

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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



Form C-144 June 1, 2004

For drilling and production facilities, submit to appropriate NMOCD District Office.

For downstream facilities, submit to Santa Fe office

Is pit or below-grade tank covered by a "general plan"? Yes \[ \] No \[ \]  Type of action: Registration of a pit or below-grade tank \[ \] Closure of a pit or below-grade tank \[ \]		
Operator: Nadel & Gussman Permian, LLC Telep	shone: 432-682-4429 e-mail address: k	emm@naguss.com
Address: 601 N. Marienfeld, Suite 508, Midland, Texas 79701		
Facility or well name: Hannibal Fee No. 1 API #: 30-015-34600	U/L B Sec 31 T22S R28E, 660' FNL, 1980' FEL	
County: EddyLatitude	NLongitude WNAD: 192	7 🔲 1983 🔲
Surface Owner: Federal State Private X Indian	. (	
<u>Pit</u>	Below-grade tank N/A	
Type: Drilling X Production Disposal	Volume: _N/A bbl Type of fluid: _N/A	
Workover  Emergency	Construction material: _N/A	
Lined X Unlined	Double-walled, with leak detection?   If not, explain why not.	
Liner type: Synthetic X Thickness: 12nd HDPE liner Clay		
Pit Volume: 1800 bbl. Approximately		
Depth to ground water (vertical distance from bottom of pit to seasonal		
high water elevation of groundwater.) Two water wells exist in Sec 31	Less than 50 feet	(20 points) 20 pts.
showing high water elevation of groundwater ranging between 35'	50 feet or more, but less than 100 feet	(10 points)
and 42'. NGP drilled a test hole very near the north wall of the pit,	100 feet or more	(0 points)
locating water at 37 feet. See Closure Plan for details.		
Wellhead protection area: (Less than 200 feet from a private domestic	Yes	(20 points)
water source, or less than 1000 feet from all other water sources.)	No X	(0 points) 0 pts.
Distance to surface water: (horizontal distance to all wetlands, playas,	Less than 200 feet	(20 points). 20 pts.
irrigation canals, ditches, and perennial and ephemeral watercourses.)	200 feet or more, but less than 1000 feet	(10 points).
	1000 feet or more	(0 points)
	Ranking Score (Total Points)	40 pts.
f this is a nit closure: (1) Attach a diagram of the facility showing the pit's emediation activity in closure report. (2) Indicate disposal location: So ction taken including remediation start date and end date. (4) Groundwater (5) Attach soil sample results and a diagram of sample locations and excavate (1).	hidification onsite. offsite If offsite, name of faci encountered: No X Yes [] If yes, show depth be	lity: (3) Attach a general description of remedial
Additional Comments: Please refer to the attached letter for detailed "	Closure Finn" information.	
I hereby certify that the information above is true and complete to the best has been/will be constructed or closed according to NMOCD guideline		
Date: 17 March 2007	91 - 0	,
Printed Name/Title Kem McCready, Operations Engineer	Signature I com Inc Cro-	and
Your certification and NMOCD approval of this application/closure does not otherwise endanger public health or the environment. Nor does it relieve t regulations.	not relieve the operator of liability should the content	is of the pit or tank contaminate ground water or
Approval: Printed Name/Title Mike Bratcher Hisron	E Signature Will Spyne	100 Date: 3/20/07

Mr. Kem McCready
Operations Engineer
NADEL AND GUSSMAN PERMIAN, LLC
601 N. Marienfeld
Suite 508
Midland, TX 79701

March 17, 2007

Mr. Mike Bratcher
Oil Conservation Division
1301 West Grand Avenue
Artesia, NM 88210

Re: Hannibal Fee No. 1 Pit Closure Documents

Dear Mr. Bratcher:

Pursuant to the State of New Mexico regulatory requirements for permanent closure of drilling pits, enclosed herewith is the completed Form C-144 and additional information constituting the "Closure Plan" for closure of the Nadel and Gussman Permian, LLC, hereinafter "NGP", Hannibal Fee No. 1 drilling pit (API No. 30-015-34600) located in U/L B S31 T22S, R28E, 660' FNL, 1980' FEL of Eddy County, New Mexico.

## INTRODUCTION

Remediation of the NGP Hannibal Fee No. 1, hereinafter Hannibal, drilling pit is targeted to begin 02 April 2007 with completion expected by 13 April 2007, permitting weather and the occurrence of unexpected conditions not within the Operator's control do not create delays or exacerbate the proposed schedule in any way. NGP intends to maintain its commitment to environmental health and safety and fully comply with the Regulatory Performa of the State of New Mexico, OCD regarding this disposal action and permanent closure of the Hannibal drilling pit.

