STATE OF NEVADA COMMISSION ON MINERAL RESOURCES SPECIAL MEETING Thursday, January 16, 2014 – 1:00 p.m. Legislative Counsel Bureau 401 South Carson Street Room #2135 Carson City, Nevada

COMMISSIONERS IN ATTENDANCE:

Fred Gibson (Chairperson) John Snow Dennis Bryan John Mudge Richard DeLong David Parker Art Henderson

ALSO IN ATTENDANCE:

- Lowell Price (NDOM) Mike Visher (NDOM) Dawn Harris Paul Lenart (IWW) David Von Seggern Alex Tanchek (Keith Lee Public Affairs) Tom Gallagher (Nevada Water Solutions) Bob Fulkerson (PLAN) Glenn Miller (GBRW) John Hadder (GBRW) Jerry Walker (Consulting Geologist) Neo Mock
- John Sande IV (WSPA) Alan Tinney (NDEP) Paul Enos (Noble Energy) Rich Perry - Administrator (NDOM) Joe Bryan Tim Wilson (NDWR) Karen LeFebre (NDWR) Bill Ehni (EEI) Joe Johnson Valerie Kneefel (NDOM) Bryan Stockton (Deputy Attorney General)

CALL TO ORDER/ROLL CALL/PLEDGE OF ALLEGIANCE - Chairperson Gibson called the meeting to order at 1:00 p.m., with a quorum of six members present. The Pledge of Allegiance was conducted.

COMMENTS BY THE GENERAL PUBLIC – Pursuant to N.R.S. 241, this time is devoted to comments by the public, if any, and discussion of those comments. No action may be taken upon a matter raised under this item on the agenda until the matter itself has been specifically included on a successive agenda and identified as an item for possible action. All public comments will be limited to 5 minutes for each person. <u>ACTION WILL NOT BE TAKEN.</u>

A. Bob Fulkerson, Progressive Leadership Alliance of Nevada (PLAN) Director, commented there was a recent audit by the Legislative Council Bureau on the Nevada Division of Minerals (NDOM). Audit findings showed NDOM seldom inspects existing oil and gas wells. NDOM relied on a producer to conduct a required test for a blow-out prevention process. He commented the State of Nevada does not provide funding for the number of inspectors required. The audit found only one inspector hired for the entire oil and gas industry in the State. Mr. Fulkerson stated, in his opinion, it is a fundamental conflict of interest to have a Commission regulate and oversee the mining, oil, and gas industry whose mission it is to promote, advance, and protect those industries and whose individuals profit from those industries. He commented the Commission should not have a say unless the Commission is broadened to include private individuals. He presented a petition of 6,000 signatures against fracking in Nevada and requested these comments be taken into consideration. (The petition presented is incorporated herein by reference).

B. Joe Bryan commented fracking oil has some hazards. Hazmat capability needs to be reviewed, because a temperature shift could cause an explosion and contamination throughout communities. He presented documents regarding concern about water contamination and possible earthquakes in the State by weakening shelf plates. He

noted there is a tie between fracking and earthquakes in North Dakota. Transportation of fracking material is also a concern, because of the static electricity and changes that can occur between rail cars.

C. David Von Seggern commented he was pleased to know companies will have to report chemical fluids used for fracking to NDOM. Water monitoring will also be required before and after fracking, but only for a one mile radius. He commented on the lack of water sources and suggested water monitoring be completed for a larger area. Also, if a water source cannot be found, it should be required that a water well be drilled and monitored. He noted, in fracking, especially in shale, horizontal drilling takes place. He suggested the one mile radius be reviewed from the target location rather than the well head.

D. Glenn Miller commented he was on the faculty of the Department of Natural Resources and Environmental Science and he worked on Marcellus Shale Fracking Consulting, mostly on the environmental side. He stated, for the record, that he was not an opponent of fracking because he has land in Montana that may possibly be fracked. He commented that groundwater contamination is fairly uncommon, because water moves slowly and takes a long time for lateral transport of contaminants. Well placement is important and appropriate, because it is completed in the mining industry. Radioactivity is common in most deep wells. He recommended a measurement of gross alpha and beta be completed on the water used for fracking and possibly the well water. There should be a requirement to analyze iron, manganese and arsenic because methane could escape and cause contamination. Well construction is the most important issue for protecting the surface from contamination. There should also be a stipulation that, if well water is not sampled and is contaminated, the fracking company should be held liable, which would encourage more systematic sampling from all available water wells. More specificity is needed in the regulation on page 12 that would require water taken from the fracking site to be put back in at a greater depth rather than transported to a facility, because it can contaminate waterways and there is no way to get salts out of the water.

