EPWM - 003

GENERAL CORRESPONDENCE

2008 - Present

MARALEX
Disposal, LLC

210 Goddard Ave.
Ignacio, Colorado 81137
(970) 563-4000
FAX (970) 563-4116

RECEIVED
2009 JUL 20 PM 1 08

July 16, 2009

Wayne Price
State of New Mexico
Environmental Bureau Chief
1220 S. St. Francis Drive
Santa Fe, NM 87505

Dear Mr. Price:

Maralex Disposal, LLC respectfully requests an extension of the permit to operate the Centerpoint SWD #1 facility, located at Unit P, Section 24, Township 31N, Range 11W, San Juan County, New Mexico. Attached is a copy of our original request from July 16, 2008 as well as the subsequent approval.

Please note that Item 7 of the approval letter is currently being addressed. An application for a below-grade tank is being submitted to Mr. Brad Jones in order to bring the existing tank into compliance with the provisions of 19.15.17 NMAC.

Should you have any questions or require additional information, please let me know.

Sincerely,

Doris K. Ney
Production Technologist

Cc: Brad Jones

New Mexico Energy, Minerals and Natural Resources Department

Bill Richardson
Governor

Joanna Prukop
Cabinet Secretary
Reese Fullerton
Deputy Cabinet Secretary

Mark Fesmire
Division Director
Oil Conservation Division

August 19, 2008

Mr. Bob L. Bixler
Maralex Resources, Inc.
P.O. Box 338
Ignacio, Colorado 81137

RE: Temporary Approval to Treat and Use Produced Water: Permit EPWM - 003
Maralex Resources, Inc.
Center Point SWD #1: API# 30-045-33464
Location: SE/4, SE/4 Section 24, Township 31 North, Range 11 West, NMPM
San Juan County, New Mexico

Dear Mr. Bixler:

The New Mexico Oil Conservation Division (OCD) has reviewed Maralex Resources, Inc.'s (Maralex) request, dated July 16, 2008, to withdraw its application for a surface waste management facility permit and to treat produced water utilizing a combination of nano-filtration and reverse osmosis and reuse the treated produced water for drilling and frac operations. OCD accepts the withdraw of the surface waste management permit application. It is OCD's understanding that the concentrated wastewater generated from the treatment process will be disposed of by injection into Center Point SWD #1 (API# 30-045-33464). This request is hereby approved with the following understandings and conditions:

1. Maralex shall only accept produced water for treatment from the Fruitland Coal Formation.

2. Maralex shall store all produced water (treated and untreated) in above ground tanks. Maralex shall not manage any oilfield wastes at the proposed treatment and injection facility site on the ground in pits, ponds, below-grade tanks or land application units without an OCD approved permit.

3. Maralex shall only use the treated or untreated produced water for conventional drilling and frac operations.

4. Maralex shall verify that other generators of produce water or operators that wish to obtain treated or untreated produced water for reuse have OCD approval for such reuse prior to the release of any produced water. OCD requires individual generators of produce water or operators to obtain their own approval, separate from Maralex's approval, for reuse or disposition of treated or untreated produced water.

5. Maralex shall obtain a permit in accordance with the provisions of 19.15.17 NMAC to temporary store treated and untreated produced water off-site for reuse.

6. Maralex shall not discharge any treated or untreated produced water on the ground, to ground water, or into any surface water body without prior written authorization from the OCD Environmental Bureau in the Division's Santa Fe office.

7. Maralex shall bring the existing 350 bbl below-grade tank into compliance with the permitting, siting, design and construction, operational, closure, and transitional provisions of 19.15.17 NMAC.

8. Maralex shall properly dispose of the liquid waste streams, such as concentrate from the nano filtration and reverse osmosis systems, in a Maralex injection well permitted by OCD for the disposal of RCRA exempt waste material.

9. Maralex shall properly dispose of the of produced water treatment cartridge filters and membranes at an OCD permitted landfill or comply with the authorization request provisions and specified testing protocols of 19.15.9.712 NMAC for the disposal of produced water treatment cartridge filters and membranes, if applicable.

10. Maralex shall report all unauthorized discharges, spills, leaks and releases of produced water and conduct corrective action pursuant to WQCC Regulation 20.6.2.1203 NMAC and OCD Rule 116 (19.15.3.116 NMAC).

This authorization is approved for a period of one (1) year. **This temporary approval will expire August 19, 2009.** Renewal requests for temporary approvals shall be submitted 45 days prior to the expiration date. The OCD may revoke, suspend or impose additional operating conditions or limitations on a temporary approval at any time, if the OCD determines that the operator or the facility is in material breach of any applicable statutes or rules, or that such action is necessary for the protection of fresh water, public health or the environment.

