

**MINUTES OF THE MEETING
OF THE
ASSEMBLY COMMITTEE ON NATURAL RESOURCES, AGRICULTURE, AND
MINING**

**Seventy-Fifth Session
February 16, 2009**

The Committee on Natural Resources, Agriculture, and Mining was called to order by Chair Jerry D. Claborn at 1:32 p.m. on Monday, February 16, 2009, in Room 3161 of the Legislative Building, 401 South Carson Street, Carson City, Nevada. Copies of the minutes, including the Agenda ([Exhibit A](#)), the Attendance Roster ([Exhibit B](#)), and other substantive exhibits, are available and on file in the Research Library of the Legislative Counsel Bureau and on the Nevada Legislature's website at www.leg.state.nv.us/75th2009/committees/. In addition, copies of the audio record may be purchased through the Legislative Counsel Bureau's Publications Office (email: publications@lcb.state.nv.us; telephone: 775-684-6835).

COMMITTEE MEMBERS PRESENT:

Assemblyman Jerry D. Claborn, Chair
Assemblyman Joseph M. Hogan, Vice Chair
Assemblyman Paul Aizley
Assemblyman David P. Bobzien
Assemblyman John C. Carpenter
Assemblyman Pete Goicoechea
Assemblyman Tom Grady
Assemblyman Don Gustavson
Assemblyman Harvey J. Munford
Assemblyman James Ohrenschall
Assemblyman Tick Segerblom

COMMITTEE MEMBERS ABSENT:

None

STAFF MEMBERS PRESENT:

Randy Stephenson, Committee Counsel
Jennifer Ruedy, Committee Policy Analyst
Judith Coolbaugh, Committee Secretary
Sherwood Howard, Committee Assistant

OTHERS PRESENT:

Alan R. Coyner, Administrator, Division of Minerals, Commission on Mineral Resources
Tim Crowley, President, Nevada Mining Association, Reno, Nevada
Fred Kessler, President, Anchorage Construction Management, Inc., Carson City, Nevada

Chair Claborn:

[Roll called.] Please mute all cell phones and noise-making devices.

Today, we are welcoming a new intern working with the Committee on Natural Resources, Agriculture, and Mining (NATRAM), Victor Stiner. In addition, we will hear from our friend, Mr. Coyner. We are ready anytime you are if you want to get started on your presentation.

Alan R. Coyner, Administrator, Division of Minerals, Commission on Mineral Resources:

This is my eleventh year as Administrator of the Division of Minerals. It is always a pleasure to come before this Committee. This presentation is the same one I gave last Tuesday to the Senate Natural Resources Committee. I will spend a little time going over what the Division of Minerals does and who we are. Then I will update you on what is going on both with the Division and with mining in Nevada. [Mr. Coyner presented a PowerPoint slide show ([Exhibit C](#)).]

Our mission is to conduct activities to further the responsible development and production of the state's mineral resources to benefit and promote the welfare of the people of Nevada. Our sister agency, the Division of Environmental Protection, is the agency that regulates and bonds the mining and mineral industries.

The Commission on Mineral Resources is a seven-member body appointed by the Governor. The Division of Minerals reports directly to that Commission. We have ten employees; our current budget is about \$1.6 million a year. We have no General Fund money in our budget. All our revenue comes from fees paid by

the mineral industry, and most of that revenue comes from the mining claim filing fee. The number of mining claims is up, so our revenue is up.

Our duties include the broad topic "industry relations and government affairs," which is fairly all-encompassing and covers everything from the miner who calls us about how to correctly stake a mining claim to how many ounces of gold were produced last year in Nevada. Our Abandoned Mine Lands Program (AML) is our marquee program and where we spend most of our time and money. We also are involved in minerals education. In conjunction with the Nevada System of Higher Education's (NSHE) Bureau of Mines and Geology and the Nevada Mining Association, we hold two teachers' workshops a year. They are very successful; we process about 200 teachers through those two workshops every year, and we think that is very important.

We also regulate the oil, gas, and geothermal industries, primarily by writing their well permits, but also helping them with development and permitting issues. We maintain the Mines Registry, which makes us the authoritative source for how many million ounces of gold were produced in Nevada last year—and we will have that number for you shortly.

I also run the Nevada Reclamation Performance Bond Pool. This is a fund established to assist smaller mining operations with their reclamation-bonding obligation.

