



Arizona House of Representatives  
House Majority Research  
MEMORANDUM

*Kath*  
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Natural Resources and Agriculture Committee

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**To: JOINT LEGISLATIVE AUDIT COMMITTEE**

**Re: Department of Mines and Mineral Resources Sunset Hearing**

**Date:** November 17, 2005

Attached is the final report of the sunset review of the Department of Mines and Mineral Resources, which was conducted by the House of Representatives Natural Resources and Agriculture and Senate Natural Resources and Rural Affairs Committee of Reference on September 21, 2005.

This report has been distributed to the following individuals and agencies:

Governor of the State of Arizona  
The Honorable Janet Napolitano

President of the Senate  
Senator Ken Bennett

Speaker of the House of Representatives  
Representative Jim Weiers

Senate Members  
Senator Marilyn Jarrett, Cochair  
Senator Marsha Arzberger  
Senator Timothy S. Bee  
Senator Robert Blendu  
Senator Robert Cannell

House Members  
Representative Russ Jones, Cochair  
Representative Cheryl Chase  
Representative Ann Kirkpatrick  
Representative John Nelson  
Representative Tom O'Halleran

Arizona Department of Mines and Mineral Resources  
Department of Library, Archives & Public Records  
Auditor General

Senate Republican Staff  
Senate Research Staff  
Senate Democratic Staff  
Senate Resource Center

House Majority Staff  
House Research Staff  
House Democratic Staff  
Chief Clerk

COMMITTEE OF REFERENCE REPORT

House of Representatives Committee on Natural Resources and Agriculture and Senate  
Committee on Natural Resources and Rural Affairs Committee of Reference

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES

To: JOINT LEGISLATIVE AUDIT COMMITTEE

Representative Laura Knaperek, Co-Chair

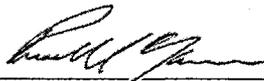
Senator Robert Blendu, Co-Chair

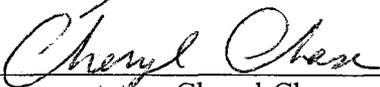
Date: September 21, 2005

Pursuant to Title 41, Chapter 27, Arizona Revised Statutes, the Committee of Reference, after performing a sunset review and conducting a public hearing, recommends the following:

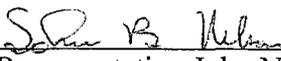
*The Department of Mines and Mineral Resources be continued for ten years and that continuation legislation address the issues raised during the committee of reference discussions.*

COMMITTEE OF REFERENCE

  
Representative Russ Jones, Co-Chair

  
Representative Cheryl Chase

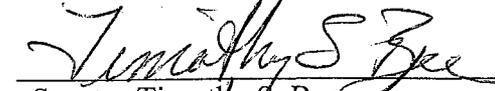
  
Representative Ann Kirkpatrick

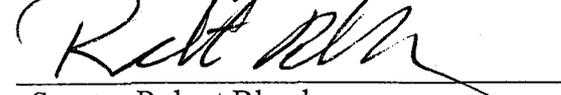
  
Representative John Nelson

  
Representative Tom O'Halleran

  
Senator Marilyn Jarrett, Co-Chair

  
Senator Marsha Arzberger

  
Senator Timothy S. Bee

  
Senator Robert Blendu

\_\_\_\_\_  
Senator Robert Cannell

## **COMMITTEE OF REFERENCE REPORT:**

### **ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES**

#### ***Background***

Pursuant to Section 41-2953, Arizona Revised Statutes, the Joint Legislative Audit Committee (JLAC) assigned the sunset review of the Arizona Department of Mines and Mineral Resources to the Senate Natural Resources and Rural Affairs and the House of Representatives Natural Resources and Agriculture Committee of Reference.

The Arizona Department of Mines and Mineral Resources (DMMR) was established in 1939 as an executive agency independent of the Legislature. The objective of the DMMR is to assist in the exploration, development and exploitation of the State's mineral resources. The duties of the DMMR are outlined in ARS 27-102, as follows:

- Promote development of mineral resources.
- Conduct studies of the economic problems of prospectors and small mines.
- Maintain archival information and a mineral museum.
- Provide quality mining data.
- Make surveys of potential economic mineral resource and conduct field and other investigations.
- Serve as a center of mining information.
- Publish and distribute information and data.
- Cooperate with related state and federal agencies such as the State Geologist at the Arizona Geologic Survey and the State Land Department.
- Oppose congressional acts favoring reciprocal or duty free imports of foreign minerals.
- Use its authority in other ways to assist in exploration and development of mineral resources in Arizona.

The DMMR maintains archival information on mining claims and mineral resources and operates the mineral museum. The DMMR is statutorily required to maintain: 1) an information bank and library of mineral and mining information including books, periodicals, films, videotapes and individual mine files; 2) underground mine map repository files, mining district data and an archive of mine data; 3) a mineral museum as the state depository for collecting, cataloging and displaying mineral specimens of various ores, gemstones, lapidary material and other valuable mineral specimens.

#### ***Committee of Reference Sunset Review Procedures***

The Committee of Reference held one public hearing on September 21, 2005, to review the DMMR response to the sunset factors as required by A.R.S § 41-2954, subsections D and F, and to receive public testimony (*See Attachment 4*). Testimony was received from Dr. Madan M. Singh, Director of DMMR, interested stakeholders and members of the public.

Dr. Singh described the agency's functions and effectiveness at promoting the development of mining and mineral resources in the state of Arizona. He discussed the publications of the Department, the presentations the Department has given and the number of visitors to the Mine Library and Museum. Dr. Singh also spoke of the limited budget that the Department has to work with. He explained that the majority of the DMMR budget is legislatively appropriated, but that a small portion of the budget is derived from proceeds from the museum gift shop. He also explained, of the money that is appropriated by the legislature, approximately half is allocated to pay for rent on the building.

Other interested parties testified in support of the continuation of the DMMR. Richard Bark, representing Phelps Dodge, Jerry Haggard, representing himself, Chuck Bentzen, representing himself, Sydney Hay, representing the Arizona Mining Association and Arizona Mining and Industry Get Our Support (AMIGOS), Bryan Wilson, representing St. Genevieve Resources Limited, Fred Brost, president of Mining and Environmental Consultants, Krishna Parameswaraw, representing Asarco LLC, Dave Ridinger, representing the Governing Board of the DMMR, and Rich London and Larry Fellows, representing themselves, also testified at the meeting.

### ***Committee of Reference Recommendations***

**The Committee of Reference recommended that the Department of Mines and Mineral Resources be continued for ten years and that continuation legislation address the issues raised during the committee of reference discussions.**

## SUNSET REPORT REQUIREMENTS

### Pursuant to Section 41-2954 subsection F, Arizona Revised Statutes

*\*\*\* Note- The following answers are a summary of the answers provided by the Department. Please see Attachment 2 for the complete DMMR answers to the sunset factors required by A.R.S. § 41-2954 subsection D and F.*

#### **I. Identification of the problem or need that the agency is intended to address.**

The DMMR is intended to attract mining and exploration companies to Arizona and to promote the development of Arizona's mineral resources. The DMMR maintains a database of unpublished reports and maps; a comprehensive information bank and library of mineral and mining related maps and literature; information on commodities and markets; target areas for exploration and a list of properties for acquisition and development. It also maintains a mineral museum.

#### **II. Statement of the objectives of the agency and its anticipated accomplishments.**

According to the DMMR, its objectives are to:

- 1) Continue to provide current and quality mining information.
- 2) Make the DMMR data knowledge widely available and easily accessible through an expanded use of the Internet that will include preservation of the aging library and mine files.
- 3) To see the Arizona mining industry prosper.
- 4) Improve the museum to enhance the experience and knowledge gained by its visitors.

#### **III. Identification of any other agencies with similar, conflicting or duplicate objectives and an explanation of the manner in which the agency avoids duplication or conflicts with other such agencies.**

According to the DMMR, there are two other agencies with objectives or names that appear to be similar, but these agencies perform dramatically different tasks. Those are the office of the State Mine Inspector and the Arizona Geological Survey.

“The Mine Inspector is a regulatory agency intended to enforce the regulations governing producing mines for the health and safety of the miners; oversee the abandoned mine program and administer mined land reclamation.

“The Arizona Geological Survey furnishes the public with data about the state's geologic setting, describes and maps the rocks and soils, performs investigations related to the field and controls and manages the laws and policies pertaining to oil, gas, helium and geothermal resources. The Survey looks at mineral deposits as they exist in a broad geologic setting and is primarily non-regulatory, although it does administer the Oil and Gas Conservation Commission, which is regulatory.

“The DMMR, by contrast, is a service agency that provides assistance in exploration, development and exploitation of the state’s mineral resources. The DMMR gathers economic data, publishes mineral resource information and cooperates with mine owners, exploration companies, mining companies and government land agencies to help develop the industry and contribute to the economy of the state.”

