



To: "Natalie Risner" <natalie@shopapropos.com>,
Cc:
Bcc:
Subject: Re: Nov. 12 Hearing for Freeport McMoRan

Thank you Natalie,
Here is the same link as you have provided below but active for others to access .

http://www.arb.ca.gov/fuels/lcfs/peerreview/050515staffreport_opgee.pdf

Ramona Hedges, (805) 781-5612
Records Management Supervisor
Custodian of Records
Planning Commission Secretary
rhedges@co.slo.ca.us
<http://www.sloplanning.org>
<http://www.facebook.com/SLOPlanning>
<http://twitter.com/SLOCoPlanning>



"Natalie Risner"	Hello Ramona -	11/02/2015 07:32:12 PM
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From: "Natalie Risner" <natalie@shopapropos.com>
To: <rhedges@co.slo.ca.us>
Date: 11/02/2015 07:32 PM
Subject: Nov. 12 Hearing for Freeport McMoRan

Hello Ramona –

Please can you forward this onto the commissioners? Thank you!

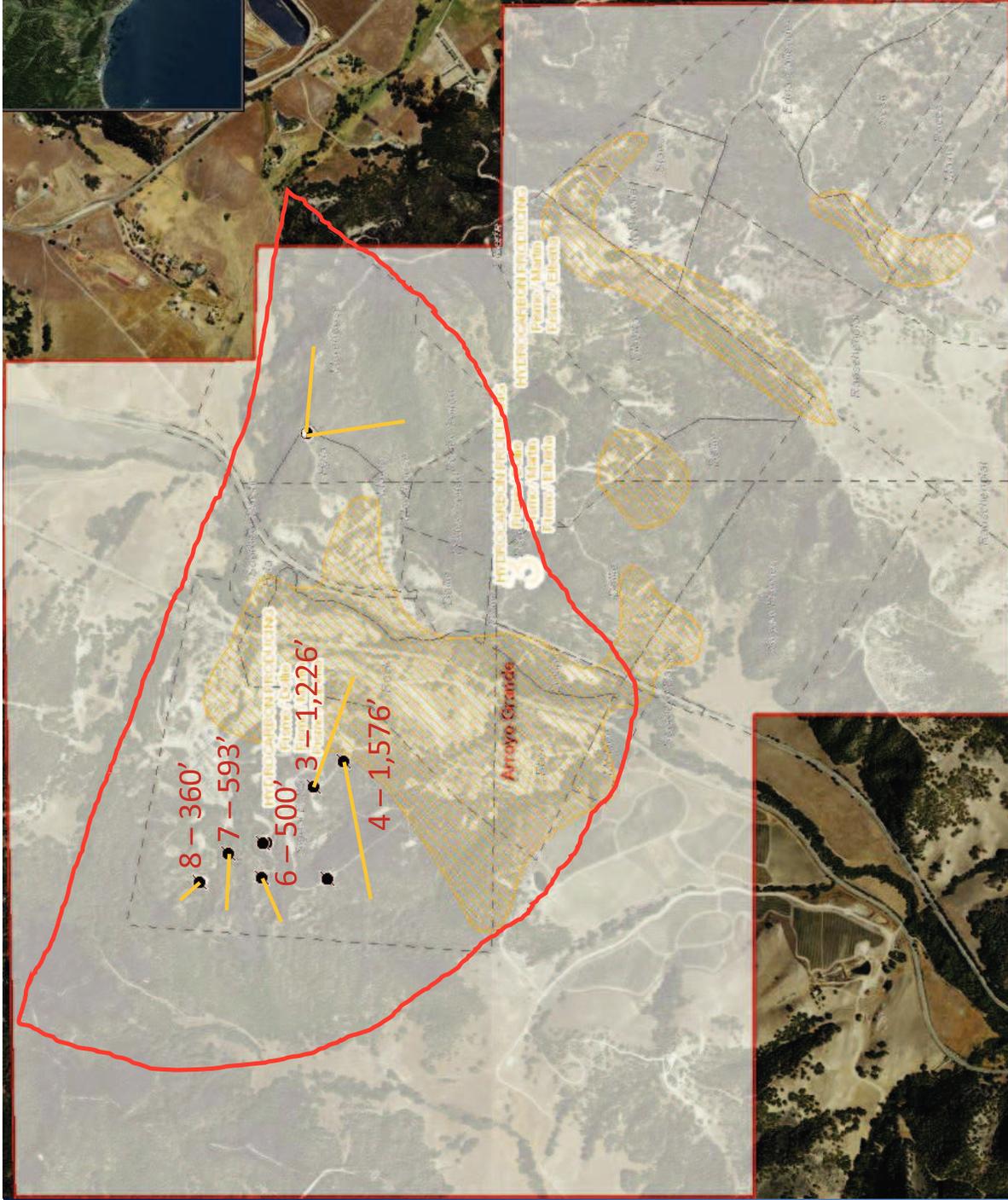
his was brought to my attention just want to make sure this has been reviewed as well . Does this part of the EIR from 2004 need to be reviewed for an extension to build these 31 remaining wells. This report came out in 2015 so I don't see how it could be included in the 2004 EIR.