As you are all aware, there has been a significant amount of mining in Nevada over the last 150 years. There are 526 identified mining districts. Within and around those mining districts are historic-legacy issues concerning abandoned mines. There can be environmental impacts, but more importantly to me, there can be physical safety hazards around and in those mining areas. We estimate that there are about 200,000 of what we call "features" on the Nevada landscape. A feature could be anything from a small dog hole to a thousand-foot-deep vertical shaft. In all cases, we have to go into the field and investigate. Of those 200,000 features, our best estimate is that about 50,000 are going to need some sort of remediation. We must carry out the Legislature's mandate to make these things known and to warn people about them. This slide shows a massive wooden structure in Goodsprings, Nevada, down in Clark County. There are ore chutes, a rail system, and open adits, which are horizontal tunnels into the rock. These can be very inviting structures to play in or investigate. The next slide shows a typical, open adit with some old timbering, rails, and a compressed air pipe running back into the hole. These tend to be very inviting areas, but because of the deaths that have occurred in these openings, the Legislature created the Abandoned Mine Lands Program in 1987 with three mandates:

1. To inventory all the sites—find them, describe them, and determine how hazardous they are.
2. Secure hazardous mines either through cooperation with industry or private property owners or, if they are on public lands with no responsible owner, the Division is charged to do that securing.
3. Develop a public awareness campaign. We call our program "Stay Out and Stay Alive" and originated that slogan when the program first started. It has been copied and used throughout the United States by many state and federal agencies.

To date, almost 14,000 sites or features have been discovered and nearly 10,000 have been secured. We report to the counties on the number of hazards located in each county and how many are secured. The counties actually hold the hammer in terms of getting compliance. When we have private property owners or claimants who are reluctant or do not respond to our notifications, our option is to go through the counties. Counties tend to be a little overburdened with lots of other things, so we try our best to get cooperation.

One of the ways I have managed to leverage the Program is through a summer intern program—this slide shows our eight students from the University of Nevada, Reno's (UNR) Mackay School of Earth Sciences and Engineering, also known as the Mackay School of Mines. Last summer, we gave them pickup trucks, post pounders, rolls of barbed wire, and inventory equipment. They travelled all around Nevada and did a lot of good work.

We also partner with the Boy Scouts of America in helping their members achieve their highest rank, Eagle Scout. We are very proud of this. Since 1992 when we started our Eagle Scout projects, we have helped over 100 Boy Scouts achieve that rank, which is quite a record for any organization. The Legislature should be proud of that accomplishment through our Division.

The mines are a habitat for other animals including bats and tortoises, so when we secure the mines, that has to be calculated into what we do. In these before-and-after pictures of some mines in Clark County, you can see the lengths to which we must go to keep people out. There are many individuals who believe these gates are challenges to their 4-wheel drives, so we have to make them as beefy as we can; however, that raises the cost.

The ultimate solution, and one we would like to do more often, is backfilling. The actual backfill is the easiest part; all the cultural and biological surveys that are required by the Bureau of Land Management (BLM) prior to backfilling are what add to the cost. This has been largely aided in the past by the Nevada

Mining Association through donations of time, equipment, and labor. We have done about 500 in the last few years, and we reserve this technique for high-hazard areas around population centers. We have done some at Painted Rock, up along the Pyramid Highway; at Jumbo, which is near Virginia City; and around Tonopah. We wish we could do more of these, but it is not a question of effort or funding, it is more the cultural, biological, and other survey work that must be accomplished prior to backfilling.

We use all kinds of out-reach materials in our public awareness campaigns including bumper stickers, mugs, pencils, and "squeeze bats," which are a great hit with kids and help make them aware of bats in abandoned mines.

I want to touch on something close to home and something we are working hard on. We have logged bona fide hazards in and around Virginia City, Gold Hill, Silver City, and the old route of the V&T Railroad. Some are on private land, and some are on public property. These continue to be a concern to us because of the reconstruction of the V&T. I, like many others, believe that Virginia City will see an upswing in tourism, and a lot of these sites are visible from the route of the V&T. We expect people to get a little bit more curious about them and go exploring over the hills around town and, perhaps, interacting with these hazards. These are dangerous sites. Even though it happened in 1996, a tragic event is still remembered in Virginia City. Two high school teachers went underground into the New Savage Mine and were killed by lack of oxygen, or "bad air" as we call it in the business. They were overcome and asphyxiated. There now are double steel doors blocking that mine in Virginia City, so, although it has been made as safe as it can be, people still want to enter it.

We have gone into the historic Fourth Ward School in Virginia City with our "Stay Out and Stay Alive" exhibit, so we are reaching out to the public through that marvelous facility. If you have not been up there yet, you need to go see it. In the Fourth Ward School, the Commission has funded the first and only hologram exhibit in Nevada. This is a forced perspective of an abandoned mine we placed in an old hallway in the school. There is a hologram of a young man looking down into a mine and viewing his own body down below where he has fallen. It was just installed last fall, it is very effective, and we are getting great comments on it.

