



Mining and Metallurgical Society of America

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President's Message

The Death of Mining – 2011

The December 17, 1984 issue of Business Week carried an article titled the “Death of Mining”. The demise of mining was attributed to shrinking markets, huge debt and depressed prices. The article predicted that “three of the four major metals producers may even be forced out of business over the next few years”. The article cited an industrial megatrend : the inexorable shift of the production and process of all basic materials from industrial countries to the Third World.

Then there were the grim economics. In 1979 metals mining was an \$8.9 billion enterprise that had shrunk to just \$5.9 billion. Mining employment was down to 44,800 from 109,000 in 1981 and that it could fall another 30 percent in the next two to three years. And there were already modern day ghost towns in mining regions around the country.

In 1984 I was a young engineer with just three years in the industry. If I had listened to the experts I should have gone back to school and got a degree in law or investment banking. Today I am very glad that I did not listen to the experts.

According to the USGS, “Domestic copper production in 2010 was 1.1 million tons with a value of \$8.4 billion. The principal mining States, in de-



Mark Jorgensen, President

scending order of production—Arizona, Utah, New Mexico, Nevada, and Montana—accounted for more than 99% of domestic production; copper also was recovered at mines in Idaho and Missouri. Although copper was recovered at 28 mines operating in the United States, 19 mines accounted for about 99% of production. Three primary smelters operated during the year.”

Figure 1 shows copper production following the dire predictions of 1984. Production rose from 1.2 M to 2.2 M metric tons in 1998 before declining to today’s current production of 1.1 M metric tons.

The Business Week article in 1984 ignored iron and gold production. Figure 2 shows gold production also rose following the dire predictions of 1984. Production rose from 65 to 360 metric tons in 1998 before declining to today’s current production of 225 metric tons. In 2010 the USGS re-

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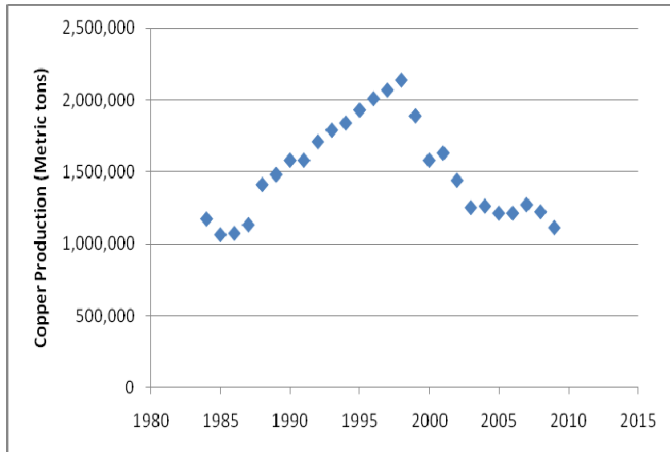


Figure 1 – Annual US Copper Production 1984 to 2010

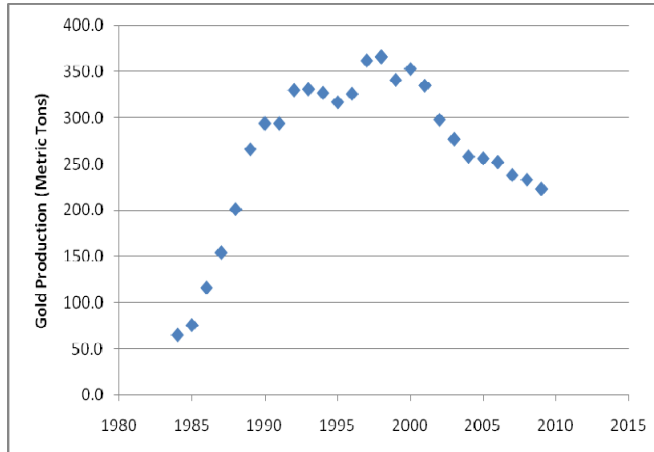


Figure 2 – Annual US Gold Production 1984 to 2010

ported that iron ore production in the US was valued at \$2 billion. Gold production was a cool \$6 billion.

It is pretty clear that not only did mining not die in 1985. The metals market that we are most familiar and that was DOA in 1985 now produces \$17 billion of wealth that

is created from dirt.

I did a quick internet check of salaries and confirmed that maybe being a lawyer would have been profitable but maybe I did just as well by being a miner. In 2008 lawyer salaries ranged from 88 to 156 K with the US Bureau of Labor Statistics reporting the average salary at \$111 K.