I don't know if you know but Arroyo Grande is literally one of the most carbon -intensive oil fields in the world: http://www.arb.ca.gov/fuels/lcfs/peerreview/050515staffreport_opgee.pdf

That means a very large amount of greenhouse gases from oil extraction . (It takes a lot of energy to run those steam injection engines.) There was no mention of greenhouse gases in the 2004 EIR. It's possible that this project by itself could eliminate the entire greenhouse gas savings from the SLO County climate action plan.

Natalie Risner
805-441-0811

Active Water Disposal Injectors



Ginger Lordus 540-1109
777 Erhart Road, Arroyo Grande CA
Resident since 1996

Exemption criteria not met (40 CF.R. 146.4, 146.7) for a USDW Class II injection Freeport McMoRan

- b). It cannot now and will **not in the future** serve as a source of drinking water because:
- (3) it is so contaminated that it would be **economically or technologically impractical** to render that water fit for human consumption.
- A. There is questionable or lack of tracking of directional/lateral drilling and the “Exhibit” on Ginger Lordus’ deed APN 044-531-073 is a legal document Indicates that oil *can* be extracted from 500 feet below the property where the **current drinking water well is located**. See Attachment A “Deed”; and Attachment B “Proposed Aquifer Exemption Boundary map” online version indicating Lordus’ property (yellow bubble) and well (below yellow dotted line).
- B. If Freeport is purifying the water for their use, draining it down Pismo Creek, or giving it to vineries it **is economically and technologically practical** to render this water fit for grey water use and/or to “spare” other potable water for drinking.
- C. There is no evidence that clean potable water from neighboring aquifers is not the source of the water to replenish the oil aquifer through permeable membranes. Billions of gallons of water for many decades, continued to be used to extract oil. This is not consistent with SLO Counties Water Conservation Program.
- D. **Local drinking water is at risk** by the direct and indirect impact of this project as a result of:
- injecting toxic materials that leach into abutting aquifers through permeability;
 - risk of leaks on site or from transport of oil through rural neighborhoods (including a pipeline running parallel to the Old Oak Park Creek and above our aquifer;
 - disaster resilience is compromised due to non-ecological use of water, subsidence, earthquakes or negligence (Attachment C “Active Water disposal Injection Wells”);
 - increased risk of fire due flammable oil*.

***Home owner’s fire insurance is not available in this area.** Although, I have had a policy with Travelers since 1996, they are no longer issuing new fire insurance policies for this area (mine was “grand fathered in”) and is at risk of being cancelled; no other companies are providing it in this area. We also now pay an additional “Fire prevention Fee”. Oil is flammable, water is needed to put out fires.

If an exemption is considered please address the following

1. Freeport McMoRan to provide annual water testing of homeowner’s wells
2. Third party to provide a ground water monitoring program
3. Freeport McMoRan to provide legal “insurance contracts” to local property owners addressing ALL of the items listed above with full compensation related to compromised water, health and property values.
4. SLO counties income from Freeport McMoRan be used for Natural Resources portion of budget and contribute to a Disaster Resilience fund.