I mentioned minerals education earlier. We conduct teachers' workshops, and this is a slide showing some teachers out at Silver Peak examining salt precipitated during evaporation that will retain concentrated lithium in the brine. Nevada is the only lithium producer in the United States. Lithium is recovered

from the salt brines in this playa. Wells pump the brine up onto the surface where it is dried. The company then recovers lithium from the salts.

If you have three publications, *Major Mines of Nevada*, *The Nevada Mineral Industry*, and *Economic Overview of the Nevada Mining Industry*, you know more about Nevada than most of our citizens. I keep these on my desk to use constantly as reference materials. If you do not have these, I am sure your Committee Policy Analyst, Jennifer Ruedy, can secure them for you. They are available on the web from the NSHE's Bureau of Mines and Geology and from the Nevada Mining Association. These three publications fit well together and give you a wealth of information about mining in Nevada.

We always say that Nevada is a really great place to explore for and mine gold. Our production speaks to that, and right now, the price speaks to that. Currently, the price is a little more than \$950 an ounce. We are enjoying a fairly strong price in gold right now, which is key in Nevada.

The most recent numbers we have are from 2007, and in that year we produced \$5.5 billion of gross value of gold in Nevada. It is a huge economic engine for our state and very important in rural Nevada. It is also the biggest chunk of Nevada's mineral, petroleum, and geothermal production. It is important to remember that we are in the middle of the biggest gold-mining boom in history. People tend to romanticize and think of the '49ers back in California, but that was really only a cumulative of about 29 million ounces. We are in a 210-million-ounce peak now and are producing more gold now than at any time in our history. Nevada is really the story in terms of production. Yes, we are on the downhill side of the peak, but we do have a tremendous amount of gold left in reserve to mine in the future. As we go forward, our contribution to the nation's total will continue. It is one of the few commodities in the United States that we have a positive export balance in, and that is pretty much due to Nevada. Annual production will probably remain at about 6 million ounces, which is significant in the U.S. and in the world.

Most mines are in northern Nevada and are producing precious metals, industrial minerals, oil, copper, and geothermal, so northern Nevada is the locus of activity although some mining extends down into southern Nevada.

I want to mention oil and geothermal because we regulate those industries and they produce energy. Yes, the price of oil is up, but we have not had a decent discovery in Nevada for quite a while—since the 1980s. We could really use someone making a new oil discovery out in Railroad Valley. That would be a tremendous thing for us. I think we are 26th in the United States with the 400,000 barrels we produce annually. We are not seeing a huge upswing in

activity even though the price of oil is up. That is due to the difficulty of finding oil in Nevada and the lower value of Nevada oil. We produce a very thick, viscous, crude oil that is good for asphalt and things like that, but not for the higher-value commodities like oil and gas.

Although we have not seen a big upswing in production of geothermal, we will see one very shortly because there are a number of plants just coming on line and a number that are being permitted and built. In 2007, the net value of production was \$70 million. I expect that will climb appreciably within the next year or two because of the work we are doing at the Division to expedite the permits. Looking at the numbers of wells permitted and wells drilled in 2006, 2007, and 2008, you can see the significant rise in numbers of wells permitted and a fairly significant increase in wells drilled. We have seven rigs running right now in Nevada and a lot of them are located around Fallon. That seems to be the locus of activity. Our biggest problem today is the BLM, and that is no secret because we continue to have problems getting permits and access to the land. I will not sugarcoat that for you. The State of Nevada is a good, known, potential area for geothermal. Senator Reid's favorite saying is that we are the Saudi Arabia of geothermal energy. We continue to push to get those resources developed and built.

Spending is dominated by our larger companies. We cannot get out and survey every little Canadian rig in the state, so the numbers are probably bigger than this, but at last count those companies spend about \$800 million a year, of which \$200 million or so is being spent in Nevada. These are international gold mining companies, mainly Barrick Gold and Newmont, and Nevada is getting a significant chunk of their exploration dollars whereas other states are not. In other words, they like doing business in Nevada; they do not like doing business in places like Colorado, Montana, or California.

The total number of active claims is an important number to me because that is where the Division's revenue comes from. Over the last few years, it is no secret that the number of claims is tracking upward with the increase in the price of gold. There were a little over 10,000 active claims towards the end of 2008, and that number was up strongly from 2007. There was a big drop in the number of claims when the federal government enacted a \$100 claim maintenance fee or rental fee. That happened in 1993-1994.

Our premier new property is called Cortez Hills and is on the slopes of Mount Tenabo across the valley from the Pipeline Mine, which is one of our largest open pit mines. This deposit is a new one being developed by Barrick Gold. It was discovered in 2004 and is just now getting into production, so there was about a five-year time line to get it going. They say it should produce

11.5 million ounces; I think it is going to be larger than that. In any case, it has a 20-year mine life and is providing 450 jobs. It is in Lander County, and the recent court decisions you may have read regarding Native American appeals concerning this project have been settled, at least in part, and the project is moving forward. This is an important project for Nevada.