**IV. Assessment of the consequences of eliminating the agency or of consolidating the agency with another agency.**

According to the DMMR, “the Department serves a valuable purpose in keeping the mining industry active and without help from the Department, new investment in Arizona’s mineral industry would dwindle. In addition, other groups would suffer by not having the DMMR historical data to call upon for land use planning and management decisions. Small mine operators and out of state mining interests would lose a guide to the mineral resources of the state.”

DMMR documents provided to the Committee of Reference state that: “Eradication of the museum would strip the state of one of the finest mineral collections in the West. Consolidating the museum with another agency would dilute or eliminate the fundamental message the museum delivers so well – that mining is necessary, that it is done in an environmentally responsible manner and that the US is dependent on Arizona’s mineral deposits.”

***Attachments***

1. Letter from Rep. Russ Jones to DMMR requesting information
2. Sunset factors pursuant to A.R.S § 41-2954, subsections D and F.
3. Meeting Notice
4. Minutes of Committee of Reference Meeting
5. Spreadsheet of statutory changes discussed at the meeting held October 10, 2005.

# **Attachment #1**

**Letter from Rep Jones to the  
Department of Mines and Mineral  
Resources**

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COMMITTEES:  
NATURAL RESOURCES AND  
AGRICULTURE,  
VICE-CHAIRMAN  
COUNTIES, MUNICIPALITIES AND  
MILITARY AFFAIRS  
TRANSPORTATION

DISTRICT 24

July 28, 2005

Susan Celestian, Acting Director  
Arizona Department of Mines and Mineral Resources  
1502 West Washington  
Phoenix, AZ 85007

Dear Director Celestian:

The sunset review process prescribed in Title 41, Chapter 27, Arizona Revised Statutes, provides a system for the Legislature to evaluate the need to continue the existence of state agencies. During the sunset review process, an agency is reviewed by a legislative committee of reference. On completion of the sunset review, the committee of reference recommends to continue revise, consolidate or terminate the agency.

The Joint Legislative Audit Committee has assigned the sunset review of the Arizona Department of Mines and Mineral Resources to the committee of reference comprised of members of the House of Representatives Natural Resources and Agriculture Committee and the Senate Natural Resources and Rural Affairs Committee.

Pursuant to A.R.S. § 41-2954, the committee of reference is required to consider certain factors in deciding whether to recommend continuance, modification or termination of an agency. Please provide your response to those factors as provided below:

1. The objective and purpose in establishing the agency.
2. The effectiveness with which the agency has met its objective and purpose and the efficiency with which it has operated.
3. The extent to which the agency has operated within the public interest.
4. The extent to which rules adopted by the agency are consistent with the legislative mandate.
5. The extent to which the agency has encouraged input from the public before adopting its rules and the extent to which it has informed the public as to its actions and their expected impact on the public.
6. The extent to which the agency has been able to investigate and resolve complaints that are within its jurisdiction.

7. The extent to which the Attorney General or any other applicable agency of state government has the authority to prosecute actions under the enabling legislation.
8. The extent to which the agency has addressed deficiencies in its enabling statues that prevent it from fulfilling its statutory mandate.
9. The extent to which changes are necessary in the laws of the agency to adequately comply with these factors.
10. The extent to which the termination of the agency would significantly harm the public health, safety or welfare.
11. The extent to which the level of regulation exercised by the agency is appropriate and whether less or more stringent levels of regulation would be appropriate.
12. The extent to which the agency has used private contractors in the performance of its duties and how effective use of private contractors could be accomplished.

Additionally please provide written responses to the following:

1. An identification of the problem or the needs that the agency is intended to address.
2. A statement, to the extent practicable, in quantitative and qualitative terms, of the objectives of such agency and its anticipated accomplishments.
3. An identification of any other agencies having similar, conflicting or duplicate objectives, and an explanation of the manner in which the agency avoids duplication or conflict with other such agencies.
4. An assessment of the consequences of eliminating the agency or of consolidating it with another agency.

In addition to responding to the factors in A.R.S. § 41-2954, please provide the committee of reference with a copy of your most recent annual report. Your response should be received by September 1, 2005 so we may proceed with the sunset review and schedule the required public hearing. Please submit the requested information to:

Kathi Knox  
Arizona House of Representatives  
1700 West Washington  
Phoenix, AZ 85007

Thank you for your time and cooperation. If you have any questions, please feel free to contact me at 6902-926-5273 or Kathi Knox, the House of Representatives Natural Resources and Agriculture Committee Analyst, at 602-926-5480.

Sincerely,



Russell Jones,  
State Representative  
Chair, Natural Resources and Agriculture Committee of Reference

# **Attachment #2**

**Sunset factors pursuant to  
A.R.S § 41-2954, subsections D and F**

# Arizona Department of Mines and Mineral Resources

## SUNSET REVIEW -- 2005

### **1. The objective and purpose in establishing the agency.**

The objective of the Department of Mines and Mineral Resources (DMMR) is to assist in the exploration, development and exploitation of the State's mineral resources. The purpose of the Department of Mines and Mineral Resources is to assist in the exploration and development of the State's resources.

The Department of Mines and Mineral Resources helps prospective mining companies, exploration geologists, and government agencies in diverse ways to mine the minerals that exist in Arizona. It also has an educational component, so that students and the public-at-large understand the critical role of minerals in our civilization. The Department does not register entities, impose taxes or penalties, or charge fees for our services.

Currently, there is a perception among some persons that mining merely scars the landscape. Few people realize that every citizen of the US consumes 3.7 million pounds of minerals, metals, and fuels in his/her lifetime, including over 32,000 pounds (16 tons) of salt, 5.9 million cubic feet of natural gas, and more than 586,000 pounds (293 tons) of coal. An average house (1,600 square feet) has over 250,000 pounds (125 tons) of minerals and metals, including over 400 pounds of copper, 160,000 pounds (80 tons) of sand and gravel, and 4,000 pounds (2 tons) of cement. Thus the Department strives to help maximize the contribution from Arizona's mineral resources.

### **2. The effectiveness with which the agency has met its objectives and purpose and the efficiency with which it has operated.**

Considering the size of the Department (only seven FTEs) and limited budget, consisting basically of rent plus salaries, the number of functions that the staff has been able to cover is truly astonishing. Hence, it may be stated, without fear of contradiction, that the Department has been both effective and efficient. This can be attributed to a small but dedicated staff and a core of devoted volunteers. Remembering that during most of the last year even though we were understaffed, the work accomplished is amazing. These accomplishments are detailed in our Annual Report, which is appended to this document.

The Department collects and analyzes mineral information as it becomes available, catalogues it, and then disseminates it to the public. It also provides data to various government agencies. It has developed a website that had over 407,000 hits last year. Economic surveys of various minerals for both capital investment and prospectors were conducted. Mining data were evaluated and given to legislative, federal, state, county, and municipal agencies. At least 17 talks were given, plus a report for the Prospectors and Developers Association of Canada (PDAC) International Conference – which is the premier meeting for mining and exploration companies.

The Mine Library has more than 11,000 records and over 5,000 hard copy files. There are over 1,700 mine maps that have been catalogued, with 5,000 awaiting treatment in the map archives. The photo archives have over 4,000 items with many of these being historic. There were 10 publications prepared, not counting the report presented at PDAC. The staff has published documents for the Bureau of Land Management for obtaining mineral rights, written a review article for the U.S. Geological Survey, assisted the Federal Bureau of Investigation with a case in Sierra Vista, the Bureau of Indian Affairs with information on uranium, worked with the State Land Department about trust land, responded to inquiries from the Arizona Geological Survey on matters related to mining and mineral resources, identified dubious mining information for the Securities Division of the Corporation, gave the Arizona Department of Environmental Quality information on the chemicals used in mineral recovery at specific locations, and provided information to many other organizations.

The Museum had nearly 42,000 visitors last year and had over 22,000 students tour the facilities. Staff visited 24 schools that were unable to come to our facilities. Classes were offered in the lapidary shops on faceting, gem identification, sphere-making, and other lapidary skills. Over 10,000 kits with rock specimens have been distributed to teachers over the years to facilitate instruction in and understanding of mineral resources and the earth sciences. In addition, 21 events were organized to underscore the role of minerals. The Museum has participated in 10 gem and mineral shows throughout the State, and even one in California. It has maps, mineral identification kits, and screen savers for sale and flyers on specific topics.

The chart below presents the budgets, mineral production, and staffing for Arizona and three neighboring states. Two of these have production values that are similar to those of Arizona. Utah has about half of our production. The staffing and budget figures are indicative of our efficiency.

