MINUTES OF THE MEETING OF THE OIL CONSERVATION COMMISSION HELD ON MARCH 19, MARCH 20, AND MARCH 26, 2013

The Oil Conservation Commission met at 9 o'clock a.m. on March 19, 2013, in Porter Hall, Wendell Chino Building, 1220 S. St. Francis Drive, Santa Fe, New Mexico.

PRESENT:

ROBERT BALCH, Member TERRY WARNELL, Member JAMI BAILEY, Chair

Bill Brancard served as the Commission counsel.

The meeting was called to order by Chair Bailey. After a motion by Commissioner Balch and a second to the motion by Chair Bailey, the Commission by a majority vote approved and adopted the minutes of the Commission meeting held on February 13 and 15, 2013. After a motion by Commissioner Balch and a second to the motion by Commissioner Warnell, the Commission unanimously approved and adopted the minutes of the Commission meeting held on February 14, 2013.

Reopened Case 14664, Frontier Field Services, LLC's Motion to Amend Order No. R-13443, was called for final action. After a motion by Commissioner Balch and a second to the motion by Commissioner Warnell, the Commission unanimously agreed to adopt the draft order and signed Order No. R-13443-A in reopened Case 14664.

Case 14974, the application of the Oil Conservation Division (Division) for a pre-hearing to consider proposed amendments to certain provisions of Title 19, Chapter 15, Part 26 of the New Mexico Administrative Code, was called. Appearances were made by Gabrielle Gerholt and Jesse Allen for the Division and Michael Feldewert for OXY USA WTP LP and Occidental Permian, Ltd. and for the New Mexico Oil and Gas Association.

Ms. Gerholt made an opening statement explaining that a workgroup was formed to review the issue of acid gas disposal wells. She asked for this pre-hearing to see if the Commission is ready for the language proposed by the workgroup to be presented at a formal rulemaking hearing or whether the Commission has any concerns or thoughts that require further discussion by the workgroup. The Commission asked for certain issues to be addressed as follows:

Commissioner Warnell: difference between acid gas and sour gas, and clarification on whether the proposed rule references measured depth or true vertical depth.

Commissioner Balch: one-half mile limit for the area of interest and renewal language;

Chair Bailey: pressure maintenance aspects – need to have some idea on the pressures, both beginning and endpoint; re-injection of produced gas; and operation and maintenance of oil and gas processing facilities.

Ms. Gerholt said she would take the matter back to the workgroup to propose specific rules for disposal and form a new workgroup, including individuals with expertise in pressure maintenance and enhanced recovery, to address EOR and pressure maintenance issues.

Mr. Feldewert said that acid gas disposal wells dealing with CO₂ in pressure maintenance projects are different and should be discussed at the hearing on proposed amendments.

The case was continued indefinitely to allow Ms. Gerholt time to meet with the workgroups and discuss all of the issues brought up at this pre-hearing.

Cheryl Bada served as the Commission counsel for the following case.

Case 14948, the application of Los Lobos Renewable Power, LLC (Forms C-112) for approval to inject into a geothermal aquifer through two proposed geothermal injection wells at the site of the proposed Lightning Dock Geothermal Power Project, Hidalgo County, New Mexico, was called. Appearances were made by Michelle Henri for Los Lobos Renewable Power, LLC (Los Lobos), Charles Lakins for AmeriCulture, Inc. (AmeriCulture), and David Brooks for the Oil Conservation Division (OCD or Division). Ms. Henri made an opening statement describing the history of the geothermal project at issue in this case and the objection to it. She outlined the presentation of her case. Mr. Lakins made an opening statement in which he questioned which statute applies to this case, if an opinion from the State Engineer is required, and he identified some notice problems for WQCC permits. Mr. Brooks made an opening statement voicing the Division's stance of taking no position on whether the application should or would be granted but, if granted, urged that the Commission issue an order which will serve as a permit with conditions. He stated the primary issues in this case are water quality, waste, and correlative rights.