Please be advised that approval of this request does not relieve the Maralex of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve Maralex of its responsibility to comply with any other applicable governmental authority's rules and regulations.

If you have any questions regarding this matter, please contact Brad A Jones of my staff at (505) 476-3487 or brad.a.jones@state.nm.us.

Sincerely,

Wayne Price
Environmental Bureau Chief

LWP/baj

cc: OCD District III Office, Aztec

July 16, 2008

Wayne Price
State of New Mexico
Environmental Bureau Chief
1220 S. St. Francis Drive
Santa Fe, New Mexico 87505

Dear Wayne Price,

Thank you for taking time to meet with us yesterday.

Maralex Resources, Inc. would like to apply for a permit as a generator of produced water and a user of treated produced water. We generate water from the fruitland coal formation and will bring water to Centerpoint from only that formation. We will not bring water from other sources to the Centerpoint facility. We expect to average about 200 barrels of produced water a day and use about 100 barrels a day of treated produced water. Maralex Resources is seeking a permit as a generator of produced water and a user of diverted treated produced water. We will use the treated water for drilling operations with lined pits and frac operations. The water will never touch the ground. We understand that this permit will be for one year and subject to the produced water rules once they come into effect.

Thank you for your time in this matter and we look forward to receiving our permit as soon as possible.

Sincerely,

Bob L. Bixler PE
Maralex Resources, Inc.
cc: Brad A. Jones
1220 S. St. Francis Drive
Santa Fe, New Mexico 87505

Chavez, Carl J, EMNRD

From: Jeremy Golob [jgolob@maralexinc.com]
Sent: Monday, June 29, 2009 2:15 PM
To: Chavez, Carl J, EMNRD
Subject: RE: NM Oil Conservation Division Produced Water Diversion Quarterly Report (April 1 - June 30, 2009) Reminder

0 for Maralex again this quarter.

Thanks,

Jeremy

-----Original Message-----
From: Chavez, Carl J, EMNRD [mailto:CarlJ.Chavez@state.nm.us]
Sent: Monday, June 29, 2009 9:01 AM
To: jgolob@maralexinc.com; Frost, Gwendolynne; monica.johnson@conocophillips.com; Karen Evans; Mayberry, Don; Jennifer.vancuren@dvn.com
Subject: NM Oil Conservation Division Produced Water Diversion Quarterly Report (April 1 - June 30, 2009) Reminder

Ladies and Gentlemen:

Reminder for the quarterly diversion numbers. Thanks.

Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.
Oil Conservation Division, Environmental Bureau
1220 South St. Francis Dr., Santa Fe, New Mexico 87505
Office: (505) 476-3490
Fax: (505) 476-3462
E-mail: CarlJ.Chavez@state.nm.us
Website: http://www.emnrd.state.nm.us/ocd/index.htm
(Pollution Prevention Guidance is under "Publications")

Chavez, Carl J, EMNRD

From: Jones, Brad A., EMNRD
Sent: Thursday, April 09, 2009 12:57 PM
To: Jeremy Golob
Cc: Chavez, Carl J, EMNRD
Subject: EPWM - 003 RE: Center Point Concrete "tank"

Jeremy,

Pursuant to Subsection H of 19.15.17.7 NMAC a "*sump means an impermeable vessel, or a collection device incorporated within a secondary containment system, with a capacity less than 500 gallons, which remains predominantly empty, serves as a drain or receptacle for de minimis releases on an intermittent basis and is not used to store, treat, dispose of or evaporate products or wastes.*" Pursuant to Paragraph 5 of Subsection B of 19.15.2.7 NMAC a "*below-grade tank means a vessel, excluding sumps and pressurized pipeline drip traps, where a portion of the tank's sidewalls is below the surrounding ground surface's elevation. Below-grade tank does not include an above ground storage tank that is located above or at the surrounding ground surface's elevation and is surrounded by berms.*" Based upon the information that has been provide to the OCD, the tank in question is a below-grade tank and as the operator you are required to bring the concrete below-grade tank into compliance with 19.15.17 NMAC.

