Pat Sanchez

From: Pat Sanchez

Sent: Friday, December 19, 2008 10:22 AM

To: 'charlie.perrin@state.nm.us'; 'brandon.powell@state.nm.us'

Cc: Vicki Donaghey; Kirt Snyder; Martin Cabrera; Charlie Donahue; Ed Hasely

Subject: Pit closures for Closed Loop flow Back tanks - remedial/work over type

Mr. Powell and Mr. Perrin;

We will be submitting several work over - flow back tank type closed loop permits for closure. The permits were approved by NMOCD from Mid summer until late fall of 2008. A miscommunication in our internal processing occurred and we did not submit closure reports.

The fluids are typically produced water with spent treatment fluid that have been pumped into the reservoir during operations and were disposed of in our own SWD's typically.

I will be out of the office from December 20th and back in on Monday January 5, 2009 - if you need to follow-up by phone please call my Supervisor Mr. Charlie Donahue at 505.324.4140.

They will be submitted as soon as possible.

Thanks

Patricio W. Sanchez Energen Resources District Engineer- San Juan 2010 Afton Place Farmington, NM 87401 Telephone 505.324.4141 Cell 505.793.7605 District 1
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

State of New Mexico Energy Minerals and Natural Resources Department Oil Conservation Division 1220 South St. Francis Dr.

Santa Fe, NM 87505

For temporary pits, closed-loop systems, and below-grade tanks, submit to the appropriate NMOCD District Office.

For permanent pits and exceptions submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

Pit, Closed-Loop System, Below-Grade Tank, or						
Proposed Alternative Method Permit or Closure Plan Application						
Type of action: Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method Modification to an existing permit Closure plan only submitted for an existing permitted or non-permitted pit, closed-loop system,						
below-grade tank, or proposed alternative method						
Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, below-grade tank or alternative request						
Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances						
Operator: ENENGEN RESURCES Address: 2010 After Place, Farmington, NM 87401 Facility or well name: Son Juan 30-4 Unit # 300						
Application 20 020 20021 CORP.						
API Number: 3/1-3/1-3/05 OCD Permit Number:						
API Number: 30-039-30031 OCD Permit Number: U/L or Qtr/Qtr						
Center of Proposed Design: Latitude 36.82.555 Longitude 707.25 987 NAD: 1927 1983						
Surface Owner: K Federal State Private Tribal Trust or Indian Allotment						
Pit: Subsection F or G of 19.15.17.11 NMAC RCVD AUG 11 '08						
Temporary: Drilling Workover OIL CONS. DIV.						
Permanent Emergency Cavitation P&A						
Lined Unlined Liner type: Thicknessmil LLDPE HDPE PVC Other						
☐ String-Reinforced						
Liner Seams: Welded Factory Other Volume: bbl Dimensions: L x W x D						
3.						
Closed-loop System: Subsection H of 19.15.17.11 NMAC						
Type of Operation: P&A Drilling a new well Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent)						
Drying Pad 🚨 Above Ground Steel Tanks 🗌 Haul-off Bins 🗌 Other						
Lined Unlined Liner type: Thickness mil LLDPE HDPE PVC Other						
Liner Seams: Welded Factory Other Other						
Liner Seams: Welded Factory Other						
Liner Seams: Welded Factory Other						
Liner Seams: Welded Factory Other						
Liner Seams: Welded Factory Other						
Liner Seams: Welded Factory Other Below-grade tank: Subsection I of 19.15.17.11 NMAC Volume: bbl Type of fluid: CONS DIV DIST 3 Secondary containment with leak detection Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off						
Liner Seams: Welded Factory Other Below-grade tank: Subsection I of 19.15.17.11 NMAC Volume: bbl Type of fluid: CONS DIV DIST 3 Secondary containment with leak detection Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off						
Liner Seams: Welded Factory Other						
Liner Seams: Welded Factory Other						
Liner Seams: Welded Factory Other						

Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks) Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school, institution or church) Four foot height, four strands of barbed wire evenly spaced between one and four feet Alternate. Please specify	hospital,				
Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks) Screen Netting Other Monthly inspections (If netting or screening is not physically feasible)					
s. Signs: Subsection C of 19.15.17.11 NMAC 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers Signed in compliance with 19.15.3.103 NMAC					
Administrative Approvals and Exceptions: Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance. Please check a box if one or more of the following is requested, if not leave blank: Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau consideration of approval. Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.	office for				
Siting Criteria (regarding permitting): 19.15.17.10 NMAC Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of accept material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the approance office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of a Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to dry above-grade tanks associated with a closed-loop system.	ppriate district pproval.				
Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No				
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No				
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (Applies to temporary, emergency, or cavitation pits and below-grade tanks) - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image					
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (Applies to permanent pits) - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No ☐ NA				
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No				
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No				
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No				
Within the area overlying a subsurface mine Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No				
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map					
Within a 100-year floodplain FEMA map	Yes No				

Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are
attached. Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC ☐ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC
Previously Approved Design (attach copy of design) API Number: or Permit Number:
Closed-loop Systems Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached. Confering and Hudrococlogic Data (only for on site classes), beard want to a gripmants of Beautre (2) of Subsection B of 19.15.17.0
Geologic and Hydrogeologic Data (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9 Siting Criteria Compliance Demonstrations (only for on-site closure) - based upon the appropriate requirements of 19.15.17.10 NMAC Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC
and 19.15.17.13 NMAC
☐ Previously Approved Design (attach copy of design) API Number:
above ground steel tanks or haul-off bins and propose to implement waste removal for closure)
Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached. Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC Climatological Factors Assessment Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC Quality Control/Quality Assurance Construction and Installation Plan Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC Muisance or Hazardous Odors, including H ₂ S, Prevention Plan Gil Field Waste Stream Characterization Monitoring and Inspection Plan Erosion Control Plan Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC
Proposed Closure: 19.15.17.13 NMAC Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan. Type: Drilling Workover Emergency Cavitation P&A Permanent Pit Below-grade Tank Closed-loop System Alternative Proposed Closure Method: Waste Excavation and Removal Waste Removal (Closed-loop systems only) On-site Closure Method (Only for temporary pits and closed-loop systems) In-place Burial On-site Trench Burial Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)
Naste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached. Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings) Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: (19.15.17.13.D NMAC) Instructions: Please indentify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more than two							
Disposal Facility Name: ADIA MOS Protty Lady Disposal Facility Permit Number: APT VII 3	0-1245-3042						
Disposal Facility Name: Alla Moss Pretty Lady Disposal Facility Name: Environment Lady Disposal Facility Name: Environment Lady Disposal Facility Permit Number: MM-01-voll							
Will any of the proposed closed-loop system operations and associated activities occur on or in areas that will not be used for future service and operations? Yes (If yes, please provide the information below) No							
Required for impacted areas which will not be used for future service and operations: Soil Backfill and Cover Design Specifications based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC							
17. Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.							
Ground water is less than 50 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA						
Ground water is between 50 and 100 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells							
Ground water is more than 100 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA						
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No						
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image							
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site							
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality							
Within 500 feet of a wetland US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No						
Within the area overlying a subsurface mine Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division							
 Within an unstable area. Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map 	☐ Yes ☐ No						
Within a 100-year floodplain FEMA map	☐ Yes ☐ No						
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached. Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of 19.15.17.11 NMAC Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.13 NMAC Protocols and Procedures - based upon the appropriate requirements of 5ubsection F of 19.15.17.13 NMAC Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC Sisposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved) Soil Cover Design - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC							

19. Operator Application Certification:	
I hereby certify that the information submitted with this application is true, a	ccurate and complete to the best of my knowledge and belief.
Name (Print): Patricio W. Sanchez	Title: Distorct Engineer
Signature: Anti-Wang	Date: 8-8-2008
e-mail address: Psancheze energen. Con	<u>.</u>
OCD Approval: Permit Application (including closure plan) KT Close	ne Plan (only) OCD Conditions (see attachment)
OCD Representative Signature: Boll Sall	2/23/1/ Approval Date: 8-18-08
Title: Enviro/spee	OCD Permit Number:
21. Closure Report (required within 60 days of closure completion): Subsect Instructions: Operators are required to obtain an approved closure plan put. The closure report is required to be submitted to the division within 60 days section of the form until an approved closure plan has been obtained and the	rior to implementing any closure activities and submitting the closure report. s of the completion of the closure activities. Please do not complete this
Closure Method: Name and Removal On-Site Closure Method Al If different from approved plan, please explain.	ternative Closure Method Waste Removal (Closed-loop systems only)
two facilities were utilized	
Required for impacted areas which will not be used for future service and op Site Reclamation (Photo Documentation) Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique	erations:
mark in the box, that the documents are attached. Proof of Closure Notice (surface owner and division) Proof of Deed Notice (required for on-site closure) Plot Plan (for on-site closures and temporary pits) Confirmation Sampling Analytical Results (if applicable) WALL Waste Material Sampling Analytical Results (required for on-site closure) Disposal Facility Name and Permit Number Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique Site Reclamation (Photo Documentation)	ure) NAD: 1927 1983
Operator Closure Certification: I hereby certify that the information and attachments submitted with this clos belief. I also certify that the closure complies with all applicable closure requirements. Name (Print): Pattle W. Sank Z	
Signature: Julia W. Lang	Date: 12/19/2/08
e-mail address: DS unche 26 Polition. Com	Telephone: 505,324, 414