**Comparison of Budgets for the Department of Mines  
and Mineral Resources with Other States.**

<u>State</u>	<u>Budget</u>	<u>Mineral Production</u>	<u>No. of Employees</u>
<b>Arizona</b> Dept. Mines and Mineral Resources (non-regulatory)	\$658,400	\$3.3 billion	7
Geological Survey (non-reg & reg)	<u>\$772,000</u>		<u>13</u>
Total	\$1,430,040		20
<b>Nevada</b> Bureau of Mines & Geology (non-regulatory)	\$1,703,689	\$3.0 billion	26
Their Division of Mines is funded by a severance tax.			<u>9</u> 35
<b>California</b> Geological Survey (regulatory and non-regulatory)	\$7,800,000	\$3.3 billion	212
<b>Utah</b> Geological Survey (non-regulatory)	\$2,127,000	\$1.5 billion	59
Oil, Gas & Mining Division (regulatory)	<u>\$1,198,000</u>		<u>82</u>
	\$3,325,000		141
The other western states have mineral productions of less than a billion dollars and have staffs from 16 to 59. Funding goes up to \$3.8 million. It should be borne in mind that no two states have similar laws and organizations, hence direct comparisons are difficult.			

**3. The extent to which the agency has operated within the public interest.**

The primary function of the Department of Mines and Mineral Resources is to encourage the development of the minerals industry in Arizona. It does this by collecting data about mineral occurrences in the State and making them available to the public and to the mining and exploration companies. This basic knowledge of where to look for further deposits helps these entities to focus their resources in areas where the chances of success are greatest. Over a period of time some of these ventures flourish into large and successful mining operations. This constitutes a notable contribution to the economy of the State.

Mining has been a vital industry for Arizona since its settlement. Prospectors and business people flocked to the territory to explore and exploit its mineral wealth. Mining activity continues to be important to the State, especially in the rural areas. Mining provides high-paying jobs and a significant

tax base for the schools and other facilities. In 2004, the mining of construction materials generated over 25,000 jobs, including those due to the indirect impact. The copper industry provided 22,400 jobs, again including the indirect component. This is a sizeable source of revenue for the local governments.

In 2004 alone, mining has directly contributed over \$3.3 billion to the State's economy, excluding exploration and development. It may be estimated that this resulted in nearly \$7 billion including the indirect impact. The mining industry is currently in an upswing. In addition, copper mining alone has major contributions to make, since it is expanding. For example, the Safford Operation of Phelps Dodge will spend \$570 million before it comes into production in 2007. Resolution Copper is expected to invest an estimated \$2 billion in developing its new deposit near Superior, before it produces even one pound of copper. Construction is very strong throughout the state and, hence, construction-materials mining is at an all time high. Thus, expansion of existing mines and starting of new operations are increasing demand for ADMMR's services.

#### **4. The extent to which rules adopted by the agency are consistent with the legislative mandate.**

*Not Applicable.* The Department is a non-regulatory agency and does not promulgate rules that affect the industry or the public-at-large. The objectives and functioning of the Department is consistent with the legislative mandate to encourage prudent capital investment and development of the minerals industry in the State.

#### **5. The extent to which the agency has encouraged input from the public before adopting its rules and the extent to which it has informed the public as to its actions and their mandate.**

*Not Applicable.* Since the Department is non-regulatory in character it does not formulate rules. Hence, there is no need for direct input from the public. However, the Department is proactive in seeking the opinions of both the industry and other stakeholders and aggressively works toward achieving the maximum benefit for Arizona.

A Board of Governors, consisting of five members, governs the Department. The members of this Board are appointed by the Governor of the State, one each year. These members are selected from the public and have an interest in the mineral resources of the State. The Board sets the policies of the Department within the statutory and budgetary limitations. This mechanism provides public input in an indirect manner.

#### **6. The extent to which the agency has been able to investigate and resolve complaints that are within its jurisdiction.**

*Not Applicable.* Again, the nature of the Department is such that it does not have jurisdiction over the public. The Department has considerable expertise in the field of mineral resources and does provide assistance to several State and federal agencies. Investors and regulators are often first alerted and then later assisted by our knowledge, investigation, and analysis.

Often these efforts are related to dubious claims of mineral properties, but on occasion these help locate likely criminal activity in the area. In the past year, the Department has worked with the Securities Division of the Corporation Commission, the Office of the State Attorney General, Mohave County Sheriff's Office, the State Land Department, the Office of the State Mine Inspector, the Federal Bureau of Investigation, the Bureau of Land Management, and security and law enforcement agencies of other states and countries.

When the prices of mineral commodities are on the upswing, as is currently the case, or when the return in the general investment market is poor, the number of suspect activities related thereto multiply. Unfortunately, the resources of the Department are limited, which tends to restrict the services the Department can provide.

## **7. The extent to which the Attorney General or any other applicable agency of state government has the authority to prosecute actions under the enabling legislation.**

*Not Applicable.* It is not within the purview of the Department to prosecute anyone directly. The primary purpose of the agency is to promote investments in the minerals industry in Arizona. However, it cooperates with the Attorney General, the Securities Division of the Corporation Commission, Federal Bureau of Investigation, Department of Treasury, Securities and Exchange Commission, and others to investigate fraudulent activity related to mining securities and offerings. The technical expertise that the Department possesses is necessary to differentiate between legitimate risk in mining ventures and outright fraud. On occasion the staff has also aided the Drug Enforcement Agency when requested, such as when a mining company front is being used to cover nefarious drug activities.

## **8. The extent to which the agency has addressed deficiencies in its enabling statutes that prevent it from fulfilling its statutory mandate.**

The enabling legislation provides a broad mandate for the Department and its operations. However, if some members of the general public fail to understand the importance of mining, or the Department's role in promoting this vital industry, this probably reflects on the Department's failure to convey this message, but not a deficiency in our enabling statutes. In the forthcoming year, this will be one focal point for the Department.

Often the investing public, market regulators, and stock brokers make inquiries about advertised mining properties. The Department provides whatever information it has on hand. However, this issue is a sensitive one and further addressed in the next section.

Gone are the days when Henry Wickenburg was able to find a rock on the surface and throw it at a vulture to find it split open and expose gold, or Jose Jerise could pick up some samples without even realizing the amount of gold in them, or when Bill Hope found a globe-shaped nugget of silver which later led to the settlement of the community of Globe. New deposits are now found deep underground, which require sophisticated equipment and considerable expertise and expense. Although the need to explore continues, the resources allocated to the Department to assist remain very restricted. The Department, however, does preserve, organize, and evaluate data that it obtains from various sources and makes it available to potential explorationists, mine operators, and mineral consumers as they call upon our services.

The costs for developing and operating mines are substantial; large mines offer economy of scale and operation. There is a global competition for the extraction of metals that puts small miners at a disadvantage. Hence, the number of small miners has decreased over time. Small mines still exist for the extraction of gemstones; niche commodities such as kitty litter (and other absorbents); pigments for paint; sand and gravel; and crushed stone. Small miners can also operate during times of high commodity prices. The Department cooperates with these entities and with new companies that are interested in initiating new ventures, to the extent the resources permit. Small operators have an acquisition/exploration advantage, however, by virtue of being small and able to react quickly. Additionally, they are often not risk adverse.

## **9. The extent to which changes are necessary in the laws of the agency to adequately comply with these factors.**

Statute 12 states, "The Department shall oppose duty-free imports of foreign minerals." This relates to fees on imported materials and is outdated, since free trade is the current policy of the federal government. Examples of these agreements include GAAT, NAFTA, and the recently passed CAFTA. Hence, it should be deleted.

In 1997, the Department, and some of its staff, were sued personally for \$27 million because they had reported the total lack of discovery of a mining operation. In fact, this was based on field sampling, done by the Department staff in 1994, and assay results by an independent laboratory. Yet the Maricopa Superior Court ruled in favor of the plaintiff and decided that the Department does not have the statutory authority to predict the likelihood of success or economic viability of a particular mining operation, or to opine as to the value of the stock in a mining company.

It might be noted that by the next year, with no proof of discovery emerging and with NASDAQ and others investigating, that company's stock had slumped and finally, in 2000, the remaining stock was sold for \$20,000 in Bankruptcy Court. This validates the assessment of the property by Department staff.

In view of the above and the Department's statutory duty to "provide quality mining data, evaluation, and assistance....." and further to "conduct studies of economic problems ....." the Department requests that the Legislature more clearly define the authority that the Department employees have to evaluate properties may be and the extent to which the information provided to the public.

A suggested mechanism is to change ARS 27-102(A) (4) to read as follows:

"4. Provide quality mining data, evaluation and assistance relating to mineral development to the *public*, legislature, and *federal*, state, county and *other government agencies*."

The italics are changes from the original as it exists.

It is further suggested that the following or similar clause be added:

"Employees and staff, including the director and the board, of the department shall be immune from personal liability with respect to acts done and actions taken in good faith, within the scope of their authority."

Similar clauses occur in other agency authorizations. For example, ARS 27-121 (F) from the statutes for the State Mine Inspector states "Any claim or action against the mine inspector or the inspector's deputies, agents or employees in their official capacity as described in this title shall be brought against the state of Arizona and not against the mine inspector, deputy, agent or employee individually."

