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

## State of New Mexico **Energy Minerals and Natural Resources** Department Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505



Form C-144 June 24, 2008

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

JUL 16 2008 OCD-ARTESIA

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

Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, below-grade tank or alternative request

ase he advised that approval of the 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, t	egulations or ordinances.			
Operator: COG Operating LLC	OGRID #: 229137			
Address: 550 W. Texas, Suite 1300, Midland, TX 7970				
Facility or well name. GJ West Coop Unit #141				
API Number: 30-015-29298 OC	D Permit Number:			
U/L or Qtr/Qtr N Section 21 Township 17S	Range 29E County: Eddy			
Center of Proposed Design: Latitude N/A	Longitude <u>N/A</u> NAD: <u>1927</u> 1983			
Surface Owner: Federal State Private Tribal Trust or Indian Allotment				
Pit: Subsection F or G of 19.15.17.11 NMAC	☐ Closed-loop System: Subsection H of 19.15.17.11 NMAC			
Temporary: Drilling Workover	☐ Drying Pad ☐ Tanks ☐ Haul-off Bins ☐ Other			
Permanent Emergency Cavitation Steel Pit	☐ Lined ☐ Unlined			
Lined Unlined	Liner type: Thicknessmil			
Liner type: Thicknessmil	☐ Other			
Other String-Reinforced	Seams:  Welded  Factory  Other			
Seams:  Welded  Factory  Other	Volume:bblyd³			
Volume: bbl Dimensions: L x W x D	Dimensions: Lengthx Width			
Below-grade tank: Subsection 1 of 19.15.17.11 NMAC	Fencing: Subsection D of 19 15 17 11 NMAC			
Volumebbl	Chain link, six feet in height, two strands of barbed wire at top			
Type of fluid	Four foot height, four strands of barbed wire evenly spaced between one and four feet			
Tank Construction material	Netting: Subsection E of 19.15 17.11 NMAC			
Secondary containment with leak detection	Screen Netting Other			
☐ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off	Monthly inspections			
Visible sidewalls and liner	Signs: Subsection C of 19.15.17 11 NMAC			
Visible sidewalls only	12'x24', 2' lettering, providing Operator's name, site location, and emergency			
Other	telephone numbers  Signed in compliance with 19 15 3 103 NMAC			
Liner type. Thicknessmil  HDPE PVC	Signed in compliance with 19 15 5 105 NIVIAC			
Other	,			
Alternative Method: Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration	Administrative Approvals and Exceptions:  Justifications and/or demonstrations of equivalency are required Please refer to 19.15.17 NMAC for guidance.			
of approval.	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 office for consideration of approval.  Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.			

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 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. Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drying pads or above-grade tanks associated with a closed-loop system.			
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	☐ Yes ☐ No ☐ NA		
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	☐ Yes ☐ No		
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 19.15.17.12 NMAC  Closure Plan - based upon the appropriate requirements 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.  Geologic and Hydrogeologic Data (required for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9  Siting Criteria Compliance Demonstrations (required for on-site closure) - based upon the appropriate requirements of 19.15.17.11 NMAC  Design Plan - based upon the appropriate requirements of 19.15.17.12 NMAC  Closure Plan - 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:			
Previously Approved Design (attach copy of design) API Number:			

Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC  Instructions: Find of the following items must be attached to the application. Plants indicate by a check work in the box that the decuments are				
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.				
<ul> <li>☐ Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC</li> <li>☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC</li> </ul>				
☐ 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				
☐ Liner Specifications and Compatibility Assessment - 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				
☐ Nuisance or Hazardous Odors, including H <sub>2</sub> S, Prevention Plan				
☐ Emergency Response Plan ☐ Oil 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				
Type: ☑ Drilling ☐ Workover ☐ Emergency ☐ Cavitation ☐ Permanent Pit ☐ Below-grade Tank ☒ Closed-loop System ☐	Alternative			
Proposed Closure Method: Waste Excavation and Removal				
<ul><li>☐ Waste Removal (Closed-loop systems only)</li><li>☐ On-site Closure Method (Only for temporary pits and closed-loop systems)</li></ul>				
In-place Burial On-site Trench Burial				
Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for con	nsideration)			
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.	□ Vaa □ Na			
- 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	<ul><li>☐ Yes ☐ No</li><li>☐ NA</li></ul>			
- NW Office of the State Eligineer - twaters database scarcii, 0303, Data obtained from hearby wells	□ IVA			
Ground water is more than 100 feet below the bottom of the buried waste.	☐ Yes ☐ No			
- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	□ NA			
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa	☐ Yes ☐ No			
lake (measured from the ordinary high-water mark).				
- Topographic map; Visual inspection (certification) of the proposed site				
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.	☐ Yes ☐ No			
- 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	☐ Yes ☐ No			
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	☐ Yes ☐ No			
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.	☐ Yes ☐ No			
- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site				
Within the area overlying a subsurface mine.	☐ Yes ☐ No			
- 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	☐ Yes ☐ No			
Society, Topographic map				
Within a 100-year floodplain.	☐ Yes ☐ No			
- FEMA map				