E. John Hadder, Great Basin Resource Watch Director, noted detailed comments on the regulations will be submitted at a later time. He commented this regulation should fall under the Division of Environmental Protection. In general, the regulations and requirements for monitoring should be to the same extent as required for the mining industry. The company should also develop a proper ground water model to determine the proper amount of monitoring needed, which is a requirement by the Division when the mining industry submits for a water pollution control permit.

F. Dawn Harris commented she has studied this issue extensively, from both an industry and environmental perspective, and that she is not convinced that the State can be safeguarded from issues that come from hydraulic fracturing. One of her main concerns is that there were exclusions in U.S. Code exempting the company from issues that arise from hydraulic fracturing due to the Superfund Act or the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the Safe Drinking Water Act; therefore, it will fall to the State to clean up any contamination. She is also concerned with the lack of addressing air quality issues. She commented that, in her opinion, the State should not get involved with hydraulic fracturing and suggested allowing science to catch up with the industry. The State is playing with the health of its citizens. Citizens can do without energy and money, but it cannot do without air or water. She noted she is representing 6,000 individuals and requested signatures to be included in the public record. (The signatures referred to were incorporated herein by reference under A, when first presented).

G. Karen LeFebre, Division of Water Resources, commented she has studied S.B. 4, which relates to California's fracking regulations. She stated California's sampling analysis program is more robust and includes a water management program. She encouraged the Commission to review S.B. 4. Bond funding for abandonment in Nevada, in her opinion, is also too low. She suggested a blanket bond anywhere from \$500,000 to \$1 million and, per well, should be approximately \$80,000-\$100,000. Her main concern is having orphan wells in the State.

H. Neo Mock commented that his main concern is that Nevada is water constrained and that fracking uses a significant amount of water.

I. Paul Lenart commented that Nevada has not had a great deal of exploitation of non-traditional methods, which is an advantage, especially in a State that has vast hydro-electric resources and potential renewable resources. He hoped fracking would be held to the strictest monitoring.

I. NEW BUSINESS

A. Consideration of draft changes to NAC 522 (Oil & Gas) to address the use of hydraulic fracturing in the drilling of exploration or production wells for oil and/or gas in Nevada. <u>FOR POSSIBLE ACTION</u>

Background: The Nevada Legislature approved Senate Bill 390 (NRS 522.119), during the 2013 session, which reads as follows:

- 1. The Division of Minerals and the Division of Environmental Protection shall, jointly, develop a hydraulic fracturing program to:
 - (a) Assess the effects of hydraulic fracturing on the waters of the State of Nevada;
 - (b) Require a person who engages in hydraulic fracturing to disclose each chemical used to engage in hydraulic fracturing; and,
 - (c) Provide for notice to members of the general public concerning activities relating to hydraulic fracturing in this state.
- 2. The Commission on Mineral Resources shall adopt regulations to implement the hydraulic fracturing program required by subsection 1.

NDOM and NDEP are working with industry and environmental community stakeholders to develop a program for hydraulic fracturing that addresses direction from the legislature.

NDOM staff will present the program and recommend changes to NAC 522 which would establish new regulations for drilling of oil and gas wells where hydraulic fracturing will be used, and recommend other changes to update NAC 522.

The Commission can approve, request modifications or reject the program presented.

If the proposed program is approved, the language for changes in NAC 522 would be submitted to the Legislative Council Bureau for legal review. Once LCB has completed the legal review, staff would schedule public workshops at several venues in the State and gather public and industry recommendation and comments. These would be presented with a final draft of the recommended programs to the Commission at a later date in 2014.