Closed-loop Design Plan:

Our closed loop system will not entail a drying pad, temporary pit, below grade tank or sump. It will entail an above ground tank suitable for holding the cuttings and fluids for rig operations. The tank will be of sufficient volume to maintain a safe free board between disposal of the liquids and solids from rig operations.

- 1) Fencing is not required for an above ground closed-loop system.
- 2) It will be signed in compliance with 19.15.3.103 NMAC.
- 3) A frac tank will be on location to store fresh water.

Closed-loop Operating and Maintenance Plan:

The closed-loop tank will be operated and maintained; to contain liquids and solids, to aid in the prevention of contamination of fresh water sources, in order to protect public health and the environment. To attain this goal the following steps will be followed:

- 1) The liquids will be vacuumed out and disposed of at the Agua Moss Pretty Lady #1 facility (Disposal API Number 30-045-30922). Solids in the closed-loop tank will be vacuumed out and disposed of at Envirotech (Permit Number NM-01-0011) on a periodic basis to prevent over topping.
- 2) No hazardous waste, miscellaneous solid waste or debris will be discharged into or stored in the tank. Only fluids or cuttings used or generated by rig operations will be placed or stored in the tank.
- 3) The division district office will be notified within 48 hours of the discovery of compromised integrity of the closed-loop tank. Upon the discovery of the compromised tank, repairs will be enacted immediately.
- 4) All of the above operations will be inspected and a log will be signed and dated. During rig operations the inspection will be daily.

Closed-loop Closure Plan:

The closed loop tank will be closed in accordance with 19.15.17.13. This will be done by transporting cuttings and all remaining sludge to Envirotech (Permit Number NM-01-0011) following rig operations. All remaining liquids will be transported and disposed of in the Agua Moss Pretty Lady #1 facility (Disposal API number 30-045-30922). The tanks will be removed from the location as part of the rig move. At time of well abandonment, the site will be reclaimed and re-vegetated to pre-existing conditions when possible.

DISTRICT I 1625 N. French Dr., Hobbs, N.M. 88240

State of New Mexico

Form C-102 Revised August 15, 2000

DISTRICT II 811 South First, Artesia, R.M. 88210

DISTRICT III 1000 Rio Breson Rd., Asteo, N.M. 87410

2040 South Pacheco Santa Fe, NM 87505

Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

☐ AMENDED REPORT

OIL CONSERVATION DIVISION

DISTRICT IV 2040 South Pacheco, Santa Fe, RM 87805 WELL LOCATION AND ACREAGE DEDICATION PLAT 'API Number Poel Code 0-039-30031 97540 Gras Property Code 21994 SAN JUAN 30-4 Unit 300 OCRID H Operator Name Rievation **ENERGEN RESOURCES CORPORATION** 7471' 10 Surface Location Feet from the UL or lot no. Borth/South line Section Lot Idn Feet from the East/Vest line County RIO ARRIBA 1 9 30N 4W 1605 SOUTH 1055 EAST

11 Bottom Hole Location If Different From Surface UL or lot po. Lot Idn Peet from the North/South line Post from the Bast/West Line County Dedicated Acres Joint or Infill M Connolidation Code Green No. 160

16	NO ALLOWADIA							THE DIVISION
	-					яю 3-1/4 Вым 1953	BC	17 OPERATOR CERTIFICATION I hereby certify that the systemation contained herein in trust and complete to the best of my inscription and balls?
		+ . _			- +	(G) , AU LONG	5282.23' (M)	Signature Saith Printed Harma Drilling Engineer Title 7/31/06
				LAT. 36.83	7.25489 W	0	N 004'46" W	18 SURVEYOR CERTIFICATION I hereby certify that the mell landton shows on this plat was plotted from field nature of actual zurveys unade by we or under my supervision, and that the cause to true and correct to the best of my belief. JUNE 5, 2006 Date of thereby R. RUSS Besighters and Sub-pair-processing purpoper.
		 	FND 3-1/4" BC BLM 1933	N 907 N 89"59"41"	'00' E 'W 2639.	2640.00' (R) 65' (M) RM 185	5 8C	DANGO RUSSET PO