Ms. Henri's first witness was Ted De Rocher, Vice President of Operations with AltaRock Energy, Inc. based in Seattle, Washington. He explained the technology to be used in the Lightning Dock Project. He discussed fluid management and described the operational procedure to maintain the heat. He described the proposed monitoring program for all wells in the area. He discussed the water quality in the project area. Mr. Lakins, Mr. Brooks, Commissioner Warnell, Commissioner Balch, and Chair Bailey cross-examined the witness, and he was excused.

The next witness was David Janney, Senior Geologist with AMEC Environment and Infrastructure in Albuquerque, New Mexico. He discussed the filing of plats, logs, diagrammatic sketches, and notice proofs on each of the subject wells. He discussed AmeriCulture's letter of protest regarding the hydrologic connection between its well and the subject wells. He described the geology of the area. He presented completion and production data for the subject wells and identified the injection interval. He presented analytical results of the water quality and chemistry in the Los Lobos and AmeriCulture wells in the area. Mr. Lakins, Mr. Brooks, Commissioner Warnell, Commissioner Balch, and Chair Bailey cross-examined the witness, and he was excused.

Sworn public comments were taken as follows:

Bryn Davis, Las Cruces- supported the Los Lobos application and responded to questions from Mr. Lakins.

Cob Rios, Deming – supported the Los Lobos application and responded to questions from Mr. Lakins.

Dora Dominguez, Director of the Office of Business Advocacy for New Mexico in Santa Fe – supported the Los Lobos application and responded to questions from Mr. Lakins.

Tom Carroll with Carroll Strategies Communications in the Animas area – supported the Los Lobos application.

Steven Gamble, President of Eastern New Mexico University Station 1 in Portales - read letters of support for the Los Lobos application from various citizens of the area.

Kacie Peterson, an employee of Cirq Energy - after objections were raised was not allowed to comment.

Scott Richens, a resident of Hidalgo County – supported the Los Lobos application and responded to questions from Mr. Lakins.

Ms. Henri's next witness was John W. Shomaker, Hydrologist with John Shomaker & Associates in Albuquerque, New Mexico. He stated he prepared the summary of the data gained by the tracer test performed by Los Lobos and discussed the summary data in relation to differential and wells coming into equilibrium. He presented drawdown data for several observation wells. Mr. Lakins, Mr. Brooks, Commissioner Warnell, Commissioner Balch, and Chair Bailey cross-examined the witness, and he was excused.

The next witness was Chuck Smiley, Manager of Construction for Cirq Energy, Inc. (Cirq) in Animas. He discussed lease agreements from the Bureau of Land Management (BLM) and the State Land Office (SLO) to AmeriCulture. He explained the relationship of Cirq, Raser Technologies and Los Lobos. He spoke of affidavits stating that Los Lobos does not plan to install a water cooling tower for the Los Lobos project now or ever. He told of a Power Purchase Agreement Los Lobos entered into with PNM. He explained that Los Lobos does not own water rights but leases 150 acres from a resident. He discussed a Joint Facility Operating Agreement that AmeriCulture entered into with Lightning Dock Geothermal, Inc. The witness was excused.

The meeting was recessed at 4:53 p.m.

The meeting reconvened at 8:00 a.m. on March 20, 2013, in Morgan Hall, State Land Office Building, 310 Old Santa Fe Trail, Santa Fe, New Mexico. Mr. Smiley was recalled for cross-examination. Mr. Lakins, Commissioner Warnell, and Commissioner Balch cross-examined the witness, and he was excused.

The next witness was Roger Peery, CEO and Principal Hydrologist with John Shomaker & Associates, Inc. in Albuquerque. He interpreted a diagram as showing that the water quality of shallow and deep water is the same. Mr. Lakins, Mr. Brooks, Commissioner Warnell, and Commissioner Balch cross-examined the witness, and he was excused.

Ted De Rocher was recalled to correct the record regarding the temperature range for heat variation. Commissioner Balch cross-examined the witness, and he was excused.

Mr. Lakins' first witness was Damon Seawright, President of AmeriCulture in Animas, New Mexico. He explained the operation of his fish hatchery and the impact on the fish market if his company goes out of business. He discussed his protest of the Well No. 45-7 which was not submitted timely because of his misunderstanding of the deadline for submitting a protest. He discussed samples taken from the No. 45-7 well and talked of reports submitted by Mr. Janney. He was excused.