Hollister is up in Elko County between the Carlin Trend, which is where a lot of our biggest properties are, and a small property called Midas. It is high-grade vein-type mining operated by a smaller company, Great Basin Gold. I mention it because it is something new happening in that part of the state.

Another very exciting new project is called Kings Valley and is at the very north end of Nevada. This is a caldera structure called the McDermitt Caldera. It was drilled for uranium back in the 1970s by Chevron. In the course of drilling for uranium, Chevron discovered lithium-rich clays associated with that deposit. There is a little bit of an issue because of the composition of the clay. They will need some smart metallurgists from the Mackay School of Mines to figure that out, but if you like electric cars and believe in lithium batteries, you might want to invest in Western Lithium Corporation. I am not a stockbroker, but I am telling you that this is a very exciting new project for Nevada.

Long Canyon is in Elko County near the Utah border. The companies operating there are Frontier and AuEx, which is headquartered here in Reno. This area is being described as a potential new Carlin Trend, which is a pretty big statement. They do have a very good deposit of gold and they are moving forward with development of it. I think it is going to be a real winner.

Midway between Tonopah and Round Mountain in Nye County is a high-grade vein system being developed by a company called Midway Gold. It is a very good looking property.

A property in Eureka County that is just north of Eureka is also a very exciting property. It is being run by a company called General Moly and is a high-grade ore body of molybdenum. The project is on hold right now because of financing issues, but I think we will continue to see it move forward. If it does, this will change the face of Eureka. The project will provide 450 jobs and will have a 50-year mine life. It is a giant project and a very significant one. We hope it moves forward.

Pumpkin Hollow is in Lyon County, east and south of Yerington in the Mason Valley. It was first discovered about 25 years ago by U.S. Steel as an airborne magnetic anomaly, which means it is hidden. There is no exposure. Magnetite in the ore body, the iron, is what gave it its signature, but there is a

lot of copper associated with this mine as well. This exploration is currently going forward with financing, et cetera, so it could be an important addition to the Yerington area.

Spring Valley is in Pershing County and owned by Midway Gold. This find was hidden at the headwaters of one of our larger placer deposits—placer being gold that is derived from sand and gravel on the surface. To have this mine operating would be a welcome addition to Pershing County now that the Coeur Rochester Mine is closed.

The Springer Mine is north of Rye Patch in Pershing County. The company that owns it is Golden Predator. This was an historic tungsten mine that was built by General Electric. At one time, Nevada was a very significant tungsten producer, but China flooded this country with tungsten and basically put most of the tungsten mines out of business. This mine has been on care and maintenance since General Electric left it. Golden Predator purchased it but, again, there is some hesitation now because of financing issues. They certainly intend to move forward in 2009 and once again produce tungsten in Nevada.

I will touch on the Bond Pool we run. The amount in the Pool is close to \$3 million right now because of the addition of a new property. There are a number of different types of financial instruments the companies use to provide financial assurance, which now totals \$1.2 billion. Nevada's mining industry has really "put their money where their mouth is" as we look at the possibility of a future decline in prices, leading to hard times for the mining industry. Our regulatory system has put a number of safeguards into place to ensure Nevada has money available should any of these companies go out of business.

Assemblyman Bobzien:

How scarce is lithium in Nevada compared to the other states? Do we have a natural advantage similar to the advantage we have with gold?

Alan Coyner:

Nevada is uniquely positioned to take advantage of an increase in lithium production as far as the United States goes. Chile is a dominant supplier of lithium. Lithium, like some of the other minor metals, has a niche market and some of it can be brought to market fairly rapidly. Given that, there are trends I think are very positive for lithium, including lithium being the ideal metal of choice for batteries. It is light, has no memory, and there are a number of positive things going for it. If Nevada can even capture a very small fraction of that market, we will do well. We will continue to be the nation's leading supplier in any case. If the metallurgical challenges can be overcome at the Western Lithium Corporation property at Kings Valley, we will be in a good

situation. I expect to see those properties contribute to Nevada's economy and, certainly, McDermitt could use a few jobs. I view it as very positive.

Assemblyman Bobzien:

I know battery technology is a kind of "final frontier" for many renewable energy projects, and much of the technology is being sorted out, but what about the processing of lithium once it is extracted? What are the possibilities for having some of the processing actually located in Nevada?

Alan Coyner:

I would expect that production of lithium oxide would occur in Nevada at the mine. Whether there would be things like battery manufacturing facilities here to take advantage of the local source might be a little bit of a push. We do not do a lot of marketing after the raw production here in Nevada. We generally ship out products for further refinement elsewhere, so I am a little cautious to say that there will be a lithium battery production facility in Reno, Sparks, or elsewhere. Again, if the metallurgical issues can be overcome, I think we will be in good shape to provide lithium to the nation.