Attachments

- A. Lordus Deed
- B. Proposed Aquifer Exemption Boundary
- C. Active Water Disposal Injection Wells

Resources:

1. California State Budget Natural Resources
<http://www.ebudget.ca.gov/2015-16/pdf/Enacted/BudgetSummary/NaturalResources.pdf>
2. Oil industry’s toxic wastewater threatens California water supplies
<http://www.sacbee.com/opinion/op-ed/soapbox/article10718264.html>
3. Environmentalists Are Taking California To Court Over Illegal Oil Industry Wastewater Injection
<http://www.resilience.org/stories/2015-05-18/environmentalists-are-taking-california-to-court-over-illegal-oil-industry-wastewater-injection>
4. The Research Basis for Disaster Resilience
<https://www.huduser.gov/portal/periodicals/em/winter15/highlight2.html>

Recording Requested By:

When recorded mail document to:

Ginger Shekina Lordus
777 Erhart Road
Arroyo Grande CA 93420

TOMMY GONG
San Luis Obispo County – Clerk/Recorder

EB
4/28/2015
9:51 AM

Recorded at the request of
Public

DOC#: 2015019911

Titles: 1 Pages: 2



Fees 17.00
Taxes 0.00
Others 10.00
PAID 27.00

APN: 044-531-073

GRANT DEED

Above Space for Recorder's Use Only

SURVEY MONUMENT FEE \$10.00

THE UNDERSIGNED GRANTOR(S) DECLARE(S)
DOCUMENTARY TRANSFER TAX is \$ 0 exempt; transferring Title

- computed on full value of property conveyed, or
- computed on full value of items or encumbrances remaining at time of sale,
- Unincorporated area City of _____

FILED	FEE PAID	EXEMPT	OUT OF STATE
<i>EB</i>			

FOR A FULL VALUABLE CONSIDERATION, receipt of which is hereby acknowledged, _____

Ginger Shekina Lordus

hereby GRANT(s) to Ginger Shekina Lordus, as Trustee of the Ginger Shekina Lordus Revocable Living Trust

the following described real property in the County of San Luis Obispo, State of California.
for LEGAL DESCRIPTION, SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART

Dated: 4/27/2015

Ginger Shekina Lordus, Trustee

Ginger Shekina Lordus, Trustee
Printed Name(s) of Grantor(s)

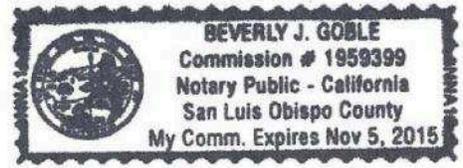
A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA }
COUNTY OF San Luis Obispo }

On April 27, 2015 before me, Beverly J. Goble
_____, Notary Public, personally appeared Ginger S. Lordus who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument. I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature Beverly J Goble



MAIL TAX STATEMENTS TO PARTY SHOWN ON THE FOLLOWING LINE: IF NO PARTY SO SHOWN, MAIL AS DIRECTED ABOVE.

Name _____ Street Address _____ City State & Zip _____

Exhibit "A"

PARCEL A:

PARCEL 2 OF PARCEL MAP CO-89-150, IN THE COUNTY OF SAN LUIS OBISPO, STATE OF CALIFORNIA, ACCORDING TO MAP RECORDED APRIL 25, 1995 IN BOOK 51 AT PAGE 46 OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

EXCEPTING THEREFROM 1/2 OF ALL OIL, GAS, HYDROCARBON SUBSTANCES, MINERAL AND OIL AND MINERAL RIGHTS IN AND UNDER SAID LAND, LYING BELOW A DEPTH OF 500 FEET BELOW THE SURFACE OF SAID LAND, BUT WITHOUT THE RIGHT OF ENTRY UPON THE SURFACE OF SAID LAND, AS RESERVED IN A DEED FROM MARY OLIVE LOVELL, ET AL., TO STANLEY QUIGLEY, RECORDED MARCH 9, 1959 IN BOOK 987, PAGE 189 OF OFFICIAL RECORDS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