In accordance with the design and construction specifications of Section 11 of 19.15.17. NMAC, an operator of a below-grade tank shall comply with the following:

"***A.*** *General specifications. An operator shall design and construct a pit, closed-loop system, below-grade tank or sump to contain liquids and solids and prevent contamination of fresh water and protect public health and the environment.*

C. *Signs. The operator shall post an upright sign not less than 12 inches by 24 inches with lettering not less than two inches in height in a conspicuous place on the fence surrounding the pit, closed-loop system or below-grade tank, unless the pit, closed-loop system or below-grade tank is located on a site where there is an existing well, signed in compliance with 19.15.16.8 NMAC, that is operated by the same operator. The operator shall post the sign in a manner and location such that a person can easily read the legend. The sign shall provide the following information: the operator's name; the location of the site by quarter-quarter or unit letter, section, township and range; and emergency telephone numbers.*

D. *Fencing.*

(1) *The operator shall fence or enclose a pit or below-grade tank in a manner that prevents unauthorized access and shall maintain the fences in good repair. Fences are not required if there is an adequate surrounding perimeter fence that prevents unauthorized access to the well site or facility, including the pit or below-grade tank. During drilling or workover operations, the operator is not required to fence the edge of the pit adjacent to the drilling or workover rig.*

(2) *The operator shall fence or enclose a pit or below-grade tank located within 1000 feet of a permanent residence, school, hospital, institution or church with a chain link security fence, at least six feet in height with at least two strands of barbed wire at the top. The operator shall ensure that all gates associated with the fence are closed and locked when responsible personnel are not on-site. During drilling or workover operations, the operator is not required to fence the edge of the temporary pit adjacent to the drilling or workover rig.*

(3) *The operator shall fence any other pit or below-grade tank to exclude livestock with a four foot fence that has at least four strands of barbed wire evenly spaced in the interval between one foot and four feet above ground level. The appropriate division district office may approve an alternative to this requirement if the operator demonstrates that an alternative provides equivalent or better protection. The appropriate division district office may impose additional fencing requirements for protection of wildlife in particular areas.*

E. *Netting. The operator shall ensure that a permanent pit or a permanent open top tank is screened, netted or otherwise rendered non-hazardous to wildlife, including migratory birds. Where netting or screening is not feasible, the operator shall on a monthly basis inspect for, and within 30 days of discovery, report discovery of dead migratory birds or other wildlife to the appropriate wildlife agency and to the appropriate division district office in order to facilitate assessment and implementation of measures to prevent incidents from reoccurring."*

In accordance with the design and construction specifications of Subsection I of 19.15.17.11 NMAC, "*The operator shall design and construct a below-grade tank in accordance with the following requirements, as applicable:*

(1) *The operator shall ensure that a below-grade tank is constructed of materials resistant to the below-grade tank's particular contents and resistant to damage from sunlight.*

(2) *A below-grade tank system shall have a properly constructed foundation consisting of a level base free of rocks, debris, sharp edges or irregularities to prevent punctures, cracks or indentations of the liner or tank bottom.*

(3) *The operator shall construct a below-grade tank to prevent overflow and the collection of surface water run-on.*

(4) *An operator shall construct a below-grade tank in accordance with one of the following designs.*

(a) *An operator may construct and use a below-grade tank that does not have double walls provided that the below-grade tank's side walls are open for visual inspection for leaks, the below-grade tank's bottom is elevated a minimum of six inches above the underlying ground surface and the below-grade tank is underlain with a geomembrane liner, which may be covered with gravel, to divert leaked liquid to a location that can be visually inspected. The operator shall equip below-grade tanks designed in this manner with a properly operating automatic high-level shut-off control device and manual controls to prevent overflows. The geomembrane liner shall consist of 30-mil flexible PVC or 60-mil HDPE liner, or an equivalent liner material that the appropriate division district office approves. The geomembrane liner shall have a hydraulic conductivity no greater than 1 x 10^{-9} cm/sec. The geomembrane liner shall be composed of an impervious, synthetic material that is resistant to petroleum hydrocarbons, salts and acidic and alkaline solutions. The liner material shall be resistant to ultraviolet light. Liner compatibility shall comply with EPA SW-846 method 9090A.*

(b) *All other below-grade tanks, in which the side walls are not open for visible inspection for leaks shall be double walled with leak detection capability.*

(c) *An operator may construct a below-grade tank according to an alternative system that the appropriate district office approves based upon the operator's demonstration that the alternative provides equivalent or better protection."*

Based upon the information provided in the email below, Maralex is considering to propose an "alternative" system or design. Maralex must demonstrate to OCD that the proposed "alternative" provides equivalent or better protection than the approved designs and specifications identified in Paragraphs (1) through (4) of 19.15.17.11.I NMAC. If Maralex chooses to decommission the below-grade tank, then Maralex shall submit a form C-144 and a closure plan in accordance with 19.15.17 NMAC for OCD's review and consideration of approval. The closure plan shall include the plugging technique for the drains to the existing tank. OCD's approval of the closure plan is required prior to implementing any closure activities. \

Please remember, as an operator of a below-grade tank you are required to comply with all of the applicable requires within 19.15.17 NMAC. This includes the operational requirements. Please familiarize yourself with the regulation. If you have any questions regarding this matter, please do not hesitate to contact me.