Assemblyman Goicoechea:

Is the gold at the project in Pershing County free gold, and is there a silver deposit there as well?

Alan Coyner:

Are we talking about Spring Valley?

Assemblyman Goicoechea:

Yes.

Alan Coyner:

Yes, it is mostly free gold, so to be able to recover that gold would require a significant gravity component to that mill site when it is built. With regard to the deposit, there is silver as well but it is not anomalously high. It is generally in the range that most of our Nevada gold deposits are in, so it will not replace the Coeur Rochester Mine in terms of helping our silver production rise. We are still the Silver State, but right now Alaska is the silver state in terms of total production.

Assemblyman Goicoechea:

I just thought with the proximity to the Coeur Rochester Mine, there would have been more silver values there.

Assemblyman Segerblom:

Could you tell me again how your office is funded?

Alan Coyner:

Certainly; we are solely fee-funded. There is no General Fund money in our budget and, if my Commissioners have their say, there never will be. The Legislature has given the Commission the authority to set mining claim fees within a certain range. The mining claim fee is an annual fee paid at the county level by all claimants, and that is where we collect our fees. As I said, mining claims are up, so the Division of Minerals has been weathering the recession quite well.

Assemblyman Segerblom:

The fee you are describing, is that something the Legislature sets?

Alan Coyner:

Ten or eleven years ago, the Legislature removed the Division of Minerals from the Division of Business and Industry and placed it under the Commission on Mineral Resources. The Legislature put a cap on the mining claim fee, which is the dominant fee within the Division of Minerals, of \$10 per claim. That fee is currently at \$8.50 per claim and was recently raised from \$6.50 per claim by the Commission. The additional \$2 is now going to the Mackay School of Mines at the University of Nevada, Reno because the mining engineering department was in jeopardy. It had been cut severely in the first round of budget cuts so, with the cooperation of the industry, the Commission moved to put the \$2 fee increase in place to help fund the Mackay School of Mines. The \$6.50 is still coming to the Division and goes right into our fund. By statute, that money remains within the Division, and we work out of the reserve from year to year and ride the ups and downs.

Again, we receive no General Fund money. The fees we receive are paid by the industry and come primarily from the mining claim fee plus some other smaller fees on geothermal well permits, oil and gas well permits, and so forth.

Assemblyman Segerblom:

Is there anything limiting the size of that fee?

Alan Coyner:

Yes, the mining claim fee is capped by statute at \$10 per mining claim per year.

Assemblyman Segerblom:

So, the Legislature could raise that to \$20?

Alan Coyner:

The Legislature could change the cap but the Commission, as currently set, has the power to change the fee. That is my understanding.

Assemblyman Grady:

You show nine properties that are future prospects. What are you looking at in this tight economy as far as the willingness to fund these through the various bonding sources? Is it really tight or is there a possibility that some of these could become a reality within the next few years when money is more readily available?

Alan Coyner:

The question is, "Where is the price of gold going to be a year from now?" These properties are advance properties; they have been drill-tested, and they have a significant investment of money in them at this point. These are not raw exploration properties on which someone drilled a hole and thought the results looked pretty good. These properties are well into permitting and advanced exploration. I mentioned that two properties are on hold, but I do not know for sure what "hold" means. People are being told by both the Springer Mine and the operators of Mt. Hope that they are in a "holding pattern" in terms of financing. I am sure it has something to do with whether there is independent cash flow. Barrick and Newmont have cash flow from production that they can utilize to help finance their properties. As you know, Cortez Hills, which is a massive property with a huge investment totaling in the hundreds of millions of dollars, is going forward. Others, like Springer or Mt. Hope where the companies are not in production and are looking for financing, are probably having a more difficult time of it.

How real are these properties and how soon will they go forward? The state geologist has a wonderful presentation on supply and demand and how Nevada fits into that. You might want to have him present it to you some time. The global trend for increasing use of commodities is almost inexorable because China is growing so fast and is consuming so many resources. Even though we are in an unsure period right now because of the decline in the price of metal in some commodities and because of financing issues, I see the markets coming back. Nevada, as a commodity-based rural economy, will benefit from it.

Assemblyman Aizley:

I need to understand more about what a mining claim is. Does someone pay \$6.50 to explore all of the Cortez Mountain?

Alan Coyner:

The term "mining claim" has been around since the settlement of the West in the mid-1800s. We operate under something called the 1872 Mining Law. Currently, a mining claim has a maximum of 20 acres. An individual or a corporation can hold as many of those 20-acre mining claims as they can afford. Mining law is often maligned by folks, but it was the first property right and the first equal employment opportunity (EEO) law in this country. Women could hold property; they could hold a mining claim.