While some big shot lawyers obviously make much more than this I can safely say that overall wages for senior staff in the mining industry are at least comparable. We do pretty well.

What do we have to look forward to in the future? The challenges to the mining industry are great. There is almost a general feeling in this country that mining is a dirty dying industry that destroys the environment but adds little if anything to the bottom line of the country. If only our populace and politicians would learn from our Canadian neighbors.

The Canadian Mineral Industry Federation (CMIF) presented evidence of economic prosperity for their industry.

“Canada’s mining industry is a major contributor to Canadian prosperity – providing \$35 billion to GDP in 2010 and based on Natural Resources Canada definitions, employing 308,000 workers in mineral extraction, processing and manufacturing. There are more than 3,200 companies, which provide inputs to the industry ranging from engineering services to drilling equipment.

Canada remained the top destination for global exploration attracting 19% of world spending in 2010 – with mineral exploration spending in Can-

Membership Applications

New Regular and QP Member Applications:

The following individual(s) have submitted membership applications and or changes to their membership status. They have either received approval of the Membership Committee or are currently under review:

<u>Applicant</u>	<u>Endorsers</u>	<u>Applicant</u>	<u>Endorsers</u>
Anthony A. Lowe	Fernando Rodrigues Joanna Poeck Neal Rigby (Supervisor)	Patrick E. Mohr	Marcel DeGuire Douglas Moore Matthew Collins

QP Applications

Anthony A. Lowe

Area of Special Expertise

Mining

If any member of MMSA has good cause to believe that any of the above applicant(s) should not be granted Regular membership or QP membership, as appropriate, you are requested to make known your objections, in writing, to **Betty Gibbs**, Executive Director, within 30 days from issue of this Newsletter. In the absence of any objections and after receiving approval of the various committees, the candidate members and those members requesting a change of status will be confirmed as Regular Members or QP Members, as provided by the bylaws.

ada growing by 35% to \$2.6 billion. The industry's trade levels also increased significantly, with exports having grown by 27% in 2010 . . . Canada also features world-leading mineral exploration capabilities – there are an estimated 1,000 Canadian exploration companies active in over 100 countries.”

It seems that if we wanted to create jobs and make ourselves proud to be American we would not be afraid to do a little work and get rich digging dirt. The Canadians are doing just this and they are doing it well. The Canadian federal government is not put off by special interest groups who seek to destroy this great nation by denying decent people the right to create wealth and jobs.

Do you know anyone who has been unemployed for a long time? Ask

them if they would like to have a job? Ask them if they would favor developing our natural resources and using them as they were intended to be used. It's a good conversation with anyone that you know.

Again, what does the future hold for mining in our nation? I assure you that it will not die. It will be here for a long time. But it can be a greater industry than it is even today and provide jobs for hundreds of thousands of people if we can just let our message resonate with those who are outside looking in at us.

Canadian NI 43-101 Changes Affect MMSA's QP Program

As of July 1, a revised set of rules related to NI 43-101 reporting was made law in Canada. During the process, admission requirements and application processes used by various foreign associations were reviewed.

Under NI 43-101, the minimum requirements and processes a foreign association uses to assess applicants for admission to a particular membership designation is substantially similar to the minimum requirements that an applicant must meet when applying for registration in a Canadian jurisdiction.

Craig Waldie of the Ontario Securities Commission had these suggestions to enhance MMSA's QP program:

1) *Confidential Peer Evaluation of an applicant's character, professional judgment, experience, and ethical fitness.* Endorsers for QP applications will soon be asked to

fill out a more extensive form than those applying for regular membership. The form will ask more specific questions about an applicant's qualifications to be a QP.

2) *Continuing Professional Development by QP members is required or encouraged.* MMSA has not required QP members to provide information about continuing education courses and technical meetings attended. The Executive and QP Committees will be addressing this issue in the coming months. In the meantime, if you are a QP, it would be a good idea to keep track of your continuing education efforts. If you have thoughts or ideas about how and at what level MMSA could be monitoring professional development, please contact any member of the Executive Committee.

At the September 2 Denver Section lunch meeting, David Abbott presented a talk about the changes in the NI 43-101 regulations for report writing. A quick tabular summary of the major changes is shown on page 4. The slides from the talk are available on the MMSA Web site at <http://www.mmsa.net/SignificantChangesToNI43-101.pdf>. A link is also provided on the main page of the Web site.