A discussion was held on the dates for the continuance of this hearing. The Commission agreed on Tuesday, March 26, 2013, at 9 o'clock a.m. in Porter Hall. The meeting was continued to March 26, 2013 and adjourned for the day at 9:58 a.m.

The meeting reconvened at 9 o'clock a.m. on March 26, 2013, in Porter Hall, Wendell Chino Building, 1220 S. St. Francis Drive, Santa Fe, New Mexico. Appearances were made by Michelle Henri for Los Lobos, Charles Lakins for AmeriCulture, and David Brooks for the Oil Conservation Division.

Damon Seawright was recalled for direct testimony. He outlined the site of AmeriCulture's operations, identified the location of its domestic water wells, and provided temperatures in each well. He talked of the discovery of a contaminant in the water and the impact it had on the fish. He discussed the tracer data and told of a change in the fish color. He explained that he requested a hearing in 2008 because of the proposal by Raser Technologies to inject toxic chemicals. He stated that at least one of the proposed injection wells is in hydraulic connection with the wells operated by AmeriCulture. He discussed the water rights issued to AmeriCulture. He told of his intention of eventually building a power plant. He discussed a Joint Facility Operating Agreement between AmeriCulture and Lighting Dock Geothermal, Inc. pertaining to 15 surface acres of state trust lands. Ms. Henri cross-examined the witness, and he was excused.

Public statements were taken as follows:

Sworn – Jim Victor, a farmer in the vicinity of the proposed wells - opposed the Los Lobos application and responded to questions from Ms. Henri and Commissioner Balch.

Sworn – Ricky Massey, Owner and Operator of a large farm in the Animas Valley - opposed the Los Lobos application and responded to questions from Ms. Henri, Mr. Lakins, and Commissioner Balch.

Unsworn – Sam Hagley, Owner and Operator of PM Farms in the Animas Valley - opposed the Los Lobos application.

Mr. Seawright was recalled for the continuation of cross-examination. Mr. Brooks, Commissioner Balch, and Chair Bailey cross-examined the witness, and he was excused.

The next witness was James Witcher, Geologist and Geothermal Consultant and Principal of Witcher and Associates in Las Cruces, New Mexico. He stated he performed a geothermal evaluation for AmeriCulture in which he looked at the Lightning Dock geothermal system. He gave his interpretation of the geology of the region around the Lightning Dock area. He described a hot springs system. He discussed the hydrogeology and the reservoir in the Lightning Dock project. He discussed the summary geologic log of the AmeriCulture Well No. 2, the chemistry of the water, and reservoir and flow paths. Ms. Henri, Mr. Brooks, Commissioner Warnell, Commissioner Balch, and Chair Bailey cross-examined the witness, and he was excused.

Mr. Brooks explained that OCD's Exhibits A and B can be attached to any permit issued by the Commission, so he would not call his witness, Carl Chavez. He said that Mr. Lakins indicated he would still like to call Mr. Chavez, who was not available at this time, at some time in the future to ask him about notice provisions under the Water Quality Control Commission regulations. Mr. Brooks said he objected to questions on that matter as being irrelevant but will stipulate that the Division did not give notice under the provisions of the Water Quality Control Act. The Chair sustained Mr. Brooks' objection and ruled that Mr. Chavez does not need to be called as a witness.

Ms. Henri called David Janney as a rebuttal witness to identify changes Los Lobos wished to make to OCD's proposed Conditions of Approval submitted as Exhibits A and

B with its pre-hearing statement. Mr. Lakins stated that he had not had the opportunity to evaluate Los Lobos' proposed changes because he had not seen them before, and he was concerned about some of the changes. He asked that he be given the right to provide written comments. Mr. Brooks objected to some of the proposed changes. Chair Bailey agreed that the Commission and all involved parties need time to review and determine the necessity for the changes as presented by Los Lobos. She said the Commission cannot make a decision until it receives comments on this new material. She asked for written comments and closing arguments to be submitted to the Commission by April 11, 2013. The Commission will begin deliberations on this case at its next regularly scheduled Commission meeting on April 16, 2013. The case was continued to April 16, 2013.

The meeting was adjourned at 7:05 p.m.

STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

JAMI BAILEY, Chair