It is a self-initiation process; you can go on open public land and stake your own mining claim, pursue it, and, hopefully, have a valid discovery and move forward with a right to mine. The current holding cost for a mining claim, all other things being equal, is about a \$125 a year, and that goes to the federal government. Previously, I mentioned a "claim maintenance" fee which is on all claims, with the exception of small miners having ten or fewer claims. Small miners can do what is called "assessment" work, which is \$100 of work per year on their claim. Most people choose to pay the \$125 fee. As I said, the counties collect the Division's \$8.50 fee, plus a majority of the counties collect an additional \$2 fee, so you are looking at about \$135 to \$140 per year to hold a mining claim. That is after it has been staked, after maps have been filed, and so forth. That mining claim gives you the right to mine beneath the surface all the minerals that can be found there. It is a property right; it gives you, as first possessor, the right to mine as soon as you comply with all permitting, environmental, and other obligations.

Assemblyman Carpenter:

Does the mining bill that has been introduced in Congress have anything in it that would disturb the right to stake one of these claims?

Alan Coyner:

I believe you are referring to the 1872 Mining Law revision as introduced in Congress by Representative Nick Rahall of West Virginia. It will not impact the right to stake a mining claim, but what you will be able to do with that claim will be dramatically different than what you can do with it today. You would no longer be able to patent it, and right now there is a moratorium on patenting.

For those of you who are not familiar with patenting, there are both patented and unpatented mining claims. By "proving up" a certain amount of value on that 20 acres, you can pay money to the federal government and essentially patent, or take as private property in fee-simple, that piece of land including the minerals that come with it. Currently, there is no royalty collected on an unpatented mining claim. The Rahall Bill, as it is referred to, would begin to

charge a federal royalty on any minerals taken from that mining claim, so that would be dramatically different from what we have now.

The right to mine is compromised within that bill because it is subject to a discretionary veto authority by the public management agency, generally the BLM. That is dramatically different than what we have now.

Remember, the Rayhall Bill has been passed by the House three times but has never been introduced in the Senate. I ascribe that to Senator Reid. I think he is doing a good job of holding that bill back because it would be terrible for Nevada. It would create an environment in which major companies like Newmont and Barrick and others would be very averse to further investment in this state. That bill is bad business for Nevada.

Chair Claborn:

Thank you for coming, Mr. Coyner, and thank your staff as well. We always learn a lot from your presentations. Next we have the Nevada Mining Association.

Tim Crowley, President, Nevada Mining Association, Reno, Nevada:

I have been president of the Association for only about two months, but I have spent the last ten years working in the mining industry in one capacity or another. [Distributed copies of *Nevada Miner* newsletter ([Exhibit D](#)).] I want to talk to you today about the state of mining in Nevada [began a PowerPoint presentation ([Exhibit E](#))]. We are the classic boom-and-bust industry, but we are doing the best we can to manage the variables in our industry and to continue to be a consistent partner with the State of Nevada.

The Nevada Mining Association is a trade association with membership that consists of mine operators, mine vendors, individuals, and consultants. We gather together in a forum to share best practices and to speak as one voice on any issue that comes before the industry. Those issues pertain to safety, environment, public policy, human resources, and the like. Our operators are miners of gold, silver, lime, copper, clay, gypsum, and molybdenum; our vendors and consultants are scattered throughout the state.

The businesses that join our Association are businesses you would not normally associate with mining. We have a casino member—the Red Lion—that is a good partner of the mining industry. The gaming industry in general is a good partner of the mining industry. We have accountants as members, and also security companies that provide high-level security to gaming and also to the mining industry. The individual membership consists of anyone with an interest in mining.

Nevada is the fourth largest producer of gold in the world behind China, Australia, and South Africa. By gross domestic production, mining is the 16th largest industry in Nevada, and we employ over 14,000 people. We are very proud of how we take care of our people. We have the highest salaries in the state at \$67,000 a year, plus benefits, and that is for mining industry-wide. If you were to segregate out metal mining, those wages would rise to \$80,000, plus benefits. I would point out that the mean salary in the state is \$42,000.

I would like to run through some of the commodities we produce. Gold, of course, is at the top of the list. Gold production is down right now, and it is trending down. There are a number of factors why gold production is down. One factor is that we are processing lower grade ores. A leading factor is that the cost to produce gold is up. As most people can track on a day-to-day basis, the price of gold is up also. Gold values were up by 25 percent last year, but the cost of producing gold is up by 22 percent. Costs continue to rise and that includes everything from steel, diesel fuel, and electricity to labor. Financing is also a cost we are struggling with.

This slide illustrates the volatility of the cost of gold. You can see by looking at the gold line that the fluctuations in gold value are all over the map. You can peg these changes to certain things that have happened which include the collapse of Bear Stearns, oil prices rising, the bailout of AIG, the collapse of Lehman Brothers and Washington Mutual, and the Israel/Gaza conflict.

