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**RICHARD PERRY**  
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## EXECUTIVE SUMMARY AND MONTHLY ACTIVITY REPORTS MARCH 2014

### EXECUTIVE SUMMARY

#### Statutory Programs:

- Industry Relations – The Administrator provided presentations on NDOM programs and the development of Nevada’s hydraulic fracturing regulations to the annual meeting of the American Association of Professional Landmen and at the quarterly meeting of the Nevada Mining Association Board. Testimony on the status of mining, O&G, and geothermal energy production was given at the Mining Oversight and Accountability Commission (MOAC) on March 14. Numerous press inquiries regarding the development of the State’s hydraulic fracturing regulations were answered, including two TV interviews.
- Public Relations and Minerals Education – 13 presentation or educational classes were given by which reached 535 students. YTD, 34 presentations have been presented by staff reaching 1057 Nevadan’s. Bill Durbin continues to lead is this effort, with presentations to many Southern Nevada schools.
- Abandoned Mine Lands (AML) – YTD for 2014, 70 AML sites were logged and 98 sites were secured. Interviews for summer interns were conducted and offers made to 7 students at the Mackay School and one student at UNLV. Summer interns will start work on May 19<sup>th</sup>.
- Reclamation Bond Pool - Two bond increases and three reductions were processed. Five notice-level participants were notified of termination due to non-payment of the annual administrative fee. Meetings with BLM personnel on the next steps on these will be conducted in April.
- Oil & Gas Permitting and Inspections – Two new geothermal drilling permits were approved and 25 geothermal sundries were processed. No oil & gas drilling permits were issued and two oil & gas sundries were processed. With regards to field inspections, all oil and gas wells have been field inspected in the past year and all permitted geothermal wells have been inspected. Corrective action letters for several wells that need plugging are being generated in cooperation with the BLM. Noble Energy hydraulically fractured one well in Elko County on March 18<sup>th</sup>. NDOM personnel were on-site to monitor and record Nevada’s first HF treatment, which was completed without incident.

#### Financial, Personnel and Projects:

- At the end of March the Division was staffed with 10 full-time employees with one budgeted vacancy. Interviewing for the vacancy was completed in March and an offer was made to Mr. Erik Langenfeld. Erik was most recently an ore-control geologist at Barrick Goldstrike, and has several years of oil & gas drilling experience in the San Joaquin valley in California. Erik is relocating from Elko and will be introduced at our May 8<sup>th</sup> meeting.
- Development of regulations for hydraulic fracturing – Public workshops were held in Carson City, Elko and Las Vegas the week of March 17-21. These workshops were a joint NDEP and NDOM effort. The workshops had good attendance and offered an opportunity for staff to explain the process and content of the proposed regulation changes to NAC 522. The Carson City workshop was attended by 76 people with 22 comments, 70 people in Elko with 12 comments and 43 people in Las Vegas providing 14 comments. Written comments were accepted through March 28<sup>th</sup>. The HF regulations working group, comprised of Commissioner Henderson and staff from

NDOM and NDEP will be working through comments at Thursday meetings for the next two months to produce a second draft of the regulations. These will then be sent back to LCB for legal review and should be available for public hearing by the CMR at the summer quarterly meeting (August-September)

- Construction of the new NDOM web site continued. The existing web site is being purged of stale information in preparation for the migration to the new site.

## MONTHLY ACTIVITY REPORTS

### Reclamation Bond Pool

Mike Visher

1. Processed two bond increases and three reductions. Quarterly bond pool account reconciliation completed and submitted to Controller's office with zero variance.
2. End-of-March financial summary of bond pool:

Reclamation Bond Pool Status Report		Current to: 3/31/2014							
Plan-level Bonds - Com	Project	Entry Date	Bond Amount	% of Pool	Comments	Deposit	Premiums Paid	% Bond Whole	
Custom Details	Bovie-Lew	11/17/2006	\$25,364.00	0.84%		\$ 12,217.11	\$17,479.98	117.1%	
Art Wilson	Silverpeak	9/5/1991	\$124,017.00	4.11%		\$ 18,602.55	\$123,821.54	114.8%	
Nevada Rae	Black Canyon	4/15/2005	\$369,255.00	12.23%		\$ 197,937.54	\$209,652.01	110.4%	
So. NV Liteweight	Money Pit	5/21/2004	\$395,514.00	13.10%		\$ 213,055.61	\$204,821.86	105.7%	
Specialty Clays	Bentonite	12/11/1997	\$209,900.00	6.95%		\$ 31,485.00	\$171,480.69	96.7%	
Western Mine Dev.	Victorine Mine	5/24/2000	\$45,875.39	1.52%	terminated	\$ -			
Western Mine Dev.	Kingston Mill	5/24/2000	\$100,450.00	3.33%	terminated	\$ -			
Western Mine Dev.	Manhattan Mill	5/24/2000	\$114,288.77	3.78%	terminated	\$ -			
Escape Gold	Red Rock	7/17/2008	\$1,000.00	0.03%		\$ 1,000.00	\$28.60	102.9%	
TNT Venture	Big Canyon	1/27/2010	\$60,711.00	2.01%		\$ 30,664.40	\$24,163.74	90.3%	
<b>Statewide Notice-Level</b>	<b>Various</b>	<b>various</b>	<b>\$1,573,249.00</b>	<b>52.10%</b>	<b>120 bonds</b>				
<b>Total Bond Amount</b>			<b>\$3,019,624.16</b>	<b>100.00%</b>					
<b>Cash in Pool's Account (From BSR -3/31/14)</b>			<b>\$3,969,575.22</b>						
<b>Unfunded Amount</b>			<b>-\$949,951.06</b>						
<b>Percent funded</b>				<b>131.5%</b>					

3. Pursuant to NAC519A.605, five notice-level participants were notified of their termination of participation in the bond pool for failure to pay. Meetings are planned with the BLM State and Field Offices to coordinate on next steps for reclamation planning.

### Mining, Land and Other

Mike Visher

1. Participated in various meetings and public workshops related to the proposed regulation changes to NAC522 and 534A.
2. Continued working on master reference list of chemicals commonly used in hydraulic fracture stimulation events; cross-referenced with information from GWPC, EPA, and OSHA.
3. Worked with NBMG to update the Active Mines and Energy Producers maps.
4. Staff met with representatives from Department of Taxation to review operator production reports and provided them with copies of submitted forms pertinent to their ongoing audits.
5. Assisted Lowell with inspections at 23 geothermal related sites in Washoe County.

### Major Activities – Chief, Abandoned Mine Lands Program

Robert Ghiglieri

1. Received \$12,295 from the USFS as continuation of funding to the already intact assistance agreement that will help fund NDOM's AML program.

2. Performed a cost analysis of NDOM's summer intern program. Reviewed the budget and determined remaining costs in FY14 for Category 18 and 39. Determined that there is available funding for a GeoTemp employee and started the process of hiring (a future summer intern).
3. Compiled all data for a Categorical Exclusion (CX) on the Fort Churchill (nine hazards), Chukar 3 (15 hazards) and Sutro Air Shaft # 3 (one hazard) closure projects and sent the request to the BLM Sierra Front Field Office.
4. Held 25 interviews, three in Las Vegas and 22 in Reno, for the 2014 summer internship program. Offered positions and received acceptance to eight interns, one UNLV and seven UNR.
5. Presented the NDOM AML program at the first NAMLET meeting in five years. The possibility of available of US Army Corps of Engineers Restoration of Abandoned Mine Sites (RAMS) funding was introduced and I proposed and received unanimous agreement to fund the development of an NDOM AML Web-based database.
6. Attended the NAMLET Core Committee meeting with Ken Mass, John Callan, Rory Lamp, and Jeryl Gardner. Reviewed all know AML environmental sites, prioritized the projects subject to RAMS funding, and set project goals for before the next NAMLET meeting.
7. Prepared a Scope Of Work (SOW) for the request of \$250,000 from the Army Corps of Engineers RAMS program to develop a new NDOM AML database. This database will be able to capture all needed historical data, i.e. research, securing, notifications etc., and will have a web application to allow access, querying, and reports from a secure online login. If there is enough funding we would also have an application built to allow digital field logging and can interact directly with the new database. In preparation for the SOW Rachel and I meet with DCNR's and USGS's local IT staffs to discuss the possibilities and limits of NDOM's new AML database.
8. With Rachel, George Baumgarnder, Jenni Jeffers, revisited ten Douglas County hazards to determine hard closure methods for the Almaden. Performed three underground surveys.
9. With Jenni Jeffers revisited 15 Douglas County hazards to determine hard closure methods for the Chukar 3 project.
10. Revisited seven Washoe County hazards as a recon mission with a Boy Scout for his future Eagle Scout project.
11. Contracted EPS to work on the border of Churchill and Pershing counties to preform logging work. EPS logged 18 new hazards, 89 non-hazards, revisited and repaired as necessary 14 hazards, and secured 18 hazards.
12. Provided an annual update to Robinson Mining on their AML hazards status.
13. Attended the Newmont Leadership meeting with Rich Perry. Presented NDOM's AML and discussed future NAMLET goals.