SME has added two on-line courses for professional development. See below for more details.

SME Professional Development Courses

SME offers two on-line courses (eLearning) that define ethics, concepts, history, and impact on professional practice. The courses include the following:

Henry's Daughters. This video targets engineering students and prac-

Membership Update

The following changes in membership have taken place, since the July 2011 News Page.

Regular Member Additions:

Eric Levy

QP Members Confirmed:

None

Membership Deletions:

David C. Ridinger (resigned)

Richard L. Steinberger (resigned)

MMSA presently has a total of **338** members, **9** in process. All the new member applications include QP applications. Currently, **142** members are QP members

Appropriate additions, deletions and routine changes to the Society's data base and member biographies are accessible through the Members Only page in our web site, at www.mmsa.net This data base is the best source for information on any particular member.

MMSA Quarterly Newsletter

August 2011

ting engineers alike and provides a broad perspective on professional responsibilities. Price: \$25 for SME members.

Ethics in the Mining Industry

Author: Lee Saperstein. This course defines ethics and its concepts, history and impact on professional practice. You will have a better idea of how to act ethically and what can be learned from case studies and examples. Price \$235 for SME members. For a complete catalog, see: <http://www.smenet.org/elearning/>

Staffers on September 13 and 14 in Washington DC. The one-hour event is called "The More You Dig Public Awareness Campaign & American Resources Policy Network Educational Briefing". Betty Gibbs will represent MMSA at these briefings.

- **20 Things You Didn't Know About Mining.** This is a proposal designed to increase public awareness of the benefits of mining. This would be a one-page list of key information about the importance of mining that would appeal to the public. The list is modeled after the series that appears on the back page of Discovery magazine. Suggestions for items to include are welcome!

Legislative and Regulatory Actions to Watch

The National Mining Association actively works to promote the mining industry on Capitol Hill. Visit the NMA Web site at: www.nma.org for details. Several recent news items include:

Committee Unanimously Approves Bill to Strengthen and Advance National Minerals Policy. See the Committee's press release: <http://naturalresources.house.gov/News/DocumentSingle.aspx?DocumentID=252844>

House Votes to Rein-In EPA Authority on Clean Water Act by Requiring State Concurrence

Proposed Bill Declares "Coal Ash Is NOT Hazardous Waste" A complete copy of the story is available at: RecyclingFirst.org.

National Strategic and Critical Minerals Policy Act of 2011. Approved by the House Natural Resources Committee.

Memorial for James Taranik

The memorial for **Dr. James V. Taranik** will be held on Monday, September 12, 2011, 3 p.m., DRI Plaza, 2215 Raggio Parkway, Reno, NV 89512. Please RSVP to Dawn Coots, at 775-674-7555 or Dawn.Coots@dri.edu.

Memorial gifts be made in Dr. Taranik's name to the DRI Foundation, on-line at <http://www.dri.edu/foundation>. A website that has more information about Dr. Taranik's life: <http://www.dri.edu/taranik>

More MMSA News

- MMSA will participate with Northwest Mining Association in an **I Dig Mining** briefing to be presented to Congressional

Old Form		New Form	
Title, Contents	Items 1-2	"General Contents"	Title, Date, Signature, Contents, Illustrations
Summary, Introduction, Reliance	Items 3-5	Items 1-3	Summary, Introduction, Reliance
Location, Access, History	Items 6-8	Items 4-6	Location, Access, History
Geology, Deposit types, Mineralization	Items 9-11	Items 7-8	Geology, Mineralization, Deposit Types
Work Program, Results, Verification	Items 12-18	Items 9-13	Work Program, Results, Verification
Resource and Reserve Estimates	Item 19	Item 14	Mineral Resources
Conclusions, Recommendations	Items 20-22	Item 15	Mineral Reserves
References	Item 23	Items 16-22	Mining, Recovery, Infrastructure, Markets, Contracts, Environmental, Social Impacts, Economic Analysis
Date, Signature	Item 24	Items 23-26	Adjacent properties, Other Data, Conclusions, Recommendations
Development information	Item 25	Item 27	References
Illustrations	Item 26		

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Tabular summary of the major changes for NI 43-101 reporting. Slides from David Abbott's talk are available on the MMSA Web site at <http://www.mmsa.net/SignificantChangesToNI43-101.pdf>.