Copper is another metal that is produced in Nevada, and we are blessed to have good copper reserves. Regrettably, the value of copper is poor right now and is tied very closely to the construction industry. In the first quarter of 2008, the average price was over \$3.50 a pound; today's copper is at about \$1.50.

Silver production is trending down and is tied very closely to gold production. Silver production in most cases is a by-product of gold. Where there are good, rich gold reserves you also find silver reserves. You think of the traditional gold producer as being uniquely a gold producer, but they are not. They are more than that; they are processing silver as they produce and manufacture gold. As gold trends down, so does silver. The average price of silver was \$18 per troy ounce in the first quarter of 2008, and it is now down to \$13.

Nevada is rich in many minerals, and geothermal is at the top of the list. It is a very exciting transition we are making into the renewable world, and geothermal is in the forefront. We do mine significant amounts of hot water. We are poised for major expansion in geothermal, but one of the limiting factors is transmission. Those are issues we all will be working on in the near future to see if they can be overcome.

Molybdenum is also very exciting, as was mentioned. One of the limiting factors with molybdenum is simply economics: if it does not pencil out, molybdenum mining will stop and that is true for all metals in Nevada. If it does not pencil out, mining ceases. Alan did a fabulous job with his presentation. He mentioned tungsten and pointed out that we used to be very rich in tungsten manufacturing. Tungsten did not go away; we still have great reserves in tungsten, but the economics dried up and the mining stopped. Hopefully, that will turn around and come back.

Lithium is another mineral metal that we have rich reserves of and, once again, it is tied to economics. The lithium mining development in northern Nevada is also tied to technology. They are looking at ways to mine the lithium found in clay—something that has never been done before—and make it profitable. At this point, it is not profitable, but if the Chevy Volt hits the market, the economics of mining lithium could change significantly. I should probably verify this statistic, but I am told that in the Chevy Volt battery you will find about 50 pounds of lithium. We all carry cell phones now that contain lithium—that is a pittance compared to what could happen. If lithium does become the metal of future electric cars, it could be a very prosperous metal for us to mine in the State of Nevada. There are concerns by those developing the mine in northern Nevada that lithium could be a fad in the battery world. I hope that is not the case.

Discussing the future, reserves of gold are currently estimated at 75 million ounces. It is hard for the lay person to grasp that we simply do not know what is out there. It seems as though it would be a finite and known number, but it simply is not. We are in the third major gold mining boom here in Nevada. The first boom really hit Nevada in about 1859 and then dried up. At that point, they were looking for visible gold; if you could not see it, you did not think it was underground, and you did not mine it. There were new finds in the 1920s around Tonopah and another boom came. Now, we are primarily mining microscopically, and when that technology came into being in the 1980s, it opened up a new market for us. Exploration is still finding more and more reserves. The Cortez Hills deposit at Mount Tenabo is right in the heart of a very active mining district in Crescent Valley, but nobody knew that there were 12 million ounces of gold there, and they had mined all around that area. The way we manage this is we continue to explore, so exploration is up, and we are still looking for new reserves. It is up just slightly right now, but what we are finding is exploration is happening more in what are called "brownfields." We are exploring places we have been to before; we are exploring places that are adjacent to existing mines. There is a reluctance to go out into what are considered "greenfields" and explore there because then you are developing a brand-new mine if you find something. The uncertainty in financing these days

and the uncertainty in the price of gold are causing a hesitation in exploring greenfields. Nonetheless, exploration around existing mine operations is continuing.

I would like to point out some of the challenges we face. Certainly, skilled labor is one of our biggest challenges. It is a very high-skill industry; we require engineers, scientists, geologists, and biologists and that workforce has high levels of education. In fact, it is such a challenge that, as Alan Coyner mentioned a moment ago, we assessed an additional \$2 on our state portion of the mine claims fee this year to be dedicated solely to the Mackay School of Mines because we rely on that school for the workforce. It is essential that they stay afloat in these tough times and produce the workers that we need.

Costs are also going up, and we are doing everything we can to manage the increase in costs and the variables that we face. I would like to say that I am available to you. I am happy to be with the Nevada Mining Association; we are an organization that exists to provide you with information about mining, and I am at your disposal.

Chair Claborn:

Mr. Crowley, we are happy that you are with the Nevada Mining Association. Are there any questions for Mr. Crowley? There are none. Will there be a tour this year?

Tim Crowley:

One of my goals as President of the Association is to highlight what we do and help educate policy makers such as yourself, and others, about the mining industry. The only way to really grasp what it is and how we do it to such a high standard is to come and see it. You will all get a formal invitation to come visit our mines, but please, do not hesitate to call me up and say that you are ready to take a look because we want to show them off.