#### AML Hazard Statistics

COUNTY	SITES DISCOVERED	SITES SECURED	% SECURED	TOTAL UNSECURED	% UNSECURED STATEWIDE
Carson	76	76	100.00%	0	0.00%
Churchill	682	567	83.14%	115	3.17%
Clark	2,145	1,657	77.25%	488	13.44%
Douglas	199	186	93.47%	13	0.36%
Elko	708	542	76.55%	166	4.57%
Esmeralda	2,653	2,310	87.07%	343	9.45%
Eureka	775	706	91.10%	69	1.90%
Humboldt	797	700	87.83%	97	2.67%
Lander	575	474	82.43%	101	2.78%
Lincoln	686	545	79.45%	141	3.88%
Lyon	1,024	867	84.67%	157	4.32%

Mineral	1,540	1,314	85.32%	226	6.22%
Nye	2,522	1,861	73.79%	661	18.20%
Pershing	1,521	1,045	68.70%	476	13.11%
Storey	193	162	83.94%	31	0.85%
Washoe	428	394	92.06%	34	0.94%
White Pine	1,423	910	63.95%	513	14.13%
<b>TOTAL (Since 1987)</b>	<b>17,952</b>	<b>14,316</b>	<b>79.75%</b>	<b>3631</b>	<b>100.00%</b>
<b>2014 Year to Date</b>	<b>70</b>	<b>98</b>	<b>140%</b>		

Data as of 3/31/2014

### AML / GIS

Rachel Wearne

1. Completed routine back-up and archiving of the AML photo database.
2. Conducted interviews for the 2014 summer internship. Spent a day and a half at Mackay School of Earth Science and Engineering interviewing 22 students.
3. Participated in the interview process for the new oil, gas, and geothermal position.
4. Attended the March Education Committee meeting at the Nevada Mining Association in Reno. Discussed the upcoming workshop and presentations that will be given. Worked on determining where to take teachers for tours during the July workshop.
5. Traveled to the north end of Smith Valley with Rob, Jenni Jeffers (NDOW), and George Baumgardner (Nevada State Museum) in order to assess several opening in the area for hard closure potential and wildlife compatible closures.
6. Reviewed all applicants for the summer internship with Rob and Valerie and selected eight students to hire. Seven are from UNR while one is from UNLV.
7. Worked with Debbie on revising the existing AML database.
8. Completed routine database QA/QC
9. Continued work planning for the summer interns.
10. Began putting together supplies to take down to Las Vegas for the Teacher Workshop next month.
11. Planned a weeks' worth of work for EPS and Brian Breiter in the Dixie Valley area of Churchill and Pershing counties.
12. Worked on revising a scope of work to be submitted to the Army Corps of Engineers in order to request funding for a new AML database, web application, and mobile application. Met with NDEP and USGS to discuss database management options and geodatabase management choices. Discussed types of hardware and software needed to complete this project. Researched several different geodatabase options to determine which one would best fit our needs and how best our agency can move forward. Attended a web seminar on GeoPDF technology and field data collection methods.
13. Continued work on the new NDOM Website using the EITS managed Ektron software. Completed the program pages for AML (scouts and interns), Education program, and Geothermal Program. Several other pages are under construction or nearing completion.

### AML/Public Awareness – Southern Nevada

Bill Durbin

1. Attended the NAMLET meeting in Carson City.
2. Las Vegas staff participated by phone on the March NDOM staff meeting.
3. Participated in the bi-monthly conference call/progress report on the BLM/BOR AML closure projects.
4. Logged in 7 new BOR AML closures in Clark County completed in February, 2014.
5. Rob and Bill conducted three interviews for summer intern candidates at UNLV.