## **10. The extent to which the termination of the agency would significantly harm the public health, safety or welfare.**

The ultimate result of closing the Department of Mines and Mineral Resources would be disastrous for the mining industry and thus the State of Arizona. It would severely hamper the development of new mineral resources in the State and adversely affect those that are currently in operation. The current and future producers and consumers of minerals often call on the Department for information and assistance. The Department has supplied various types of information for the new developments at Phelps Dodge's Safford and the Resolution Copper mines that will become productive in the forthcoming years.

Prospectors or companies interested in exploring or developing minerals in the State can contact the Department to find previous exploration data and feasibility, possible locales for specific commodities, and obtain overall guidance in getting started toward exploring and starting a mine. Recently, the Department has been inundated with calls from various entities regarding ASARCO, since they have declared bankruptcy.

The Mining and Mineral Museum is an integral and important part of the Department. The State can be proud of having one of the best mineral collections in the country. It helps the public understand the critical role of minerals to our society in general and to Arizona in particular. It serves as an Arizona state science standards-based educational channel for children in the K-12 group and instills an interest in geology and the minerals industry. Each year over 20,000 students visit the Museum. By providing access to specimens and ore suites from deposits inaccessible due to unsafe conditions or flooded workings, the displays, and the extensive cataloged non-displayed reference collection, are of great value to prospectors, mineralogists, professional geologists, mining engineers, and other researchers.

The Museum offers an outreach program that provides talks and classes in rural schools. Minerals, rocks, and printed materials are assembled into educational kits and distributed to teachers to help them convey knowledge about minerals and mining to the students. To date over 10,000 kits have been handed out. The Museum provides teacher workshops, attended by teachers and home-schooling parents. Classes in lapidary, silversmithing, and mineralogy are very popular. The Department conforms to the American With Disabilities Act, and accommodates such persons in classes and museum tours.

Although no formal agreements exist with the State Universities at this time, we would like to initiate cooperation with their libraries and other areas of common interest.

**11. The extent to which the level of regulation exercised by the agency is appropriate and whether less or more stringent levels of regulation would be appropriate.**

*Not Applicable.* The Department is a non-regulatory agency.

**12. The extent to which the agency has used private contractors in the performance of its duties and how effective use of private contractors could be accomplished.**

Private contractors have been used in the past for engineering design, especially for the Museum building. The Department also has used outside printing companies and photo reproduction facilities. Generally, there are insufficient funds for much work by contractors.

Most of the work performed by the Department involves collecting, analyzing, and disseminating technical data related to the minerals industry. This is done almost entirely in-house. The Department also collects specific mineral specimens and has a strong educational component. It has exceptional capabilities to execute these duties.

## **Responses to Additional Questions**

**1. An identification of the problem or the needs that the agency is intended to address.**

The Department is intended to attract mining and exploration companies to Arizona rather than going elsewhere in their search for, and development of deposits of, raw materials. There is also the need to educate some segments of the general public that view mining as being unnecessary to society. The critical role of minerals in our civilization and their key role in our standard of living is inadequately understood.

The objective of the Department is to promote the development of Arizona's mineral resources. This is accomplished through technical research, field investigations, compilation of information into a mineral occurrence database, and disseminating information through publications, personal contacts, and seminars. The staff, of mining engineers and geologists, assists mining and exploration companies, prospectors, and others interested in Arizona's minerals with land acquisition, exploration, mine development, mineral processing, financing, government regulations, and marketing. It also provides assistance that is tailored to meet the diverse needs of the public. This assistance includes maintaining a database of unpublished reports and maps; a comprehensive information bank and library of mineral-and mining-related maps and literature; information on commodities and markets; target areas for exploration, and a list of properties for acquisition and development. The Department can facilitate dealing with regulatory agencies; publish survey and technical reports; maintain and operate an exceptional museum; and educate school children and the public about minerals and their critical role in society.

**The Department serves as a one-stop shop for exploration and mining companies that are contemplating investing in the Arizona minerals industry. Without such an agency the State would be signaling to mining-related firms that the State is indifferent to the development of new resources.**

**2. A statement, to the extent practicable, in quantitative and qualitative terms, of the objectives of such agency and its anticipated accomplishments.**

**1) Continue to provide current and quality mining information to a rapidly changing world.**

The Department is essentially a service agency. Therefore, it is sometimes difficult to quantify its achievements. For example, just recently ASARCO has had its workers go on strike and it has declared Chapter 11 bankruptcy. We have responded to numerous calls from brokers and other entities regarding their production capabilities, other Arizona assets, as well as possible liabilities. Individuals and mining companies' representatives come to our offices to review reports and maps, and discuss properties with the goal of perhaps making offers to purchase them. This is time-consuming for the staff, but if the mines are recapitalized they could produce copper again at their full potential. This would not only gainfully employ the miners that are working there, but also resume the generation of revenue for the mine suppliers as well as State and local governments.

**2) To make our data and knowledge widely available and easily accessible through an expanded use of the Internet. This will include preservation of the aging library and mine file information for use into the 21<sup>st</sup> century.**

With restricted funding and lack of adequate staff, the Department has worked diligently towards digitizing the data on exploration and mineral deposits in the State and putting this data on its website. This has decreased the number of office visitors and requests for publications. As increasingly more information becomes available on the Internet it frees staff time for research and less routine tasks and inquiries.

**3) To see the Arizona mining industry prosper, although recognizing that it is influenced and sometimes delayed by external events.**

Many of the results of the efforts of the Department are indirect and often delayed by years. For instance, the current activity to develop the copper deposits in Safford by Phelps Dodge had to wait for a land exchange to be approved by the US Department of the Interior and for copper prices to rise. Now, however, Phelps Dodge anticipates spending \$570 million for development expenses even before production starts. Similarly, cooperation with Magma Copper Company during the early and mid-1980s has now led to Resolution Copper developing a deposit near Superior, with estimated expenses of nearly \$2 billion before any copper is produced.

**4) Improve the Museum to enhance the experience and knowledge gained by its visitors.**

A goal of the Museum is to have high visitation, and last year we had about 42,000. This number has gradually increased every year, in spite of the admission charge that has been instigated by the Legislature. The staff also encourages students to go through the museum, with over 22,000 having visited last year alone. In addition, the staff present talks at various schools and organizations in the State. This leads to interest in geology and mining in the upcoming generation. Work continues to improve the quality of both internal and external displays.

**3. An identification of any other agencies having similar, conflicting or duplicate objectives, and an exploration of the manner in which the agency avoids duplication or conflict with other such agencies.**

There are only two agencies with objectives or names that may appear to be similar, but these agencies perform dramatically different tasks. These are the office of the State Mine Inspector and the Arizona Geological Survey.

The Mine Inspector's responsibilities include 1) to "inspect" all the active mines in the State, 2) to oversee the abandoned mine program, and 3) administer mine land reclamation. The inspections cover "the operation, conditions, safety appliances, machinery, equipment, sanitation and ventilation, the means of ingress and egress, the means taken to protect the lives, health and safety of the miners, the cause of accidents and deaths occurring at the mine, and the means taken to comply with the" other provisions of the law.

In short, this is a regulatory agency intended to enforce the regulations governing producing mines for the health and safety of the miners. By statute the Mine Inspector's office is not allowed to comment on "ore, ore bodies, or values, of any mine or part thereof."

In contrast, the Department of Mines and Mineral Resources is intended "to assist in the exploration, development and exploitation of the State's mineral resources". Thus, we are a service agency, which gathers economic data, publishes mineral resource information and cooperates with the mine owners, exploration companies, mining companies, and government land agencies to help them develop the industry and, thereby, contribute to the economy of the State.

The duties of the Geological Survey is to furnish the public with data about the State's geologic setting, to describe the rocks and soils and to map the same, perform investigations related to the field, and to control and manage the laws and policies pertaining to oil, gas, helium, and geothermal resources. The Survey looks at mineral deposits as they exist in a broad geologic setting, while our Department researches specific deposits for their mineral potential and is the State's official repository of information on mineral deposits. The Survey is primarily non-regulatory, but it administers the Oil and Gas Conservation Commission, which is regulatory.

There is no duplication or conflict between the Department of Mines and Mineral Resources and the Geological Survey. In 1999, Dr. Larry Fellows, then Executive Director of the Arizona Geological Survey, but who has since retired, testified to the Legislature that there was no duplication between the two agencies.

The Department assists both of these agencies as the need arises. The Department serves the Mine Inspector's abandoned mines program with its historic data and underground maps, and also tracks the industry activity for that office. The Geological Survey has been supplied with data on mineral resources, mines, and suggested areas for geologic mapping.

These activities are in accordance with our statutory obligations.