With a PowerPoint[®] presentation, Rich Perry reviewed oil production and oil regulations in the State of Nevada and draft regulations developed for hydraulic fracturing that are to be in place by 2015, as mandated by the Legislature. Mr. Perry stated oil production mostly occurs in the eastern part of the state. It peaked in 1990 at approximately 4 million barrels a day. It has been on a steady decline in the fields that were found and developed. As of 2012, 368,000 barrels were produced. Oil production is concentrated in two areas: 1) Railroad Valley in Nye County; and 2) Pine Valley in Eureka County. In 2012, there were seventy-one producing wells in the entire State. The Legislature mandated the Division of Minerals and the Division of Environmental Protection to develop a program and regulations for hydraulic fracturing, which is listed in NRS 522.119 and include: 1) assess the effects of hydraulic fracturing on waters in the State of Nevada; 2) require person who engages in hydraulic fracturing to disclose each chemical used to engage in hydraulic fracturing; and, 3) provide for notice to members of the public concerning activities relating to hydraulic fracturing in the State. The program should be in place in 2015. He noted NRS 522 regarding oil regulations in the State was adopted in 1979. The last time there was an update to NRS 522 was in 2001. Fundamental in NRS 522, is the protection of fresh water and to seal off strata that produces oil from the strata that has ground water to prevent contamination. The permit application process requires drilling details and bonding information. He noted, if the well is located on federal ground, bonding is collected by the BLM. If a well is located on private ground, bonding is collected and held in an account by the Division of Minerals; 97% of the producing oil wells in the State of Nevada are located on federal ground. Sundry notices are required for any changes. A well completion report is required at the end of activity. Confidentiality will be granted to an operator for six months as far as the well log and cuttings, and is included in code. There is a clause for penalties for violators and injunctive relief if a violator needs to be brought into compliance, which occurs in the district court of the county where the violation occurred. Conditions of approval are included with the permit and are conditions under which a permit is granted to complete an exploration for oil or gas. There are currently three individuals involved in the evaluation and granting of a permit; 1) the Oil, Gas, and Geothermal Program Manager; 2) the Administrator; and, 3) the Deputy Administrator. These individuals are currently sufficient for the amount of permit activity that occurs in the State at this time. If there is an increase in activity, more individuals will be involved in the process. NDOM staff, Commissioner Henderson, and NDEP representatives developed draft regulations. Other state statutes and regulations were reviewed. The BLM was also consulted, because there is a Memorandum of Understanding (MOU)

with them. The Interstate Oil and Gas Compact Commission was also consulted, of which, the State of Nevada is a member. On November 21, 2013, a stakeholder meeting was held. The direction received was to include conditions of approval to the regulations. The draft received was also available to the public on the Internet. Regulation language includes the following:

- Having an application for permit to drill with an area of review minimum of one mile, which is currently not in regulations, and would also require the applicant to produce a map that is similar to one that is submitted for a water right.
- Ground baseline sampling and monitoring of up to four wells by the operator will require sampling before the well is hydraulically fractured six twelve months after a frac, and sixty to seventy-two months after hydraulic fracturing, which is language borrowed from other states, specifically from Colorado.
- Submission from the operator to the Division of Minerals and triggers for notification if certain accidences were found.
- Require a cement bond log and pressure monitoring during hydraulic fracturing, which occurs during the drilling of the well. A cement bond log is done to determine if there are any voids in the cement after it is set behind the casing. Pressure monitoring is to prove that there are no leaks in the casing or the cement.
- Intermediate casing will be required for wells proposed for hydraulic fracturing.
- Production casing will be required to be cemented to 500 feet above the upper most zone of hydro-carbon interest to make sure there is a seal between the strata.
- An individual engaged in hydraulic fracturing will be required to disclose each chemical in use. In the proposed regulations, the use of the NDOM website was added. A standard list of chemicals and maximum concentrations used in hydraulic fracturing fluids will be sourced from Frac Focus, which is funded by IOGCC and the Ground Water Council. NDOM will also enlist the assistance of NDEP to evaluate those chemicals, as they have more individuals specialized in that type of review.
- The operator will post the chemicals used on a publicly-available chemical disclosure registry and to Frac Focus within 60 days.
- The operator will be required to provide a 14-day notice of intent to NDOM and the land owner disclosing the location of where hydraulic fracturing will occur before it is initiated. This requirement will be included in NRS 522.

Mr. Perry noted approved permits will be available for public viewing on the NDOM website. He reviewed current regulations for conventional and unconventional wells that will be added to the hydraulic fracturing program. They were proposing to remove the regulation that allows drilling for oil and gas with cable tools. The Commission also requested a change in administrative fees and a repeal of the first year administration fee on oil production. Public workshops will be held in March 2014 in Carson City, Las Vegas, Elko, and Ely. NDEP will update the MOU to provide additional assistance for the proposed regulations. A 30-day notice will be sent out before the Notice of Public Hearing for the final adoption by the Commission.

Commissioner Henderson asked how many of the seventy-one producing wells in 2012 were inspected in 2013. Mr. Perry stated all 118 permitted wells were inspected in the last six months.

Commissioner DeLong asked which Division was being referred to on page 12, paragraph G, the last line. Mr. Perry replied the Division of Minerals.

Commissioner Parker commented, on page 6, paragraph two stated the area of interest will be one mile out. He asked for clarification that the area of interest can be extended two miles out. Mike Visher stated the area of review will not only be around the well bore, but will extend along the surface trace of any proposed lateral. They will be looking for information that can be used as part of the permit application to assist with evaluating what safeguards need to be in place for well-bore integrity. Commissioner Parker asked if this will include an extension of water monitoring. Mr. Visher replied no. The water monitoring will be restricted within the one mile radius unless the Division feels there is a need for an extension. The operator may want to combine multiple applications within one area of review, so it would create a larger area, but water monitoring will still be restricted to the well bore and the one mile radius from that location.

