

Minerals Science and Information Coalition

February 23, 2015

Dr. Suzette Kimball
Acting Director, U.S. Geological Survey
Directors Office
12201 Sunrise Valley Drive
Mail Stop 100
Reston, VA, 20192-000

Dear Dr. Kimball:

The Minerals Science and Information Coalition (MSIC) would like to express support for the current initiatives and activities of the National Minerals Information Center (NMIC) as laid out by the January 22, 2015 letter from Director Steven M. Fortier to MSIC.

MSIC is a broad-based alliance of organizations that represent all stages of the supply chain. Importantly, the coalition supports federal investments in minerals science and research. For this reason, MSIC commends the U.S. Geological Survey (USGS) and NMIC for work as the primary national source of minerals science and information. The NMIC initiatives and activities listed for 2015 underscore the usefulness of minerals science and information to every sector of our national and global economy.

The coalition is very interested in the potential, natural extension of NMIC's current work on minerals forecasting. The new Mineral Commodity Criticality Assessment and Early Warning Project shows important movement towards more proactive minerals science and information analyses. The ability to anticipate potential supply chain disruptions is important to safeguarding uninterrupted access to the minerals necessary for our economic and national wellbeing. Combining accurate and timely information with supply and demand forecasting will allow for a more comprehensive understanding of supply chain vulnerabilities. Providing new money to develop comprehensive minerals supply forecasting at USGS is a precursory necessity to address the nation's abiding dependence on minerals.

The addition of several different studies to NMIC's annual work products demonstrates an impressive understanding of the impact timely and accurate information can have on both the private and public sectors. Commonsense initiatives such as the following will help guide mineral development and usage: fact sheets on conflict minerals; studies on the impact of the Ebola outbreak on the mining and processing industry; production and consumption estimates for hydraulic fracturing sand in the U.S.; a report on trends in Cuba's mining and petroleum extraction industries; historical global statistics for mineral commodities; and a mineral commodity criticality assessment and early warning project.

The work of NMIC under the leadership of the USGS is key to the responsible development and consumption of minerals and raw materials that underpin every sector of the economy. MSIC supports NMIC's 2015 initiatives and urges development of USGS's mineral forecasting capabilities.

Sincerely,

American Chemical Society
American Exploration & Mining Association
American Geosciences Institute
American Physical Society

Minerals Science and Information Coalition

Bureau of Topographic and Geologic Survey of Pennsylvania
The Fertilizer Institute
Geological Society of America
Industrial Minerals Association – North America
Materials Research Society
Mining and Metallurgical Society of America
National Electrical Manufacturers Association
National Stone, Sand & Gravel Association
Society of Economic Geologists
Society for Mining, Metallurgy, and Exploration, Inc.

Cc: The Honorable Sally Jewell
Secretary
U.S. Department of the Interior

Ms. Jennifer Gimbel
Principal Deputy Assistant Secretary for Water and Science
U.S. Department of the Interior

Dr. Dan Hayba
Acting Associate Director, Energy and Minerals, and Environmental Health
U.S. Geological Survey

Dr. Larry Meinert
Program Coordinator, Mineral Resources
U.S. Geological Survey

Dr. David Russ
Regional Director, Northeast
U.S. Geological Survey

Dr. Steven Fortier
Director, National Minerals Information Center
U.S. Geological Survey

MSIC contact information: Dr. P. Patrick Leahy, American Geosciences Institute, 4220 King Street, Alexandria, VA 22302. pleahy@agiweb.org. 703-379-2480.



United States Department of the Interior

U.S. GEOLOGICAL SURVEY
National Minerals Information Center
988 National Center
Reston, VA 20192

To: Maeve A. Boland, Director, Geoscience Policy, American Geosciences Institute

From: Steven M. Fortier, Director, USGS – National Minerals Information Center

Subject: Current Initiatives and Activities of the NMIC

Date: January 22, 2015

The following is a brief summary of some of the important initiatives and projects currently underway in the USGS-NMIC. The list is not comprehensive but rather captures some highlights.