#### **4. An assessment of the consequences of eliminating the agency or of consolidating it with another agency.**

(See also the response to Number 10 above)

The Department serves a valuable purpose in keeping the mining industry active in the State and to sustain mineral discovery. Its existence as a State agency conveys to many capital groups the State's desire for exploration and mining. Arizona has a history of being rich in minerals, which were the initial enticement for settlement of the area. Without help from the Department, new investment in Arizona's mineral industry would dwindle. Industry would receive the message that the State is not interested in their contribution to the economy.

In addition, other groups with whom we cooperate would suffer by not having our historical data to call upon for land use planning and management decisions. These include state, federal, and Indian land managers, environmental investigators, the financial community, archeologists, and the technical, as well as, the historical researchers. The small mine operators and entrepreneurs, and the out-of-state mining community would lose a guide to the mineral resources, including the labyrinth of mineral rights regulations, industry and service connections, and permitting requirements.

Elimination of the Department of Mines and Mineral Resources would result in a decline in exploration, mine jobs, and tax revenues derived from mining and the large service industry associated therewith. The rural economies would feel the loss most strongly.

Eradication of the Museum would strip the State of one of the finest mineral collections in the West. Consolidating the Museum with another agency would dilute or eliminate the fundamental message that the Museum delivers so well – that mining is necessary for civilization, that it is done in an environmentally responsible manner, and that the United States is dependent on Arizona's remarkable mineral deposits.

Arizona competes with other States in trying to attract financial resources for mineral development. As it stands, Arizona's investment in the Department of Mines and Mineral Resources is relatively low compared to adjoining States. In some respects the Department's work is similar to that of tourism. Tourism thrives with advertisement. Chambers of Commerce serve a similar purpose. The Department helps the mining and exploration community learn about all the mineral opportunities that Arizona has to offer.

# **Attachment #3**

## **Meeting Notice**

## ARIZONA STATE LEGISLATURE

### INTERIM MEETING NOTICE OPEN TO THE PUBLIC

#### SENATE NATURAL RESOURCES AND RURAL AFFAIRS COMMITTEE AND HOUSE OF REPRESENTATIVES NATURAL RESOURCES AND AGRICULTURE COMMITTEE OF REFERENCE FOR THE SUNSET HEARING OF THE DEPARTMENT OF MINES AND MINERAL RESOURCES

**Date:** Wednesday, September 21, 2005

**Time:** 1:30 p.m.

**Place:** House Hearing Room 3

#### AGENDA

1. Call to Order
2. Opening Remarks
3. Sunset – Department of Mines and Mineral Resources
  - Presentation by the Department of Mines and Mineral Resources
  - Public Testimony
  - Discussion
  - Recommendations by the Committee of Reference
4. Adjourn

#### Members:

Senator Marilyn Jarrett, Cochair  
Senator Marsha Arzberger  
Senator Tim Bee  
Senator Robert Blendu  
Senator Robert Cannell

Representative Russ Jones, Cochair  
Representative Cheryl Chase  
Representative Ann Kirkpatrick  
Representative John Nelson  
Representative Tom O'Halleran

9/6/05  
jmb

**People with disabilities may request reasonable accommodations such as interpreters, alternative formats, or assistance with physical accessibility. If you require accommodations, please contact the Chief Clerk's Office at (602) 926-3032, TDD (602) 926-3241.**

# **Attachment #4**

## **Minutes of Committee of Reference Meeting**

ARIZONA STATE LEGISLATURE  
Forty-seventh Legislature – First Regular Session

**SENATE NATURAL RESOURCES AND RURAL AFFAIRS COMMITTEE AND  
HOUSE OF REPRESENTATIVES NATURAL RESOURCES AND AGRICULTURE  
COMMITTEES OF REFERENCE  
FOR THE SUNSET HEARING OF  
THE DEPARTMENT OF MINES AND MINERAL RESOURCES**

Minutes of Meeting  
Wednesday, September 21, 2005  
House Hearing Room 3 -- 1:30 p.m.

Chairman Jones called the meeting to order at 1:35 p.m. and attendance was noted by the secretary.

**Members Present**

Senator Bee  
Senator Blendu  
Senator Jarrett, Cochair

Representative Chase  
Representative Kirkpatrick  
Representative Jones, Cochair

**Members Absent**

Senator Arzberger  
Senator Cannell

Representative Nelson  
Representative O'Halleran

**Speakers Present**

Kathi Knox, Majority Research Analyst, House Natural Resources and Agriculture Committee  
Megan Gnagy, Majority Assistant Research Analyst, House Natural Resources and Agriculture Committee

Doug Martin, Arizona State Mine Inspector

Rose Ellen McDonnell, Interim Director, Arizona Geological Survey

Jon Spencer, Senior Geologist, Arizona Geological Survey

Madan Singh, Director, Arizona Department of Mines and Mineral Resources

Richard Bark, Attorney, representing Phelps Dodge

Jerry Haggard, representing self

Ted Eyde, representing self, Tucson

Chuck Bentzen, Hydrotex

Sydney Hay, Executive Director, Arizona Mining and Industry Get Our Support; Arizona Mining Association

Bryan Wilson, President/Chief Executive Officer, St. Genevieve Resources Limited; SGV Resources Incorporated, Montreal, P.Q., Canada

Krishna Parameswaraw, Environmental Affairs, Asarco LLC

(Chairman Jones recognized a person in favor of continuation of DMMR who did not speak, page 7)

Larry Fellows, representing self

Fred Brost, President, Mining and Environmental Consultants, Peoria

Dave Ridinger, Chairman, Board of Directors, Arizona Department of Mines and Mineral Resources

Richard Lundin, Charles A. Hoffman Foundation

At Chairman Jones' request, the Members introduced themselves.

## **PRESENTATIONS**

Kathi Knox, Majority Research Analyst, House Natural Resources and Agriculture Committee, explained the sunset review process.

Megan Gnagy, Majority Assistant Research Analyst, House Natural Resources and Agriculture Committee, related the duties of the Arizona Department of Mines and Mineral Resources (DMMR) as outlined in A.R.S. §27-102:

- Promote development of mineral resources in the state.
- Conduct studies of the economic problems of prospectors and small mines.
- Maintain archival information in the mineral museum.
- Provide quality mining data.
- Make surveys of potential economic mineral resources.
- Conduct field and other investigations.
- Serve as the center of mining information.
- Publish and distribute information and data.
- Cooperate with several related state and federal agencies, such as the State Geologist, the Arizona Geologic Survey (AGS), and the State Land Department (SLD).
- Oppose congressional acts favoring reciprocal or duty free imports of foreign material.
- Use its authority in other ways to assist in more extensive exploration and development of mineral resources in Arizona.

Chairman Jones stated that he asked the AGS and State Mine Inspector to make brief presentations on their purpose and function in relation to DMMR.

Doug Martin, Arizona State Mine Inspector, stated that DMMR is very unique. When mining was affluent in the state, over 1,500 mines were in operation that went out of production from 1940 to 1942. Exploration companies came to the state looking for mines that were productive in different minerals, but information on mining was scattered. From 1971 to 1973, mining and geological engineers in the state visited every mining engineer widow and asked for an endowment of their husband's papers and maps, which were deposited at DMMR where an employee developed a program to computerize the records and maps. This information is invaluable, not to mention the museum, which shows people how important minerals are to the state.

In relation to his office, Mr. Martin conveyed that 43 ostriches were missing from the ostrich farm near Pinnacle Peak and could not be found for weeks. He asked DMMR for a record of mines, tunnels, or shafts in the area. DMMR gave him the exact location of three abandoned mines where he found every ostrich huddled in cool tunnels. Also, a suspect accused of killing his wife and two children ran off toward Payson and supposedly hid in abandoned mines. That information was gleaned not only from his office records on active mines, but also from DMMR.

Mr. Martin said his office receives calls on a daily basis from people asking where mines are located that can be purchased, where to look for silver, etc., and DMMR has the information. The importance of the historical data for their Abandoned Mines Program is invaluable in that the mining companies contribute to the Abandoned Mine Fund, and hopefully, the State Legislature will match the fund this year, so those damages can be secured. DMMR has a place in state government and is invaluable not only to his office, but to law enforcement agencies, petroleum, gas and mineral production, and the mining industry.

Rose Ellen McDonnell, Interim Director, Arizona Geological Survey (AGS), stated that the mission of AGS is to inform and advise the public about the geological character of Arizona, help meet societal needs for water, energy, and mineral resources, and assist in prudently managing the state's land and natural resources. AGS staff perform several important functions for patrons who include governmental agencies, elected officials and staff, environmental and engineering geology firms, hydrologists, energy and mineral resource exploration and production companies, consultants, planners, property owners and potential buyers, attorneys, realtors, insurance companies, tourists, teachers, students, book dealers, professional society citizen groups, and interested individuals. AGS informs and advises the public by answering questions, selling maps and reports, maintaining a geology library and databases, giving talks, and leading field trips. AGS also maps and characterizes rock formations, surficial materials, and mineral and energy resources. AGS describes and monitors potential hazards in the state and limitations to land and resource management, such as earthquakes, flooding, land subsidence, earth fissures, landslides, debris flows, and rock solution. AGS also provides support for the Arizona Oil & Gas Conservation Commission.

