Conflict Minerals: A Snapshot

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SUMMARY: As the supply chain becomes increasingly complex and global, with an ever-increasing number of suppliers, full traceability of conflict minerals throughout the global supply chain is a daunting task. To comply with the SEC's reporting and disclosure requirement, a company must formulate a comprehensive program to achieving traceability and transparency.

For the last decade, regulations, new or pending, have been the focus of discussions, debates, and reviews. Existing and potential regulations are exerting and will exert significant impact on our industry and our personal lives. Regulations closely affecting our industry include: Sarbanes-Oxley Act (the Public Company Accounting Reform and Investor Protection Act), enacted on July 30, 2002, which regulates accounting principles and procedures and has changed the regulation of financial practice and corporate governance; the RoHS directive, which took effect July 1, 2006, and restricts the use of specified hazardous substances and revamps the use of electronic materials; and REACH (the European Community's Registration, Evaluation, Authorization and Restriction of Chemical Substances) entered into force on June 1, 2007, and calls for awareness and labeling of potential hazardous chemicals and regulates the substances and their safe use. On January 1, 2013, Conflict Minerals came into force, which deals with specific sources of mining ores.

A wide range of regulations change the way we do business and affect corporate behavior, amplifying corporate social responsibility. This month, I'd like to provide a snapshot of the newly-enacted regulation on conflict minerals.

Questioned Minerals

Currently, four minerals are deemed to be "conflict minerals." These mineral ores produce four essential elements (tantalum, tin, tungsten, and gold) which are key to a variety of end-use applications for diverse industries ranging from electronics to industrial to consumer to military sectors. The four minerals are:

- **Columbite-tantalite** - An important source of tantalum; the metal ore from which the element tantalum is extracted. Tantalum is used in electronics, military, and other sectors.
- **Cassiterite** - An important source of tin; tin is widely used in plating, solder, and making specialty alloys and organo-tin compounds that offer various applications in battery and chemical reactions.
- **Wolframite** - An important source of tungsten; tungsten is a highly-dense metal and is frequently used for this property to produce high-density, wear-resistant alloys for a wide array of applications from tools to turbine blades.
- **Gold** - Offering diverse uses from medicine field to electronics. It is also present in some chemical compounds used in various manufacturing processes.

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The new regulation covers the above four important elements at the present time, but it should be noted that additional minerals may be added in the future.

The Conflict

Internationally, increased attention has been given to the violence and gross human rights violations occurring during the mining of certain minerals, most often situated in the eastern portion of the Democratic Republic of the Congo (DRC) and surrounding countries. Minerals are mined in conditions of armed conflict and severe human rights abuses. Armed militia groups appear to be intent on exploiting the area's natural resources. This pervasive exploitation in conflict-affected and high-risk areas has caused grave concern in the international community and the region is now deemed a "conflict region."

Companies directly or indirectly sourcing from, or directly operating in, this region face the risk of contributing to the conflict.

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Combating the Problem

To combat illegal exploitation of natural resources in conflict-affected and high-risk areas, and to initiate a proactive process through which companies can ensure they respect human rights and do not contribute further to the conflict, Senator Sam Brownback (R-KS) introduced the Congo Conflict Minerals Act of 2009 (S.819) which requires electronics companies to verify and disclose their sources of cassiterite, wolframite, and tantalum. This legislation lost its pulse in committee. However, similar language was later added as Section 1502 of the Dodd–Frank Wall Street Reform and Consumer Protection Act.

Section 1502 of the Dodd-Frank Reform Act requires companies to verify and disclose their sources of conflict minerals. The goal is to eliminate the link between mining and conflict and to help prevent company complicity in a vicious cycle of mineral-fuelled conflict in the region.

The Dodd-Frank Act passed the U.S. Congress and was signed into law by President Barack Obama July 21, 2010. The U.S. Securities and Exchange Commission (SEC) proposed and published the draft regulations to implement the Conflict Mineral Law in December 2010. During its review and comment period, more than 700 comment letters were submitted to SEC on the proposal.

In August 2012, SEC adopted a rule mandated by the Dodd-Frank Wall Street Reform and Consumer Protection Act to require companies to publicly disclose use of conflict minerals which originated in the DRC or an adjoining country.