6. Nevada Reading Week – Read the book “Everybody Needs a Rock” to one class of 26 3<sup>rd</sup> graders at Gordon McCaw Elementary School – handed out “Mining in Nevada” activity books and pencils to the students and gave the teacher a Smithsonian rock and mineral book and workshop flyers.
7. Received a call from Eagle Scout candidate Griffin Coleman requesting an AML securing project. Griffin is our 179<sup>th</sup> Scout to request a project.
8. Coordinated the rock and mineral competition at the 30<sup>th</sup> Annual Nevada Science Olympiad at Rancho High School – Las Vegas. 11 middle school teams and 14 high school teams competed.
9. Attended the Nevada Mining Association Education Committee meeting via conference call.
10. Conducted Kason Horlacher’s Eagle Scout project site visit. Kason will fence four mine openings at the Arden Mine west of Las Vegas.
11. Received a call from Eagle Scout candidate Zachary Weaver requesting an AML securing project. Zachary is the 180<sup>th</sup> Scout to request a project.
12. Conducted AML claim research – Clark, Elko and Esmeralda County Recorder offices.
13. Conducted Jared Gibson’s Eagle Scout project site visit. Jared will fence three mine openings northwest of Goodsprings, Clark County.
14. Met with Frank McAllister (retired CEO of Stillwater Mining Co.) regarding the “Mining in Society” Boy Scout Merit Badge and Nevada’s Eagle Scout AML program.
15. Prepped 100 “bagged and tagged” Coeur Rochester silver ore samples for teacher workshop bags.
16. Attended the Las Vegas Public Workshop for amendment of Regulations for Oil and Gas Wells, Wells intended for Hydraulic fracturing and for Geothermal wells.
17. Met with Helen Mortenson, president of the Las Vegas Ice Age Park Foundation and a member of the Citizens for Active Management who support the proposed National Park status of the Tule Spring Fossil Site and Gypsum Cave Archaeological Site situated in the BLM Sunrise Management Area. Mrs. Mortenson is seeking partnerships in developing future educational and public recreation activities and facilities at these locations.
18. Presented 4 sessions of “Minerals and Commodities”, “What a Geologist Does” and AML for seven classes of third graders at Wallin Elementary School – Henderson. Total of 154 students.
19. Manned “Mineral and Commodity” and AML display at the 1<sup>st</sup> Annual Math and Science Family Night at Vegas Verdes Elementary School – Las Vegas. The 1 ½ –hour event was attended by 200 students, parents and grandparents.
20. Picked up 60 metal T-posts from the BOR yard in Boulder City. The posts were recovered at sites permanently closed by the BOR crew. There are an additional 80 posts available at the yard.
21. Final edits completed by Jon Price, D.D. La Pointe, and Bill on the Las Vegas to Bullfrog/Rhyolite road log for the 2014 Las Vegas teacher workshop tour. 125 copies made at NDOM-LV.
22. Completed Jacob Eckersley’s Eagle Scout Service Project. Four AML hazards were secured in the Sandy Valley in Clark County, NV. This is the 145<sup>th</sup> completed Scout project.
23. Completed Caden Marshall’s Eagle Scout Service Project. Three hazards were secured in the Crescent Peak area west of Searchlight, Clark County. This is the 146<sup>th</sup> completed Scout project. To-date, 662 hazards have been secured and 133 hazards have been re-secured.
24. Prepped mineral and rock samples for Las Vegas 2014 teacher workshop kits.

### **Geothermal, Oil and Gas Other**

Lowell Price

1. Witnessed surface and intermediate casing BOPE tests on the McGinness Hills 27A-10 production well. Two geothermal permit applications were approved, on domestic in Incline Village and on industrial production at McGinness Hills. No oil sundries were approved, but waiting on BLM notification of approval for 10 pending permit applications. Twenty-five geothermal related sundries were approved. Three oil related sundries were approved. Completed the well site inspections of all oil related wells (124) and all but one geothermal wells (432 of 433 wells – one commercial well in Reno is yet to be found, may be under asphalt parking lot). Hydraulic fracturing workshops were given in Carson City, Elko, and Las Vegas. A total of 48 oral comments and 39 written comments were

received by NDOM during the comment period. The majority of the comments do not relate to the proposed hydraulic fracturing regulations. NDOM also received an anti-hydraulic fracturing online internet petitions with approximately 4,000 signatures, where signatures are typed, and indicate people residing in Nevada, other states, and other countries. Noble Energy performed a hydraulic fracturing operation on the M2C-M2-21B well. All flow-back, including oil, was put into Baker type tanks on locations. All fluids will be held on the M2C-M2-21B location until their transport to a refinery (oil) or Clean Harbors (flow-back fluid) in Tooele, Utah. However, the flow-back fluids may possibly be used for the hydraulic fracturing of the M10C-M10-11B well. Noble Energy has recently installed a down hole production pump in the M2C-M2-21B well, and is expected to mobe in production tanks for the produced oil and water.