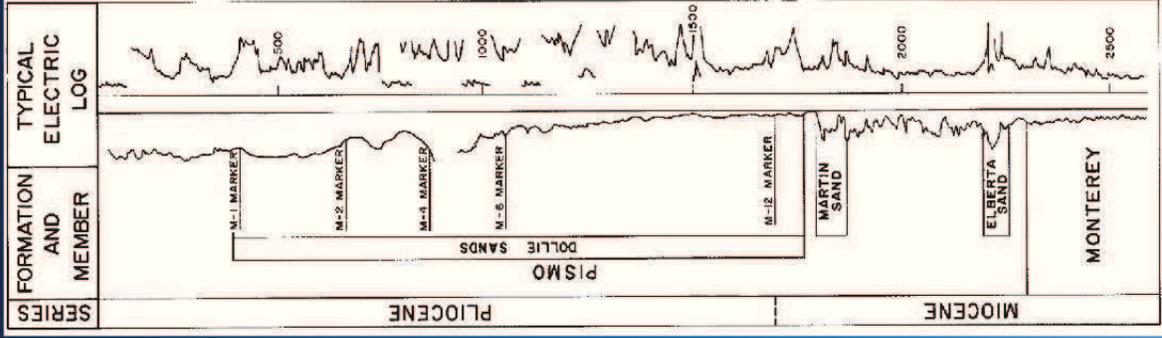
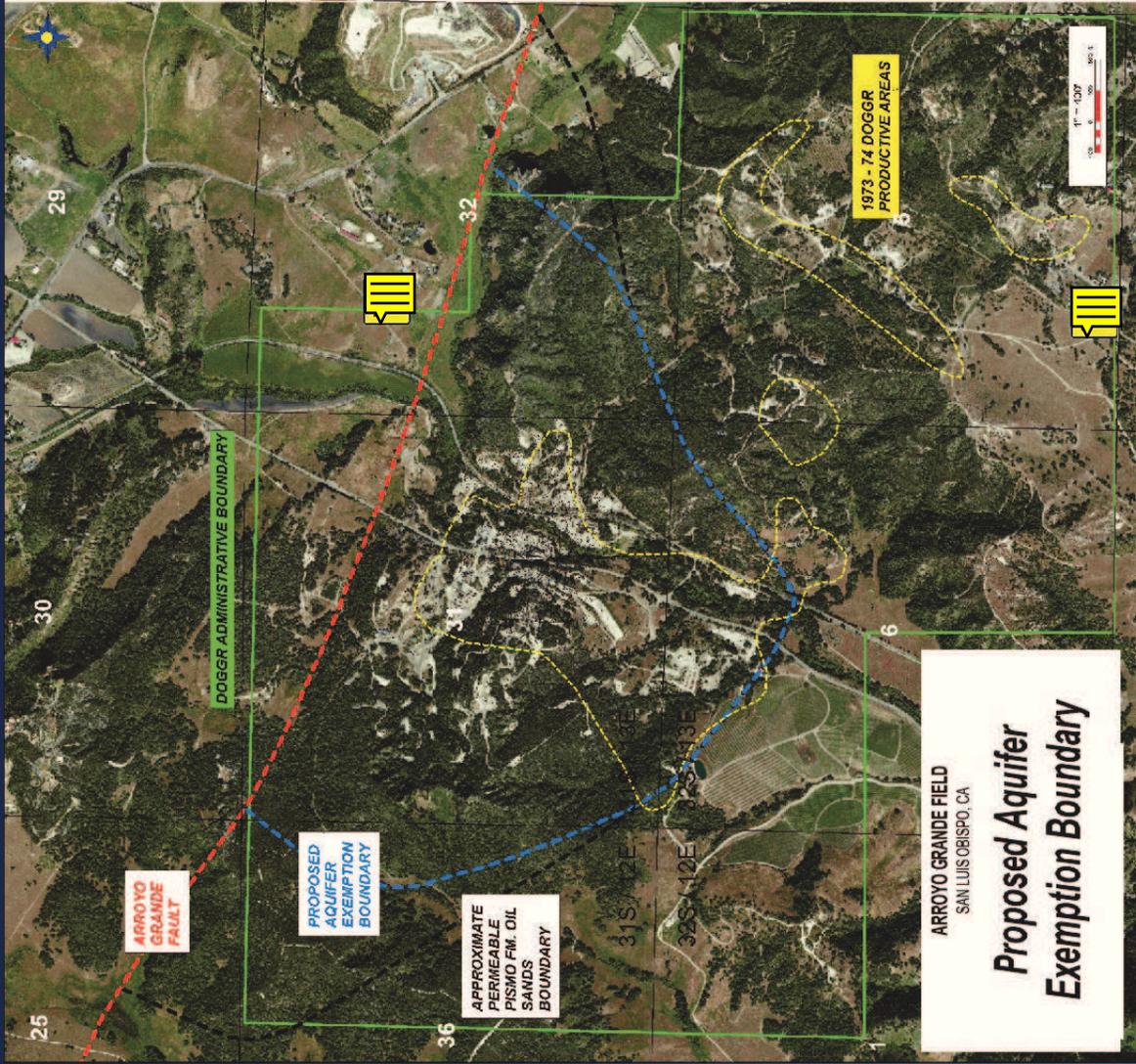
PARCEL B:

AN EASEMENT 20 FEET IN WIDTH, FOR INGRESS AND EGRESS, AND PUBLIC UTILITIES OVER THAT PORTION OF PARCEL C OF PARCEL MAP CO-81-09, IN THE COUNTY OF SAN LUIS OBISPO, STATE OF CALIFORNIA, RECORDED AUGUST 18, 1982 IN BOOK 32, PAGE 60 OF MAPS, MEASURED AT RIGHT ANGLES AND LYING 10 FEET EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE:

COMMENCING AT THE MOST SOUTHERLY CORNER OF PARCEL C, BEING ON THE CENTERLINE OF LADERA LANE, AN EXISTING 50.00 FEET ROAD EASEMENT AS SHOWN ON SAID MAP; THENCE NORTH 27° 08' 55" EAST, 243.33 FEET; THENCE CONTINUING ALONG CENTERLINE, NORTH 37° 12' 58" EAST, 168.06 FEET; THENCE LEAVING SAID CENTERLINE NORTH 52° 06' 28" WEST, 25.00 FEET TO THE WESTERLY RIGHT-OF-WAY OF SAID LADERA LANE THE TRUE POINT OF BEGINNING OF SAID CENTERLINE; THENCE LEAVING SAID NORTHWESTERLY RIGHT-OF-WAY AND CONTINUING NORTH 52° 06' 28" WEST, 70.10 FEET TO THE BEGINNING OF A 180.00 FOOT RADIUS CURVE CONCAVE NORTHEASTERLY; THENCE NORTHERLY ON THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 33° 25' 18", AN ARC DISTANCE OF 105.00 FEET TO A POINT OF COMPOUND CURVATURE WITH A 275.00 FOOT RADIUS CURVE CONCAVE WESTERLY; THENCE NORTHERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 20° 07' 58", AN ARC DISTANCE OF 96.63 FEET TO A POINT, SAID POINT LYING ON THE SOUTHEASTERLY LINE OF PARCEL "A" THE MOST EASTERLY CORNER OF PARCEL "A" BEARS NORTH 58° 31' 06" EAST 44.73 FEET.

THE SIDE LINES OF SAID EASEMENT TO BE LENGTHENED OR SHORTENED TO TERMINATE ON THE NORTHWESTERLY LINES OF PARCEL C AND OF LADERA LANE.

Proposed Area



**FM O&G Phase 4 CUP Extension Application
Response to Comments – 11/9/15**

Response to Ginger Lordus comments (*Submitted by Natalie Risner*)

Assertion 1: The containment of the aquifer is contradicted by the fact that oil is documented to exist under the Lordus property which is outside of the proposed boundaries.

Response: Oil exploration has historically occurred throughout the Price Canyon area. Several distinct aquifer exemption areas were established in the area at the time the Primacy Agreement was signed between the state and federal governments in 1983. Different distinct exemption areas were established due to the lack of hydrologic connectivity between the different oil reservoirs. Each of the exempted areas was established based on a demonstration of the presence of free oil.

Ms. Lordus' property is located adjacent to the southernmost exemption area as established in 1983 (the area commonly referred to as "the grub" throughout the county's hearings. The area is geologically disconnected from the Arroyo Grande Oil Field reservoir that is the subject of the current aquifer exemption application that has been prepared by the state. Currently there is no active injection or oil production operations in the exempted area adjacent to Ms. Lordus' property and FM O&G does not plan to initiate exploration and production activities in that area.

Assertion 2: The beneficial use water generated by the Water Reclamation Facility (WRF) validates the water in the oil aquifer can be used and that the area does not qualify for an exemption.

Response: The state's aquifer exemption application contains detailed information about the operation of the WRF. Within the geologic confines of the oil reservoir it is well documented that hydrocarbons are present from the base of the reservoir to the surface. Every barrel of water recovered from the aquifer is comingled with free oil that must be separated. Put simply, oil production operations are essential within the geologic parameters of the oil reservoir to recover the water so that it can be treated.