closure plan. Please indicate, by a check mark in the box, that the  Protocols and Procedures - based upon the appropriate requirements of Confirmation Sampling Plan (if applicable) - based upon the appropria Disposal Facility Name and Permit Number (for liquids, drilling fluids Soil Backfill and Cover Design Specifications - based upon the approp Re-vegetation Plan - based upon the appropriate requirements of Subset Site Reclamation Plan - based upon the appropriate requirements of Subset Site Reclamation Plan - based upon the appropriate requirements of Subset Site Reclamation Plan - based upon the appropriate requirements of Subset Site Reclamation Plan - based upon the appropriate requirements of Subset Site Reclamation Plan - based upon the appropriate requirements of Subset Site Reclamation Plan - based upon the appropriate requirements of Subset Site Reclamation Plan - based upon the appropriate requirements of Subset Site Reclamation Plan - based upon the appropriate requirements of Subset Site Reclamation Plan - based upon the appropriate requirements of Subset Site Reclamation Plan - based upon the appropriate requirements of Subset Site Reclamation Plan - based upon the appropriate requirements of Subset Site Reclamation Plan - based upon the appropriate requirements of Subset Site Reclamation Plan - based upon the appropriate requirements of Subset Site Reclamation Plan - based upon the appropriate requirements of Subset Site Reclamation Plan - based upon the appropriate requirements of Subset Site Reclamation Plan - based upon the appropriate requirements of Subset Site Reclamation Plan - based upon the appropriate requirements of Subset Site Reclamation Plan - based upon the appropriate requirements of Subset Site Reclamation Plan - based upon the appropriate requirements of Subset Site Reclamation Plan - based upon the appropriate Plan - based upon the appropriat	documents are attached. f 19 15.17.13 NMAC the requirements of Subsection F of 19.1 and drill cuttings) triate requirements of Subsection H of 1 ection 1 of 19.15.17.13 NMAC			
Waste Removal Closure For Closed-loop Systems That Utilize Hor facilities for the disposal of liquids, drilling fluids and drill cutting		NMAC) Instructions: Please indentify the facility		
Disposal Facility Name: CRI	ngs.  Disposal Facility Permit Num	nber R9166		
On-Site Closure Plan Checklist: (19 15 17.13 NMAC) Instructions: Each				
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 and Design of Burial Trench (if applicable) based upon the appropriate requirements of 19 15 17.11 NMAC  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  Waste Material Sampling Plan - 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 or in case on-site closure standards cannot be achieved)  Soil Cover Design - 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				
Operator Application Certification:				
I hereby certify that the information submitted with this application	is true, accurate and complete to th	e best of my knowledge and belief.		
Name (Print): Kanicia Carrillo	Title:	Regulatory Analyst		
Signature:	Date:	07/15/08		
e-mail address: kcarrillo@conchoresources.com		432-685-4332_		
OCD Approval: Permit Application (including closure plan) Closure Plan (only)  OCD Representative Signature: Approval Date: 7/16/09  Title: C208/4/				
OCD Representative Signature:	Leve . Level Septermit Numb	Approval Date: 7/18/08  ber: 0208/4/		
OCD Representative Signature:  Title:  Closure Report (required within 60 days of closure completion):	The Refinit Number	ber: <u>0208 14 f</u> AC		
Title:  Closure Report (required within 60 days of closure completion):  Closure Method:  Waste Excavation and Removal On-Site Closure Method  If different from approved plan, please explain.	Subsection K of 19.15.17.13 NM  Closure Comp	AC Detion Date:		
Closure Report (required within 60 days of closure completion):  Closure Method:  Waste Excavation and Removal On-Site Closure Method  If different from approved plan, please explain.  Closure Report Attachment Checklist: Instructions: Each of the mark in the box, that the documents are attached.  Proof of Closure Notice  Proof of Deed Notice (if applicable)  Plot Plan  Confirmation Sampling Analytical Results  Waste Material Sampling Analytical Results  Disposal Facility Name and Permit Number  Soil Backfilling and Cover Installation  Re-vegetation Application Rates and Seeding Technique  Site Reclamation (Photo Documentation)	Subsection K of 19.15.17.13 NM  Closure Comp	AC Detion Date:		