When Ms. Kirkpatrick asked if AGS interfaces with the U.S. Geological Survey (USGS), Ms. McDonnell responded that USGS provides funding for AGS' state geologic mapping program, and AGS works with the USGS on the state geological database. She indicated to Chairman Jones that AGS receives calls concerning mining records or production reports that are referred to DMMR.

Chairman Jones asked how AGS' library and database differ from that at DMMR.

John Spencer, Senior Geologist, Arizona Geological Survey, conveyed that the AGS library focuses on geologic literature, whereas DMMR's information and databases focus on mining information. An exploration company in Arizona looking to explore for gold or copper would focus on existing districts where there has been past production and would be interested in geologic information that can be obtained from AGS, as well as information about past mining activity that can be obtained from the DMMR.

Madan Singh, Director, Arizona Department of Mines and Mineral Resources, introduced DMMR staff. He stated that he joined DMMR on August 15, 2005 and related his background experience. He gave a slide presentation about DMMR and requested two changes to the statutes:

- Regarding language stating that DMMR shall oppose duty free imports of foreign minerals, fees on imported materials is outdated since free trade is the current policy of the federal government; hence, this language should be deleted.
- To discourage legal actions against DMMR, A.R.S. §27-102(A)4 should be changed to read, "Provide quality mining data, evaluation and assistance relating to mineral development to the public, legislature, and federal, state, county and other government agencies." The following or a similar clause should also be added, "Employees and staff, including the director and the board, of the department shall be immune from personal liability with respect to acts done and actions taken in good faith within the scope of its authority." Analogous clauses occur in other agencies.

Mr. Singh said he believes there is a strong case for continuation of DMMR for the next 10 years in order to continue providing current and quality data to a rapidly changing world, make information globally accessible through expanded use of the Internet, assist new mining ventures to explore Arizona's mineral deposits, obtain and enhance exhibits for the museum to encourage visitors and students, and increase the outreach program.

At Chairman Jones' request, he proceeded to review responses to the #1 and #2 factors for the Sunset Review (Attachment 1).

Chairman Jones indicated that DMMR has a very small budget, so it is amazing what is done with such limited resources, especially with only \$100 provided for travel. Mr. Singh responded that staff often spend their own money on travel because money is not available in the budget. Much information needs to be collected in the field, but the budget for travel is limited in state and out of state. Today, the mining industry is global as many mines are owned by people from abroad, so data needs to be presented to a global audience. As much as possible is done on the Internet, but that is not always possible, so for the first time last year, a meeting was attended in Toronto to present information. Staff often ride with other people or whatever, but sometimes it is quite difficult to function with limited resources.

Senator Blendu asks if DMMR promotes the development of mineral resources of the state, etc., according to statute. Mr. Singh replied that DMMR does most of it. Senator Blendu advised of a problem with monitoring facilities at some of the mining operations that are set off when dust storms occur, resulting in noncompliance with Arizona Department of Environmental Quality (ADEQ) standards. He asked if DMMR could tell ADEQ that the dust storms are causing the problem. Mr. Singh responded that DMMR goes to ADEQ when permits are requested, but he is not aware of a particular case where a mine was closed because of dust storms. As far as dust and health components of the mining product, the State Mine Inspector would be in a better position to address ADEQ.

Chairman Jones asked who the advocate is for a potential investor in the state with respect to dealing with other agencies like ADEQ. Mr. Singh responded that prior to development of the

mine, DMMR would help navigate the various agencies as far as permits, etc. Once the mine is operating, DMMR monitors production and economics, but various other agencies become involved that the investors deal with directly. If the mining companies ask for DMMR's assistance, DMMR would help, but most of their work is done prior to the mine starting out.

Chairman Jones noted that DMMR publishes pamphlets and newsletters and asked if most are directed at attracting potential clients to the state or informational. Mr. Singh answered that some are informational, but others are strictly to attract people to the state. The Prospectors and Developers Association of Canada (PDAC) International Conference in Toronto was strictly for promotional purposes. Staff went to Spokane last year and plan to go again this year. The intent is to select meetings that can help development.

Chairman Jones asked if other statutory changes should be made so DMMR has the resources to carry out its charges. Mr. Singh responded that DMMR is certainly appreciative of any resources that can be obtained because some things could be done better or in more detail. For example, economic studies require going into the field, which can take some time. DMMR does not have the resources to do that, but often has to rely on mining companies and related entities to provide information. He submitted that the statute covers more areas than DMMR has resources for. The two changes he suggested are based on the fact that taxing of imported minerals is obsolete, and at one time, legal action was taken against the department and personnel. Fortunately, no money had to be given to the individual, but he would like to avoid such incidents in the future. Often these things happen when mineral prices are high, as they are now, and people want to take advantage.

Chairman Jones said he was very impressed with the museum and packets prepared for the teachers. The statute only states that DMMR will have a museum, so perhaps there should be some elaboration about activities and outreach in education. Mr. Singh responded affirmatively, noting that DMMR depends on revenues from a small gift shop to pay some of the people who work in the museum, and many volunteers work with the department, but to purchase new specimens, some of which are very expensive, DMMR must depend on people's generosity, nonprofit organizations, etc. More resources would enhance the quality and number of specimens.

Senator Jarrett surmised that DMMR may be the only agency that is not reimbursed for travel and asked for an estimated amount. Mr. Singh answered that \$7,200 was spent to attend the PDAC Conference because a booth had to be set up and at least two people needed to attend. The University of Arizona helped man the booth because DMMR could not afford to send more than two people. He suggested \$20,000 or more.

Chairman Jones remarked that if the statute requires an agency to perform certain duties, the agency needs the resources to carry those out or the statute should be changed to be compliant. Mr. Singh pointed out that DMMR has an annual budget of \$800,000, but about half is paid to the state for rent, so there is only \$400,000 to work with.

## PUBLIC TESTIMONY

Richard Bark, Attorney, representing Phelps Dodge, stated that he is in support of continuation of DMMR for 10 years. The agency does a good job in serving the public and schoolchildren who visit the museum. He indicated to Chairman Jones that the DMMR structure works well with the State Mine Inspector as the regulatory body and coordinates effectively with the AGS to meet the company's needs. He agreed with Senator Jarrett that the agency could use more funding for travel.

Jerry Haggard, representing self, said he is legal adviser to a number of mining companies in Arizona in strong support of continuation of DMMR for another 10 years (Attachment 2). During the past 35 years, he and his clients consistently received timely, competent, and accurate assistance from DMMR. He recommended clarification of DMMR's authority to advise the public making inquiries in order to put some kind of objective evaluation on particular projects marketed in Arizona.

Ted Eyde, representing self, Tucson, expressed support for continuation of DMMR for 10 years. He said he is an independent geologist who specializes in marketing of specialty and performance minerals. He also operates and owns specialty clay operations near Kirkland Junction and Baghdad, Arizona. These are minerals that were not known before. AGS is a good place to begin obtaining information, but often the deposits are buried in the geological data and it takes a while to sort them out. He related that there are two new ground calcium carbonate (ground up marble) operations in Arizona, one near Superior owned by a Swiss company, and another south of Tucson owned by a French company. A third company from Germany wants to get in the business and is looking at a deposit near Dragoon. In every case, a trip to DMMR led the companies to establish businesses in Arizona.

When Senator Blendu asked if American companies benefit from the process, Mr. Eyde responded that foreign companies recognize the growth of the industrial minerals business and own more industrial minerals operations than domestically-owned companies.

Chuck Bentzen, Hydrotex, stated that having failed retirement, he started a small business. Networking is very important to sales, so the people at DMMR need more money to travel and obtain information. He said there is no better place for a person looking for information with a buying industry than DMMR where the people are very dedicated. The state is fortunate to have these people looking out for its interest in continuing economical development of the mining potential in Arizona. Not only does DMMR deserve a hearty endorsement for another 10 years, but the travel budget should also be increased.

Sydney Hay, Executive Director, representing Arizona Mining and Industry Get Our Support; Arizona Mining Association, stated that the Arizona Copper Association conducts a study every year about the direct and indirect impact of the copper industry on the state's economy reflecting personal income, business sales, and state and local government revenues. In 2004, the latest report released, the total economic impact was \$3.3 billion. The industry depends on DMMR to maintain important databases of mining properties reflecting mineral potential, ownership, technical guidance, and metallurgical information, and the limited staff have always been helpful and responsive. She added that the most important service DMMR provides is the educational

component. Schoolchildren go through the museum and learn that without minerals, there would be no houses, cars, computers, phones or lights, and without the mines, there would not be any minerals. She urged the Members to continue DMMR.