Brad

Brad A. Jones
Environmental Engineer
Environmental Bureau
NM Oil Conservation Division
1220 S. St. Francis Drive
Santa Fe, New Mexico 87505
E-mail: brad.a.jones@state.nm.us
Office: (505) 476-3487
Fax: (505) 476-3462

From: Jeremy Golob [mailto:jgolob@maralexinc.com]
Sent: Thursday, April 02, 2009 3:49 PM
To: Jones, Brad A., EMNRD
Subject: Center Point Concrete "tank"

Hi Brad,

As you probably recall, one of the conditions of our temporary permit to treat produced water was that we bring our concrete "tank" into compliance with 19.15.17 NMAC.

The concrete tank was built because the surface landowner specified that we build our offloading and injection building with sloped floors and drains. These drains were required to flow out into a concrete sump. We built the facility per our lease agreement thinking that it would be a good emergency precaution in the unlikely event of an accidental spill.

The sump was a "mono-pour" design and does not have any cold joints. The walls and floor are 10" thick solid concrete. It has an expanded metal roof that keeps out birds, animals etc.

I am proposing for your review a practical solution that I think will very adequately protect groundwater resources.

1) Steam clean the pit.
2) Install a geomaterial liner (kevlar, spec sheet attached) from ATI.
3) Spray in a 60 mil liner from ATI (spec sheet attached).
4) The pit will be empty except for direct rain/snowfall. If water is spilled inside the building, we will immediately vacuum out the pit keeping it emptied of produced water. Our operator will inspect the pit daily.

We view this as an emergency pit only, and as a good measure for protection of the environment. Other options I looked at would require an extensive amount of permitting and much higher cost. The next best option I can think of would be to plug the drains and take the emergency pit out of service.

Please advise if I can provide any additional information.

Thank you for your consideration.

Best regards,

D. Jeremy Golob, P.E.
Sr. Engineer
Maralex Resources, Inc.
Office: (970) 563-4000
Cell: (970) 799-4278
Fax: (970) 563-4116
Email: jgolob@maralexinc.com

Chavez, Carl J, EMNRD

From: Jeremy Golob [jgolob@maralexinc.com]
Sent: Wednesday, April 22, 2009 6:29 PM
To: Chavez, Carl J, EMNRD
Subject: RE: Produced Water Diversion Quarterly Report (Jan 1 - March 31, 2009)
Attachments: Maralex Temp Approval.pdf

Hi Carl,

Attached per your request. I'll be out of the office until Monday. If you need anything else I can respond to you when I return.

Best regards,

D. Jeremy Golob

Sr. Engineer
Maralex Resources, Inc.
Office: (970) 563-4000
Cell: (970) 799-4278
Fax: (970) 563-4116
Email: jgolob@maralexinc.com

-----Original Message-----
From: Chavez, Carl J, EMNRD [mailto:CarlJ.Chavez@state.nm.us]
Sent: Tuesday, April 21, 2009 5:50 PM
To: jgolob@maralexinc.com; gwendolynne.frost@conocophillips.com; monica.johnson@conocophillips.com; karen.evans@altelainc.com
Subject: RE: Produced Water Diversion Quarterly Report (Jan 1 - March 31, 2009)

Ladies and Gentlemen:

I am writing to request that you mark your calendars to report your diversion numbers (gallons) to me the day after each quarter ends, since the numbers must be reported to OCD Management by the 6th day after each quarter or period ends.

Please contact me if you have questions. Thank you.

Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.
Oil Conservation Division, Environmental Bureau
1220 South St. Francis Dr., Santa Fe, New Mexico 87505
Office: (505) 476-3490
Fax: (505) 476-3462
E-mail: CarlJ.Chavez@state.nm.us
Website: http://www.emnrd.state.nm.us/ocd/index.htm
(Pollution Prevention Guidance is under "Publications")

From: Chavez, Carl J, EMNRD
Sent: Tuesday, April 14, 2009 8:48 AM
To: 'jgolob@maralexinc.com'; 'gwendolynne.frost@conocophillips.com'; 'monica.johnson@conocophillips.com'; 'karen.evans@altelainc.com'
Cc: Prouty, Jane, EMNRD
Subject: Produced Water Diversion Quarterly Report (Jan 1 - March 31, 2009)

Ladies and gentlemen:

Could you please send me your numbers for treated and diverted produced for the quarter listed above ASAP? Thank you.

Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.
Oil Conservation Division, Environmental Bureau
1220 South St. Francis Dr., Santa Fe, New Mexico 87505
Office: (505) 476-3490
Fax: (505) 476-3462
E-mail: CarlJ.Chavez@state.nm.us
Website: http://www.emnrd.state.nm.us/ocd/index.htm
(Pollution Prevention Guidance is under "Publications")

From: Jones, Brad A., EMNRD
Sent: Wednesday, February 18, 2009 2:04 PM
To: Chavez, Carl J, EMNRD
Subject: RE: Request to Give Presentation, meet with OCD

These are the numbers for treated and diverted produced for the last quarter of 2008.

D. Jeremy Golob
Sr. Engineer
Maralex Resources, Inc.
Office: (970) 563-4000
Cell: (970) 799-4278
Fax: (970) 563-4116

Maralex:
672,000 gallons/ 16,000 bbls

Matt Bruff
Vice President or
Karen K. Evans
Executive Administrator

ALTELA, INC.
DENVER TECHNOLOGY CENTER
5350 South Roslyn Street, Suite 430
Englewood, CO 80111

PHONE: (303) 993-1952 **FAX:** (303) 993-1955
EMAIL: karen.evans@altelainc.com **WEB:** altelainc.com

Altela, Inc.:
4,480 gallons/ 107 bbls

Monica D. Johnson
Sr. Environmental Scientist
ConocoPhillips Company
3401 East 30th Street
Farmington, NM 87402

Office: (505) 326-9829
Cell: (505) 320-9056
Direct Fax: (918) 662-1826
Office Fax: (505) 599-4005

ConocoPhillips/Burlington Resources/BLM/Sandia Labs/NM Tech Project:
7,560 gallons/ 180 bbls

The total volume of treated and diverted produced for the last quarter of 2008 is **684,040 gallons** or **16,287 barrels.**

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Tuesday, April 21, 2009 5:50 PM
To: 'jgolob@maralexinc.com'; 'gwendolynne.frost@conocophillips.com'; 'monica.johnson@conocophillips.com'; 'karen.evans@altelainc.com'
Subject: RE: Produced Water Diversion Quarterly Report (Jan 1 - March 31, 2009)

Ladies and Gentlemen:

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Please contact me if you have questions. Thank you.

Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.
Oil Conservation Division, Environmental Bureau
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Office: (505) 476-3490
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Cc: Prouty, Jane, EMNRD
Subject: Produced Water Diversion Quarterly Report (Jan 1 - March 31, 2009)

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Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.
Oil Conservation Division, Environmental Bureau
1220 South St. Francis Dr., Santa Fe, New Mexico 87505
Office: (505) 476-3490
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Website: http://www.emnrd.state.nm.us/ocd/index.htm
(Pollution Prevention Guidance is under "Publications")

From: Jones, Brad A., EMNRD
Sent: Wednesday, February 18, 2009 2:04 PM
To: Chavez, Carl J, EMNRD
Subject: RE: Request to Give Presentation, meet with OCD

These are the numbers for treated and diverted produced for the last quarter of 2008.

D. Jeremy Golob

Sr. Engineer
Maralex Resources, Inc.
Office: (970) 563-4000
Cell: (970) 799-4278
Fax: (970) 563-4116

Maralex:
672,000 gallons/ 16,000 bbls

Matt Bruff
Vice President or
Karen K. Evans
Executive Administrator

ALTELA, INC.
DENVER TECHNOLOGY CENTER
5350 South Roslyn Street, Suite 430
Englewood, CO 80111

PHONE: (303) 993-1952 **FAX:** (303) 993-1955
EMAIL: karen.evans@altelainc.com **WEB:** altelainc.com

Altela, Inc.:
4,480 gallons/ 107 bbls

Monica D. Johnson
Sr. Environmental Scientist
ConocoPhillips Company
3401 East 30th Street
Farmington, NM 87402
Office: (505) 326-9829
Cell: (505) 320-9056
Direct Fax: (918) 662-1826
Office Fax: (505) 599-4005

ConocoPhillips/Burlington Resources/BLM/Sandia Labs/NM Tech Project:
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The total volume of treated and diverted produced for the last quarter of 2008 is **684,040 gallons** or **16,287 barrels.**