Closure Report (required within 60 days of closure completion):  Closure Method:  Waste Excavation and Removal On-Site Closure Method  If different from approved plan, please explain.  Closure Report Attachment Checklist: Instructions: Each of the mark in the box, that the documents are attached.  Proof of Closure Notice  Proof of Deed Notice (if applicable)  Plot Plan  Confirmation Sampling Analytical Results  Waste Material Sampling Analytical Results  Disposal Facility Name and Permit Number  Soil Backfilling and Cover Installation  Re-vegetation Application Rates and Seeding Technique	Subsection K of 19.15.17.13 NM  Closure Comp  Alternative Closure Method  following items must be attached	AC Detion Date:		
Closure Report (required within 60 days of closure completion):  Closure Method: Waste Excavation and Removal On-Site Closure Method If different from approved plan, please explain.  Closure Report Attachment Checklist: Instructions: Each of the mark in the box, that the documents are attached. Proof of Closure Notice Proof of Deed Notice (if applicable) Plot Plan Confirmation Sampling Analytical Results Waste Material Sampling Analytical Results Disposal Facility Name and Permit Number Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique Site Reclamation (Photo Documentation) On-site Closure Location: Latitude	Subsection K of 19.15.17.13 NM  Closure Comp  Alternative Closure Method  following items must be attached  Longitude  this closure report is true, accurate	AC Detion Date:  NAD: 1927 1983  and complete to the best of my knowledge and		
Closure Report (required within 60 days of closure completion):  Closure Method:  Waste Excavation and Removal On-Site Closure Method  If different from approved plan, please explain.  Closure Report Attachment Checklist: Instructions: Each of the mark in the box, that the documents are attached.  Proof of Closure Notice  Proof of Deed Notice (if applicable)  Plot Plan  Confirmation Sampling Analytical Results  Waste Material Sampling Analytical Results  Disposal Facility Name and Permit Number  Soil Backfilling and Cover Installation  Re-vegetation Application Rates and Seeding Technique  Site Reclamation (Photo Documentation)  On-site Closure Location: Latitude  Operator Closure Certification:  I hereby certify that the information and attachments submitted with	Subsection K of 19.15.17.13 NM  Closure Comp  Alternative Closure Method  following items must be attached  Longitude  this closure report is true, accurate sure requirements and conditions s	AC Detion Date:  NAD: 1927 1983  and complete to the best of my knowledge and		
Closure Report (required within 60 days of closure completion):  Closure Method: Waste Excavation and Removal On-Site Closure Method If different from approved plan, please explain.  Closure Report Attachment Checklist: Instructions: Each of the mark in the box, that the documents are attached. Proof of Closure Notice Proof of Deed Notice (if applicable) Plot Plan Confirmation Sampling Analytical Results Waste Material Sampling Analytical Results Disposal Facility Name and Permit Number Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique Site Reclamation (Photo Documentation) On-site Closure Location: Latitude  Operator Closure Certification: I hereby certify that the information and attachments submitted with belief. I also certify that the closure complies with all applicable clo	Subsection K of 19.15.17.13 NM  Closure Comp  Alternative Closure Method  following items must be attached  Longitude  this closure report is true, accurate sure requirements and conditions s  Title:	AC Detion Date:    to the closure report. Please indicate, by a check		

## COG Operating LLC Closed Loop Equipment Diagram -**Blinebry Deepenings** Stand –by /Cuttings Steel Pit Shaker Mud Pump Steel Pit Water Tank Flow line Workover Rig Footprint Well \_Pipe Racks

## Closed Loop Operation & Maintenance Procedure

All drilling fluids are circulated over shakers and through steel work-over tanks.

Fines from shaker are dropped into stand by metal tank.

Additional tanks are used to capture unused drilling fluid or cement returns from casing jobs, as necessary.

At end of job, drilling fluid is disposed in a proper off location 3<sup>rd</sup> party injection well while fines are disposed of at a proper 3<sup>rd</sup> party waste disposal site.

This equipment will be maintained by rig crews that are on location.