Chair Claborn:

On last summer's tour, my wife, all dressed up as she was, went down a mine shaft. She said it was the neatest thing she had ever done. She did better underground than I did, and I worked underground for about 20 years. That was the highlight of our summer. It was a great tour. At one point, I think my wife was holding about \$700,000 worth of gold bricks, but I told her she could not pack that home.

Assemblyman Segerblom:

Can the Committee take a tour?

Chair Claborn:

We used to. If we can find the time and the Committee wants to, we can put it together. The last couple of sessions we have been so busy we have not been able to. We would like to put a tour together because tours are such great learning experiences. You really see what happens, what really goes on in those mines and tunnels, and all the hard work that is put into Nevada mining to make our state the great state that it is. I thought we were number two or three in terms of gold production in the world, but we have slipped to fourth place. What happened?

Alan Coyner:

I know you are somewhat busy this session so if a Committee tour does not work out for you, I am happy to take any individual members on a tour at your leisure. We can go over the weekend or take a day off and go during the week if you like.

We do alternate first, second, third, and fourth positions with three other countries—China, South Africa, and Australia. We are all producing somewhere between 6 million and 9 million ounces a year. As old mines fall off and new mines come on, we will continue to jockey back and forth within those four positions.

Assemblyman Goicoechea:

When will the Cortez Hills project be on line? What is the completion date? I know there are ten miles of conveyor belting there. That is going to be an awesome sight when it comes in.

Tim Crowley:

I do not know exactly when that mine will actually produce gold. As you probably know, during the permitting process, which took several years with that mine, there is an ongoing investment that prepares the mine to be ready as fast as possible. To date, they have spent over \$250 million on permitting, equipment acquisition, and infrastructure development. When they got the final approval, which they have received, they started building the mine, and part of "building" also means processing. I would think that in the very near future you will see gold production.

Chair Claborn:

Thank you, Mr. Crowley. Does anyone here have any public comment? If so, please step up to the microphone.

**Fred Kessler, President, Anchorage Construction Management, Inc.,
Carson City, Nevada:**

We are the local dealer for Mariah Power Windspires ([Exhibit F](#)). One week ago, I dropped off a letter and a DVD at everyone's office. Given the amount of wind energy we have in Carson City, in particular, and on the eastern slopes of the Sierra Nevada Mountains, in general, we are proposing that the state consider a pilot project to put some wind turbines in to power some of the buildings. Your current expenses on electric energy are quite high, and this is one way to use free energy to lower the cost to the state of powering its buildings. Between the prisons, office buildings, and everything else here in Carson City, you have an enormous need for alternative forms of energy. The wind is free; you have plenty of it here; and it is one way you can cut your budget over time. It is an up-front investment to install these backyard-sized windspires, but they pay for themselves later.

Chair Claborn:

Thank you very much. There is a lot of wind in Nevada; there is no doubt about that. I am sure we are going to get into that before this session is over. I will be happy to look at your DVD. It is my understanding that you would like to give us a presentation; is that correct?

Fred Kessler:

Yes, and the DVDs I dropped off a week ago are fairly all-inclusive. They show you the machine; they show you what it does—the more wind you have, the more wattage it produces. With so much wind all along the eastern slopes of the Sierra Nevada, and elsewhere in Nevada as well, why pay the electric company?

Chair Claborn:

I have something to show you when you come to my office. I just received my newsletter from the Operating Engineers in Los Angeles who built some huge windmills there. I have pictures of them, and they are enormous. If you get a chance, I would be more than happy to show them to you.

Fred Kessler:

The Mariah Windspire is backyard-sized, so homeowners could put one or two or three in their backyard and basically power their home for free.

Chair Claborn:

We have been through this before but there were problems with birds running into them. We will be getting into that, sir, and thank you very much for your comments. With that, I will close the hearing. Our next meeting will be February 18, at which time we will hear a couple of bills pertaining to

agriculture. Are there any questions from the Committee? I do not see any.
We are adjourned [at 2:39 p.m.].

RESPECTFULLY SUBMITTED:

Judith Coolbaugh
Recording Secretary

Terry Horgan
Transcribing Secretary

APPROVED BY:

Assemblyman Jerry D. Claborn, Chair

DATE: _____

EXHIBITS

Committee Name: Committee on Natural Resources, Agriculture,
and Mining

Date: February 16, 2009

Time of Meeting: 1:32 p.m.

Bill	Exhibit	Witness / Agency	Description
	A		Agenda
	B		Attendance Roster
	C	Alan R. Coyner	PowerPoint presentation
	D	Tim Crowley	Copy of <i>Nevada Miner</i> newsletter
	E	Tim Crowley	PowerPoint presentation
	F	Fred Kessler	Two-page document concerning Mariah Windspires