- **Release of the 2015 Mineral Commodity Summaries.** The 2015 MCS are scheduled for electronic release on Friday, January 30th, 2015. Bound hard copies will be available by the end of February 2015.
- **Conflict Minerals Fact Sheet Series.** The 2nd in a series of USGS Fact Sheets on 3TG minerals covered by the Dodd-Frank legislation, on tantalum, was issued at the end of December 2014. This follows the 1st in the series, on tungsten, which was released in Q3 2014. A fact sheet on the 3rd T, tin, is scheduled for release in Q1 2015. A 4th publication on gold will follow in Q2. This important series captures information on global mineral processing facilities which are capable of processing minerals listed in Section 1502 of the Dodd-Frank Act. This provision obligates companies sourcing these materials to perform due diligence on their supply chains to ensure they are not being sourced from the conflict zone in the eastern Democratic Republic of the Congo and adjacent countries. These fact sheets have been very positively received by our stakeholders at the U.S. Departments of State and Commerce, as well as by international organization such as the OECD.
- **Impact of the Ebola Virus on the Mining and Minerals Processing Industries of West Africa.** This project draws on data from the NMIC database on global mining and mineral processing facilities as well as current information on exploration and development projects in the region. This fact sheet will contain a map of the locations of active mining and mineral processing facilities relative to the areas of Ebola outbreaks and intensity using data from the World Health Organization. The focus is on the countries of Guinea, Sierra Leone, and Liberia i.e. those most impacted by the outbreak of the virus. A 2nd map will capture the locations of developmental and exploration projects on the same basis. Tables that contain commodity specific information on companies, capacities, status, investment amounts, contribution to global supply, and impact on country GDP will also be part of this package. Expected release: February 2015.
- **Recent Trends in Cuba's Mining and Petroleum Extraction Industries.** In December 2014, the U.S. Government proposed policy changes that could restore diplomatic relations with the Government of Cuba. Since that time, the Government has announced new rules including the easing of trade restrictions against Cuba. This fact sheet provides current information on the status of the minerals industries of Cuba with historical context and descriptions of recent trends, which could be useful for stakeholders and policy makers. The report provides insight into the supply of and demand for minerals which are produced in Cuba as well those mineral resources

that may become more attractive for development through private or public investment owing to the opportunity for expanded trade. Expected release: February 2015.

- **Estimates of Hydraulic Fracturing (Frac) Sand Production, Consumption, and Reserves in the United States.** This project captures the U.S. consumption of frac sand, its value in nominal and constant dollars, sources, and value by State for the period 1990-2013. It identifies frac sand consumption by basin where drilling is occurring. A map illustrating the basins and usage is included. Other aspects of this important, rapidly growing market for silica sand are also addressed, including (1) technical information on the purpose of sands and technology of injection; (2) nature of and types of sands; (3) deposit locations and resources; (4) history of use; (5) technology used to produce. This paper has received Bureau approval and will be published in a Special Frac Sand Supplement from Rock Products in March 2015.
- **Historical Global Statistics for Mineral and Material Commodities.** This data series on global statistics includes U.S. data and is a companion to Data Series 140 on “Historical Statistics for Mineral and Material Commodities in the United States”. The series contains information on the production of selected commodities from 1990 to the most current year, for all countries covered by the NMIC, and will be updated annually. The commodities covered include: iron and steel, copper, lead, aluminum, cadmium, and salt. The compilation and release of data for other commodities may be added at a later date, depending on demand and interest from stakeholders. The data may be used in the analysis of socioeconomic developments and trends and in the study of environmental issues associated with the extraction and processing of the selected commodities. The data series will be released as separate commodity files in Microsoft Excel format over the 1st half of 2015.
- **Mineral Commodity Criticality Assessment and Early Warning.** Under the auspices of the Critical and Strategic Minerals Supply Chain Subcommittee of the National Science and Technology Council (NSTC) of the Office of Science and Technology of the President (OSTP), a criticality assessment and early warning project has been initiated. The USGS – NMIC has agreed to take the lead role in the further development and implementation of this initiative with support from the Department of Energy, Department of Defense, Department of Commerce and other stakeholders. A commodity screening tool based on methodology developed by a subcommittee work group will be further refined and implemented to screen, on an annual basis, the portfolio of mineral commodities tracked by the NMIC. Commodities that are identified as sources of concern will be prioritized for further detailed analysis, probably 3-4 commodities annually. By looking at changes in supply risk and the impact of supply disruption over time, it is the aim of this initiative to establish a capability to anticipate potential issues before they become a crisis. As the primary government agency responsible for the collection of mineral commodity data on the front end of the global supply chain, the NMIC is uniquely qualified to lead this effort. Communication of results and any policy recommendations would be funneled through the NSTC and OSTP channels, however it is anticipated that components (e.g. 3 country concentration ratios) that go into the analysis and that could be useful to other stakeholders will be made available by publication through normal USGS channels. First results are expected by the end of 2015.