Bryan Wilson, President/Chief Executive Officer, St. Genevieve Resources Limited; SGV Resources Incorporated, Montreal, P.Q., Canada, said the companies became involved in Arizona about a year ago when they were in a position to acquire the Zonia Mine near Prescott and the Emerald Isle Mine in Kingman. Working with the people at DMMR and even ADEQ has been a breath of fresh air. This is the most open and welcoming jurisdiction he has encountered in many years in the mining industry. He urged the Members to continue the agency and beef up the budget for educational purposes and archiving of historical information into electronic format so it can be retained for a longer period of time.

Senator Blendu welcomed Mr. Wilson to Arizona.

When Chairman Jones asked how he found out about the resources in Arizona, Mr. Wilson responded that the mining history in the state is well-known. Over the past 10 or 15 years, a massive globalization has gone on in the mining industry. He and colleagues have gone to far places like Russia and Africa looking to develop mineral resources, but there is not a better place than North America and a state like Arizona to have a mining business. The language is the same as in Canada, the culture is essentially the same, and the bodies of law are common, so it makes sense to conduct business here as opposed to other places in the world where business is not transparent, or in some cases, legitimate. He added that DMMR is well documented, but that does not mean the agency does not need to be improved.

Ms. Chase asked if the state is the only source of funding for DMMR. Mr. Singh replied that the primary source of funding is the state. A small amount is generated from the gift shop and some companies provide donations, but that involves going hat in hand to various companies asking for money. He indicated to Senator Blendu that even though the businesses are owned by foreign companies, the workers are American.

Senator Blendu remarked that there is presently a problem in Arizona obtaining aggregate or cement, so freeway projects are being delayed even though funding is available. He will talk to Mr. Singh about the issue after the meeting.

Ms. Chase remarked that DMMR does a wonderful job.

Chairman Jones asked how much of the money raised from the gift shop and donations is used to meet expenses mandated in statute. Mr. Singh replied that only about \$100,000 to \$150,000 is raised in donations, so it is not a lot. Money from the gift shop often is used to pay people for working in the gift shop and purchasing materials to sell. Sometimes the funds are raided, perhaps a few thousand dollars, but there is not a lot to raid.

Krishna Parameswaraw, Environmental Affairs, Asarco LLC, stressed the importance of the educational component of DMMR. He said an educated populace is needed and the place to start is with schoolchildren because the more they know about mining, an industry that is of such importance to Arizona, the better off they will be. The museum component is also important

where mining industry people obtain information needed to carry on business. He added that the statute says DMMR is to run the museum, so perhaps more interactive exhibits for children should be considered, which has aided the education process in Asarco's Mineral Discovery Center in Tucson. He urged the Members to continue DMMR for another 10 years.

Chairman Jones noted that Rusty Bowers, Arizona Rock Products Association, is in favor of extending DMMR, but does not need to speak.

Larry Fellows, representing self, stated that he recently retired as State Geologist for AGS. DMMR provides more site specific information about individual properties, whereas AGS's emphasis is on regional items. Generally, mineral exploration companies start off with geological data, and as they focus in on other areas of more interest, get specific about individual mine information, etc. He related that neither agency is regulatory. While he was at AGS, there was a very close working relationship with members of the mineral exploration community, and at one time, there were three advisory committees. Mr. Eyde was a member of one such committee, which had 13 senior members with a combined total of 400 years of experience who identified providing basic geologic maps as the most useful function of AGS.

He said in relation to funding, when there is a limited amount an agency is forced to set priorities, do what it can do best with the money that is available, and then try to get more money later. AGS went with geologic mapping because it is important to mineral exploration users and there was also an opportunity to obtain funding through a national program with USGS. The AGS budget for FY 2005 was close to \$800,000 from the General Fund, but between \$500,000 and \$600,000 was brought in from outside funds, contracts with USGS, the SLD, the Forest Service, the Army Corps of Engineers, and other groups that had funding if staff went out and beat the bushes for it, which helped a lot. He submitted that DMMR is unique because it is the only agency in the country he is aware of that promotes development of minerals, but does not regulate minerals. What is done in Arizona by AGS and the DMMR is done in other states by the state geological survey.

Mr. Fellows opined that the functions DMMR performs are extremely valuable and recommended continuation; however, there is the potential to do much better and be more effective. He made the following suggestions to the enabling statutes for the museum:

- Define what the museum is to do.
- Give the museum more visibility, perhaps renaming it the Polly Rosenbaum Mineral & Mining Museum.
- Authorize the museum to use volunteers and make extensive use of volunteers.
- There is no authorization to operate the gift shop.
- Authorize soliciting of funds.
- Authorize the ability to enter into cooperative agreements with agencies like ADEQ and SLD.
- Define the educational role.

Mr. Fellows said with regard to the statutory duties for DMMR, consideration should be given to whether or not to continue some functions that are not being done, such as conducting studies of

the economic problems of prospectors of small mine operations. He has not seen that done for quite a while and it would be helpful for promoting development of mineral resources. Another is to make surveys of potential economic mineral resources. If a study of calcium or limestone was conducted, for example, a publication showing where limestone deposits are, how thick, etc., would be very useful in getting people to visit and look at the resources. He added that field investigations are extremely important and were done on a regular basis when he first started at AGS, but he does not know why their importance has declined.

In conclusion, Mr. Fellows said he believes the Mineral Museum and Mine Information Center are doing important jobs and should be continued, but both have the potential to be much more effective. The Enabling Act needs to be overhauled. Consideration might be given to the word "promotion," since almost everybody who develops properties needs to know quite a bit about the geologic setting, so taking full credit for those kinds of things is somewhat shaky. He believes more collaboration is needed between AGS and DMMR, and therefore, recommends appointing the State Geologist to the Board of Governor's as an ex officio member. With those changes, he believes DMMR could better serve the state and prioritize what is going on in a much more efficient and effective manner.

Ms. Kirkpatrick said she believes there is general enabling language allowing agencies to enter into intergovernmental and cooperative agreements. Senator Blendu said there is permissive language in the absence of prohibition. He understands whoever created the language wanted to keep DMMR insulated from certain things. There is a difference between obtaining outside funding and contracting with the Corps of Engineers, so caution is needed in crafting language.

Senator Jarrett noted that David Thomas with Legislative Council is in the audience who assured her that there is enabling language for IGAs.

Fred Brost, President, Mining & Environmental Consultants, Peoria, testified that his company provides engineering permitting services to the mining industry, primarily in Arizona, and is currently working on development of projects related to gold, copper, uranium, limestone, gypsum, decorative stone, and sand and gravel. DMMR is a very valuable asset for mining companies. Through consultation with the professional staff at DMMR and reviewing their unique records, a number of his clients were directed to valuable mineral deposits. While not all have been developed into mines yet, the companies spent millions of dollars with Arizona geologists, mining engineers, metallurgists, hydrologists, archeologists, biologists, and attorneys in the pursuit of developing these properties. When some of the properties are developed, a substantial contribution will be made to the economy of the local community and state.

He indicated that non-mining companies also benefited from the services of DMMR. A few years ago, a developer wanted to develop an old mining property near Payson and put in upscale housing, but the levels of arsenic in the soil were too high. The developer was afraid the arsenic levels were due to a spill from the mining operation and the developer could be tagged with a cleanup bill. Mr. Brost knew mining was not responsible, and through research at DMMR and site work, he was able to prove that the arsenic was strictly naturally occurring. The arsenic levels were low enough that there was not any kind of hazard, so the development proceeded. Also, many of the old mines have collapsed and the entrances were closed, so information can be found at DMMR about the underground workings on property someone wants to develop.

Mr. Brost stated that he often seeks advice on everything from mining prospects to claim staking from the professional staff at DMMR. It is a marvelous resource that serves the state well. One of his first memories of the City of Phoenix is a fifth grade class trip to the Mineral Museum, which started him on his career in the minerals industry. He stated that rather than eliminating DMMR, he would like to see its budget increased in order to fully catalogue the mining files that were recently donated and continue to bring files into the digital age. He would also like DMMR to have sufficient funding to visit existing mining operations of properties as in the past. He endorsed the changes requested by Mr. Singh and clarification of the word "promotion."

David Ridinger, Chairman, Board of Directors, Arizona Department of Mines and Mineral Resources, said he is a mining engineer who believes DMMR's budget should be doubled. He pointed out that Arizona is a mining state. DMMR is not responsible for every new operation, but the agency helps, and he strongly recommends giving DMMR another 10 years.

Richard Lundin, Charles A. Hoffman Foundation, said one thing that has not been brought out is the fact that the assay data on the location of mining portals, the workings, and tunnels, is the life flow of the mining industry. In California, he asked the geological survey for information back from the 1870s and 1880s, but it had been thrown away. The DMMR, and before that the Arizona Bureau of Mines, which was the predecessor to the AGS, kept the data, which would be lost if the agency were sunsetted, as well as the potential for future mining in Arizona. As a historical archeologist, he has been productively using the data at DMMR for 30 years. He was trained as a geologist and archeologist, practiced as a mineral exploration consultant and exploration manager, and he has had a good working relationship with DMMR.