Commissioner Mudge questioned the wording on page 4, item D. He stated the intent was for a sample to be completed within twelve months prior to a well being drilled. On page 3, item A, Commissioner Mudge requested clarification and asked if there could be a water sample twenty-four months before drilling or within the same twelve-month period. Mike Visher clarified it was within the same twelve month period.

Commissioner Henderson asked which section addressed the increase in the administrative fee. Mike Visher stated it was at the bottom of page 20.

Commissioner Henderson requested an explanation of the procedure to increase the administrative fee. Rich Perry stated it can be changed during a workshop or 30 days prior to the final draft.

Commissioner Parker asked if the Division was restricted to only NRS 241 direction. Rich Perry stated air quality issues are outside of the jurisdiction of the Division and would be up to NDEP to address.

Commissioner Mudge commented he was under the impression that NDEP would oversee ground water. He asked for clarification that it was NDEP or NDOM. Rich Perry clarified NDOM would not regulate ground water, but do need to approve where frac water will go. Mike Visher added the operator has to indicate the method that may be used for storing frac water. NDEP will regulate the diposal method. Commissioner Bryan noted this information was on page 12, item G.

Commissioner Snow commended Commissioner Henderson and the staff of NDOM and Environmental Protection for their efforts on the legislative mandate. He noted Nevada is the twenty-sixth state to implement hydraulic fracturing rules and regulations.

In response to public comment, Commissioner DeLong stated the Division was directed by the Legislature to develop a set of regulations under NRS 522, regarding oil and gas provisions. The Division does not have jurisdiction over air quality or water quality. Air Quality and water quality is under the jurisdiction of the Nevada Division of Environmental Protection.

Commissioner Henderson asked for clarification that this information is only a working draft to be presented to the Legislative Counsel Bureau to begin public workshops. Mr. Perry clarified that is correct.

Art Henderson moved to approve the draft changes without modification to NAC 522, as presented in the meeting binder and direct staff to LCB for pre-adoption review. Richard DeLong seconded the Motion. Motion carried <u>unanimously.</u>

COMMENTS BY THE GENERAL PUBLIC – Pursuant to N.R.S. 241, this time is devoted to comments by the public, if any, and discussion of those comments. No action may be taken upon a matter raised under this item on the agenda until the matter itself has been specifically included on a successive agenda and identified as an item for possible action. All public comments will be limited to 5 minutes for each person. <u>ACTION WILL NOT BE TAKEN.</u>

NOTE: The Chairperson, Commission on Mineral Resources, or other Presiding Officer of the Commission reserves the right to change the order of the agenda, and if the agenda has not been completed, to recess the meeting and continue on another specified date and time. Additionally, the Commission reserves the right to combine two or more agenda items, and/or remove an item from the agenda, or delay discussion relating to an item on the agenda at any time.

A. Clarification was requested regarding if the Division of Minerals or NDEP will decide on where and how water will be disposed because there are major differences in jurisdiction and evaluation. He considers that the most environmental issue.

B. Bob Fulkerson, PLAN, commented that regulations were adopted without any direction or resolution on how the polluted water will be handled. He stated he would have liked to have seen a broader discussion on the matter. He appreciated the questions posed by Commissioner Parker regarding air quality. Rich Perry clarified no regulations were adopted. This meeting is a preliminary view of draft regulations that will be addressed in-depth during public workshops.

C. Alan Tinney, NDEP, stated they have statutory and regulatory authority for any discharge of any fluid in the State of Nevada through the ground or through the surface area. The permitting process will be through NDEP.

D. Colleen Cripps, Division of Environmental Protection Administrator, added they have been working closing with the Division of Minerals on this process and will continue to do so. The air quality issues that were mentioned that does come under the purview of the Division of Environmental Protection and they feel they already have existing regulatory and statutory authority to address that issue.

E. Dawn Harris stated she had a question regarding page 5, item 3A which states a previous sample can be used; however, under item b, it says a previous sample may not be used. She requested clarification of this statement. She commented there were so many issues that she was concerned about, including the one-mile radius and the health of workers. She questioned what guarantee there is that these issues will be regulated that will safeguard the state. She suggested there be some direction to the public on what to expect on the Division's website. Rich Perry reiterated one workshop will be held in Carson City in March and will be posted for the public and will be in a venue where changes to the draft language can be addressed.

F. Joe Bryan stated his concern again is if fracturing shatters a shelf plate, will this decrease the earthquake factor. He questioned how fracturing will be contained if there is a major earthquake and how it will be monitored. He was also concerned with the transportation of fractured material because there are minimal regulations for this issue. He suggested hazmat inspections be conducted when transporting this material through the State.

ADJOURNMENT

There being no further business, the meeting adjourned at 2:19 p.m.