Potential, temporary contamination from the Hannibal drilling pit site, should any exist, resulted solely from oil and gas production activities. Potential contaminates of concern are typical mid to high-level concentrations of brines, typical polymers (such as xanthium gum and starch) and in general, drilling mud and fluids remaining upon completion of said drilling operations.

Area land use is primarily ranching with domestic pasturage and oil and gas production activities. The NGP Hannibal drilling pit is located in an area wherein groundwater depth to surface demonstrates an average depth of approximately 35 to 42 feet from two water wells located in Section 31 and one test bore drilled by NGP producing water at a depth of 37 feet just to the north of the pit area. Consequently, *insitu* disposal is not being considered for the Hannibal Fee No. 1 drilling pit closure to ensure compliant environmental performance and reduction of liability in this designated water sensitive area as defined by New Mexico, OCD Rule 50 regulations.

Therefore, after pursuing other regulatory alternatives in concert with input from the Eddy County, New Mexico, Oil Conservation Division (OCD) and the Santa Fe Office, NGP has elected to implement insitu solidification burial for the Hannibal immediately following the disposal of the Hannibal Fee No. 1.

## Mode of Closure: Insitu Solidification Burial

NGP shall use the Certified Kiln Dust (CKD) solidification process, depositing the material into a 20ml HDPE lined pit on location capped with a 20 ml HDPE liner. The process utilized in this disposal method shall be as described above with the exception of the solidification itself prior to initiation of the insitu burial action.

The CKD solidification procedure shall be as follows:

Three trenches shall be established, two for encapsulation and one to function as a CKD work pit constructed within the original reserve pit immediately adjacent to and between the other two pits.

- 1. Cuttings will be mixed with a track hoe and the contents lifted and dropped in a stirring fashion. Once the Certified Kiln Dust (CKD) and the pit contents are sufficiently bonded solidification will occur.
- 2. The CKD ratio to measured pit contents on the average shall be I yard drill fines to 240 pounds CKD or 1K cy to 240 pounds of drill fines. Should the fines be too dry fresh water will be introduced to initiate the bonding process.
- 3. To ensure proper QA/QC, the CKD is precisely weighed before delivery and pit size is set for a predetermined volume of pit contents.

## **CLOSURE PLAN**

Prior to commencement of closure activities, NGP contractor will contact One-Call for line spot clearance confirming the State of New Mexico, OCD is in agreement with the proposed "Closure Plan" for removal of approximately 1,500 bbl. of liquid followed by the removal of all fines (drill cuttings) assuming these fines have sufficiently dried allowing for maneuverability of heavy equipment in the pit area, enabling final closure.

Environmental health and safety regulations mandate control of pit volumes at all times. Thus, the liquid material was pumped off as needed and properly disposed of during active drilling operations. Water accumulated since this time is either due to liquid material not completely hauled from actual drilling operations or rain. This water has subsequently been hauled from the location and properly disposed of pursuant to OCD Regulatory Performa.

Contractor shall mobilize to Hannibal Fee No. 1drilling pit site located approximately 3 miles south and 2 miles east of Carlsbad, New Mexico (see Form C-144). Personnel

necessary to provide for the initiation and completion of said remediation activities presented above shall be engaged as is appropriate to the mandated exercise.

- ❖ No remediation activity shall occur off the existing pad or already disturbed areas as authorized by the APD and approved Best Management Practices (BMP's). NGP shall consider weather conditions and necessary equipment positioning to provide a clear area for adequate staging for site control and safety compliance, ensuring operations shall be compliant with New Mexico, OCD Regulatory Performa.
- The Hannibal Fee No. 1 drilling pit is currently lined with a 12ml HDPE liner, which shall be removed by heavy equipment and disposed of with the solidified drilling fines pursuant to New Mexico, OCD requirements.
- Prior to initiation of backfilling, the Operator shall take appropriate samples of the pit area to ensure compliance with OCD Standards for remediation of possible TPH, ND for BTEX and levels of less than 250ppm of chlorides. However if levels at the bottom of the drilling pit test too high, a background set of samples shall be obtained for testing from the immediate vicinity and compared to those of the pit bottom. Simultaneously, more soil shall be removed from the "hot spots". Once completed, new data acquisition shall occur and sample results determine whether or not compliance has been reached in order to begin backfilling. No backfilling shall begin without authorization by the State of New Mexico, OCD.
- Backfilling of the Hannibal Fee No.1 drilling pit shall be commensurate with existing topography and terrain relief features (contouring) so as to return it to its "near-as" previous condition, including a contour for prevention of water impoundment.
- The "Closure Plan" shall include a final report providing lab analysis of the backfill material, digital project photos and evidentiary narrative to support the completed disposition of the reclaimed Hannibal Fee No. 1 drilling pit site.

Should you have questions, please call 432-682-4429 (office) or 432-425-6347 (cell).

Sincerely,

**Operations Engineer** 

Kem McCready

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cc: State of New Mexico, OCD, Form C-144