He asked the Members to increase DMMR's budget so the agency can complete the process of acquiring all of the Arizona Department of Transportation's (ADOT) geologic and sampling data on sand and gravel and aggregate resources, which was gathered at considerable cost to taxpayers of Arizona and the U.S. government, so it can be put on microfilm or CDs and kept at DMMR with a copy at ADOT, and so SLD mineral resource data can be compiled. He said he productively used data from DMMR to find three producing properties, one of which is the largest aggregate quarry in Yavapai County currently and will provide the quarry and aggregate needs for the people in Yavapai County until the next century.

Mr. Singh thanked the Committee for the time spent on hearing DMMR's case.

## **DISCUSSION/RECOMMENDATIONS**

Chairman Jones said from his research and discussions with Dr. Singh and other people, he believes what the museum has been able to do in education should be expanded. A lot is done with very little and the archival information is an extremely valuable resource. Some changes were recommended to the statute and enabling language so DMMR could do more cooperative work and have access or seek outside additional funding. Although the Committee does not recommend the budget, in looking at what the agency is tasked to do and the resources that are provided, he believes DMMR is set up for failure unless the resources are provided or the statutes are changed.

**Senator Jarrett moved, seconded by Ms. Chase, that the Committee continue DMMR for another 10 years and legislation be worked on. In addition, she asked that people get together and come forward with recommendations for legislation to improve DMMR tasks by December 1, 2005. The motion carried.**

Without objection, the meeting adjourned at 3:35 p.m.

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Linda Taylor, Committee Secretary  
September 30, 2005

(Original minutes, attachments, and tape are on file in the Office of the Chief Clerk.)

# **Attachment #5**

**Spreadsheet of statutory changes  
discussed at the meeting held  
October 10, 2005**

**Attachment 5: Spreadsheet of statutory changes discussed at the meeting held October 10, 2005.**

Discussion Item	Related Statutes	Proposed Changes to Statute
1. Educational outreach activities – statewide, schools, mining interests.	A.R.S. § 27-102 A., 1. Promote the development of the mineral resources and industry of this state by participating in conferences, seminars, forums, speaking engagements, public news media and other functions necessary to achieve its objectives.	No changes necessary
2. Interagency and intergovernmental agreements – with agencies and universities.	A.R.S. § 27-105, 8. Enter into cooperative agreements with the federal government and its agencies or with any mining agency created by the law of any state for the purpose of carrying out this article.	<ul style="list-style-type: none"> <li>- Include state agencies and universities.</li> <li>- Authorize contracts between private entities</li> </ul>
3. Interagency cooperation and information sharing.	<p>A.R.S. § 27-102, A, 8. Cooperate with the State Land Department to encourage mining activity on state lands.</p> <p>9. Cooperate with the Corporation Commission in its investigations and administration of laws relating to the sale of mining securities.</p> <p>10. Cooperate with the State Geologist and deliver to the Arizona Geological Survey problems which the field work of the department shows to be within the scope of the activities of the Arizona Geological Survey.</p> <p>11. Cooperate with federal and other agencies in matters related to developing mineral resources in this state.</p>	<p>Add the following entities:</p> <ul style="list-style-type: none"> <li>- Non-profit economic development organizations.</li> <li>- Department of Commerce, universities, State Mine Inspector and ADEQ</li> <li>- Other museums, gem and mineral clubs</li> </ul> <p>Replace “Cooperate” with another word.  “Assist governmental agencies within the scope of requirements and budget.”</p>
4. Museum operations and gift shop.	<p>A.R.S. § 27-102 A., 3., (c) A mineral museum as the state depository for collecting, cataloging and displaying mineral specimens of various ores, gemstones, lapidary material and other valuable mineral specimens. The director may establish entrance fees to the museum for persons who are at least eighteen years of age.</p> <p><b>(does not include gift shop authority or regulations)</b></p>	<ul style="list-style-type: none"> <li>- Add authority for gift shop</li> </ul>
5. Management of archived material.	A.R.S. § 27-102 A., 3., (a) An information bank and library of mineral and mining information, including	<ul style="list-style-type: none"> <li>- Expand to include all mines not only “underground.”</li> </ul>

	<p>books, periodicals, films, videotapes and individual mine files.</p> <p>(b) Underground mine map repository files, mining district data and an archive of mine data.</p>	<ul style="list-style-type: none"> <li>- Include information in a format to be determined by the Director (digital etc.)</li> <li>- Store the information in a place that will be safe in the event of a disaster</li> </ul>
<p>6. Volunteers.</p>	<p>No statutes currently authorizing</p>	<ul style="list-style-type: none"> <li>- authorize the use of volunteers and their associated expenses (travel etc.)</li> </ul>
<p>7. Budget and rent.</p>	<p><b>A.R.S. § 27-102 B.</b> A mines and mineral resources fund is established consisting of monies received pursuant to subsection A, paragraph 3, subdivision (c) and paragraph 7 of this section and section 27-105, paragraphs 6 and 7. Monies in the fund are continuously appropriated to the department for purposes of administration of this article, and monies in the fund are exempt from the provisions of section 35-190 relating to lapsing of appropriations.</p> <p><b>A.R.S. § 27-105 5.</b> Purchase necessary office equipment and rent or lease necessary office space.</p> <p><b>A.R.S. § 27-111 A.</b> Monies received from any source by the department shall be deposited, pursuant to sections 35-146 and 35-147, in the mines and mineral resources fund established by section 27-102. Monies received pursuant to section 27-105, paragraphs 6 and 7 shall be credited to a special account in the fund, designated as the department of mines and mineral resources account, to be used by the department in accordance with the provisions of section 27-105, paragraph 6 or 7, as appropriate. Monies received pursuant to section 27-102, subsection A, paragraph 3, subdivision (c) shall be credited to an account in the mines and mineral resources fund to be used for operations of the mineral museum. Monies obtained from the sale of publications under section 27-102, subsection A, paragraph 7 shall be credited to the department's printing revolving account in the fund for printing further publications. Monies in the department's printing revolving account that at any time are in excess of ten thousand dollars shall immediately revert to the state general fund.</p>	<ul style="list-style-type: none"> <li>- Provide in statute to remove the rent requirement. Still require the DMMR to pay for maintenance and utilities.</li> <li>- Authorize the Board of Governors to lease office equipment in addition to purchasing. (Should technical equipment be included in with the office equipment?)</li> <li>- Rent is being charged at 100% for an 80% complete building. Use admission fees to offset the rent cost.</li> </ul>

8. Ability to charge fees for services.	<b>A.R.S. § 27-102, A., 3., (c)</b> A mineral museum as the state depository for collecting, cataloging and displaying mineral specimens of various ores, gemstones, lapidary material and other valuable mineral specimens. The director may establish entrance fees to the museum for persons who are at least eighteen years of age.	- Authorize the DMMR to charge fees for services (could be problematic to be in "competition" with the private sector)???
9. Responsibility for promotion of Arizona mineral resources.	<b>A.R.S. § 27-102, A., (1)</b> Promote the development of the mineral resources and industry of this state by participating in conferences, seminars, forums, speaking engagements, public news media and other functions necessary to achieve its objectives.	- Change "promote" to "support"
10. Studies, analysis and field investigations.	<b>A.R.S. § 27-102 2.</b> Conduct studies of the economic problems of prospectors and operators of small mines for the purpose of assisting in their solution and investigate their properties to assist in development.  5. Make surveys of potential economic mineral resources and conduct field and other investigations which may interest capital in the development of the state's mineral resources.	- This section needs to be cleaned up. - May need to cut these two requirements and put them in a more appropriate place.
11. Cap on publication monies account.	<b>A.R.S. § 27-111 B.</b> Monies in the department's printing revolving account up to an amount of ten thousand dollars and monies in other accounts in the mines and mineral resources fund are exempt from the provisions of section 35-190 relating to the lapsing of appropriations.	- Increase the cap on the fund to \$20,000 or some other amount as recommended by the DMMR.
12. Grants, contracts etc.	<b>A.R.S. § 27-105 6.</b> Accept gifts, bequests or legacies of real or personal property, or any other contribution, financial or otherwise, for use in accordance with the direction of the donor, or, in the absence of an express direction, to be disposed of for the best interests of the state. Monies received pursuant to this paragraph shall be deposited in a separate account of the Mines and Mineral Resources Fund established by section 27-102.	- Include the authorization to apply for grants and contracts (see Arizona Geologic Survey Statutes as a model A.R.S. §27-152.01)
13. Immunity	No statutes currently addressing this issue	- Provide for personal and agency immunity from liability.