Approximately \$90 million was spent for purposes of installing the WRF. Even after the oil has been separated from the water recovered from within the reservoir, the costs of the operation require revenue from the oil sales to make the plant economic to operate. Without the combined existence of the oil production and WRF plant, the naturally occurring water within the reservoir cannot be used for any purpose.

Assertion 3: There is no evidence that clean potable water from neighboring aquifers is not the source of the water to replenish the oil aquifer through permeable membranes.

Response: The assertion is not accurate as it ignores the fact that the presence of the geologic containment barriers prohibit the flow of fluid in both directions. The oil produced in the Arroyo Grande Oilfield is "free oil", and can be mobilized for recovery via the introduction of heat. If the reservoir lacked containment, free oil in commercial quantities would have migrated beyond the geologic

boundaries of the reservoir and would be found in the surrounding water wells as oil is lighter than water.

More than nine wells have been drilled north of the Arroyo Grande Fault in Price Canyon in an attempt to recover oil in commercial quantities. As mentioned above, one of the wells, Silva 1, was drilled on the Risner property in 1982. All of the wells proved to be uneconomic and were abandoned due to the lack of presence of free oil in commercial quantities. The lack of commercial productivity north of the fault is a key indicator that the fault is confining the migration of the free oil within the reservoir and is likewise prohibiting the flow of fluids into the reservoir.

As noted in response one, the lack of presence of “free oil” in commercial quantities to the north of the fault barrier is one of several data points that proves oil is not migrating from the reservoir due to a seal. The seal also prevents the migration of water into the reservoir. The technical and geologic reviews conducted by the state agencies involved in this process have concurred there is no hydraulic connectivity between the area proposed for exemption and any surrounding source of clean water.

Assertion 4: The oil field operations pose an increased fire risk.

Response: FM O&G works closely with the California Department of Forestry and Fire Protection, also known as Cal Fire, operating under contract with San Luis Obispo County as the County Fire Department. Cal Fire conducts regular inspections of the Arroyo Grande Oil Field which cover compliance with the California Fire Code, vegetation management, emergency response planning, and hazardous materials management. As noted at the Planning Commission hearing on October 22nd, FM O&G has a strong compliance record related to Cal Fire’s requirements.

The Arroyo Grande Oil Field’s main production facility includes a 350,000 gallon fire water storage tank that stores a minimum of 250,000 gallons at all times. The field also includes 3 remote fire water tank settings that each store 20,000 gallons. The drilling of the remaining 31 wells that would be conducted under the CUP extension will be confined to previously cleared drill-pads that meet all fire prevention standards. Each well and each well site is inspected for fire safety compliance prior to initiation of drilling activities. All fire safety plans are regularly reviewed by operations personnel. Field personnel undergo training and unannounced fire drills.

Response to Mrs. Natalie Beller’s Comments

Assertion 1: ProPublica article dated 6/21/12 validates that the migration of injected fluids is not adequately known by scientists.

Response: The aquifer exemption application was developed based on a site specific geologic evaluation of the Arroyo Grande Oil Field by the Division of Oil, Gas, and Geothermal Resources (DOGGR), State and Regional Water Board. The article submitted by Ms. Beller does not contain any information related to the Arroyo Grande Oil Field that would contradict the site specific evaluation that was conducted by the state agencies involved in developing the aquifer exemption application. Information related to geologic formations in other states, which is the main focus of the article submitted by Ms. Beller, is not germane to the site specific issues in front of the County.

Response to Mr. James Pope Comments

Assertion 1: A groundwater monitoring network that connects wells on either side of the fault is needed to determine geologic containment.

Response: The monitoring pilot project proposed by Mr. Pope is outside of the scope of the Phase 4 CUP extension and is more pertinent to the state's exemption boundary review process.

The exemption application put forward jointly by DOGGR and the State Water Board contains extensive information that validates the sealing nature of the fault. The monitoring arrangement suggested by Mr. Pope contains technical deficiencies related to the procedural details and probable accuracy of gauging reservoir data on either side of the fault. The State and Regional Water Boards have previously indicated an intent to require additional site specific monitoring wells in the future as justified by specific injection well placements. For efficiency, we encourage the county to coordinate its interest on the placement and monitoring protocol of future wells with the State and Regional Water Boards to avoid unnecessary duplication and ensure the most effective data points are established.