway to affect human health and therefore El Paso Field Services Company (EPFS) requests closure of this pit location.

FIELD PIT SITE ASSESSMENT FORM



GENERAL	Meter: 89519 Location: HILL #3A Operator #: 8367 Operator Name: ROYALTY P/L District: BLOMFIELD Coordinates: Letter: P Section 10 Township: 29 Range: 8 Or Latitude Longitude Pit Type: Dehydrator Location Drip: X Line Drip: Other: Site Assessment Date: 6.7.94 Area: 10 Run: 72				
SITE ASSESSMENT	NMOCD Zone: (From NMOCD Maps) Inside Outside Outside (2) Maps) Depth to Groundwater Less Than 50 Feet (20 points) Greater Than 100 Ft (0 points) (3) Wellhead Protection Area: Is it less than 1000 ft from wells, springs, or other sources of fresh water extraction?, or; Is it less than 200 ft from a private domestic water source? (1) YES (20 points) Horizontal Distance to Surface Water Body Less Than 200 Ft (20 points) (3) Name of Surface Water Body (Surface Water Body: Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds) Distance to Nearest Ephemeral Stream (1) < 100'(Navajo Pits Only) (2) > 100' TOTAL HAZARD RANKING SCORE: D. POINTS				
REMARKS	Remarks: THREE PITS ON LOCATION. WILL CLOSE ONLY ONE, PIT IS DRY. LOCATION IS N.W. OF HWY. 64 TO DUCCE. REDLINE SHOWS LOCATION INSIDE V.Z. BUT TOPO SHOWS LOCATION IS OUTSIDE V.Z.				
田	Pash in				

(SP3190) 04/08/94

FIEL PIT REMEDIATION/CLOSUT FORM

GENERAL	Meter: 89519 Location: #://#3A Coordinates: Letter: P Section 10 Township: 29 Range: 8 Or Latitude Longitude Date Started: 7-1-94 Area: 10 Run: 72
FIELD OBSERVATIONS	Sample Number(s): MK 77 Sample Depth: Feet Final PID Reading PID Reading Depth Feet Yes No Groundwater Encountered [] (1) [X] (2) Approximate Depth Feet
CLOSURE	Remediation Method: Excavation
REMARKS	Remarks: ENG-lives marked Soil light Brown strong If y Dro Carbon odor Hit Sand Stone 5' Signature of Specialist: Morgan Killian



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FIELD SERVICES LABORATORY ANALYTICAL REPORT PIT CLOSURE PROJECT - Soil

SAMPLE IDENTIFICATION

	Field ID	Lab ID		
SAMPLE NUMBER:	MK 77	945573		
MTR CODE SITE NAME:	89519.	N/A		
SAMPLE DATE TIME (Hrs):	7-1-94	1311		
SAMPLED BY:	N/A			
DATE OF TPH EXT. ANAL.:	717194	7/7/94		
DATE OF BTEX EXT. ANAL.:	NIA	N/A		
TYPE DESCRIPTION:	VG	Course Boun Sand		

	_	RESU	LTS

REMARKS:

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE		MG/KG				
TOLUENE		MG/KG				
ETHYL BENZENE		MG/KG				
TOTAL XYLENES		MG/KG				
TOTAL BTEX		MG/KG				
TPH (418.1)	957	MG/KG			2.00	28
HEADSPACE PID	142	PPIVI				
PERCENT SOLIDS	90.7	%				

- TPH is by EPA Method 418.1 and BTEX is by EPA Method 8020 -

The Surrogate Recovery was at Narrative: % for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

Mulad

74/07/07 14:25

Sample identification 945573

Initial mass of sample. G

Valume of sample after extraction, ml 38.000

Petroleum hydrocarbons, ppm 156.580

Net absorbance of hydrocarbons (2930 co-1) 1125