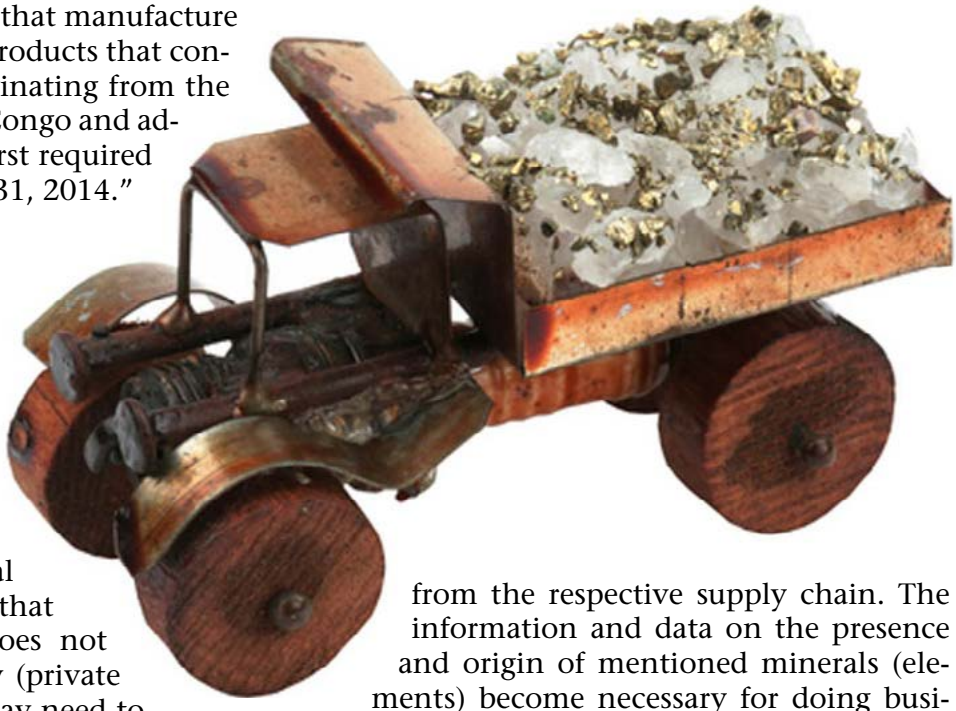
Current U.S. Regulation

The regulatory reform law directed the SEC to issue rules requiring certain companies to disclose their use of conflict minerals that include tantalum, tin, tungsten, or gold if those minerals are "necessary to the functionality or production of a product" manufactured by those companies. Companies are required to provide this disclosure on a new form (Form SD) to be filed with the SEC. The provision came into force January 1, 2013.

Before the SEC rule, the California Legislature, on September 16, 2011, passed a law (SB 861) requiring public companies to comply with the Dodd-Frank provision on conflict minerals if they want to do business with the state of California.

As stated in my January column, "2013 will be the first calendar year that the SEC rule requires supply chain due diligence and special-

ized reporting by companies that manufacture or contract to manufacture products that contain these four minerals originating from the Democratic Republic of the Congo and adjoining countries. And the first required report must be filed by May 31, 2014."



Who's Targeted?

An estimated 6,000 public companies under the jurisdiction of the SEC will need to be transparent about the source of conflict minerals used in their products and manufacturing processes. However, with the complexity of global supply chain, chances are that even the SEC regulation does not directly apply to a company (private companies); the company may need to provide information on the presence of conflict minerals in its products to customers. Attention and efforts by all manufacturers are warranted.

Tracing Origins

Companies must disclose the determination and describe the due diligence on Form SD. According to the SEC:

…companies that contract out the manufacturing of products (or components) that contain conflict minerals can circumvent the required disclosure if it is deemed that the company holds no influence over the item being contracted. A company does not qualify as having influence over the manufacturing of a product if it is simply stamping its brand on the product or if it merely services a product manufactured by a third party, according to the companies that have determined that conflict minerals sourced from countries…the company must make a reasonable inquiry into the country of origin of the conflict mineral...

The "influence" is to be determined and the traceability is the name of the game.

To trace the origin of conflict minerals in products, the entire hierarchy of suppliers must be engaged, obtaining data and information from the respective supply chain. The information and data on the presence and origin of mentioned minerals (elements) become necessary for doing business. A third-party audit and due diligence measures are mandatory.

The identification of conflict-free smelters and refiners is quite helpful for manufacturing companies. The Electronic Industry Citizenship Coalition (EICC) and Global e-Sustainability Initiative (GeSI) can help.

Due Diligence Guideline

On the international front, the Organization for Economic Cooperation and Development (OECD), and its member countries, has made a concerted effort on this front. The organization set its objectives to combat illegal exploitation of natural resources in conflict-affected and high-risk areas in order to avoid contributing to conflict; to promote principles and standards for responsible business conduct; and to successfully contribute to sustainable, equitable, and effective development. Last November, OECD published Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas, Second edition.

The SEC stipulates: "…Reporting companies have to perform due diligence that must conform to a nationally or internationally recognized due diligence framework, such as the due diligence guidance approved by OECD."

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The OECD Guidance sets out a five-step framework for risk-based due diligence in the mineral supply chain:

1. Establish strong company management systems.
2. Identify and assess risk in the supply chain.
3. Design and implement a strategy to respond to identified risks.
4. Carry out an independent third-party audit of supply chain due diligence at identified points in the supply chain.
5. Report on supply chain due diligence.

Going Forward

Basically, the U.S. conflict minerals law contains two requirements: Independent third-party supply chain traceability audits and reporting of audit information to the public and the SEC.

Dodd-Frank 1502 is a disclosure requirement and places no ban or penalty on the use of conflict minerals. However, a company is required to assess whether any conflict mineral was "necessary to the functionality or production" of a product manufactured or contracted for manufacture by the company. To comply with SEC regulation, whether or not the company that contracts out production holds the influence over the item being contracted is also to be assessed and determined.

Although it is not illegal to use conflict minerals, corporate social responsibility is on the line. The ultimate goal is to be conflict-free. Apple released its "2011 Supplier Responsibility Report," detailing how it traces its supply chain—first to the suppliers that created the subcomponents to their products and then to the smelters that processed the ores. Intel has conducted on-site reviews on smelters as part of a conflict-free smelter program.

As the supply chain becomes increasingly complex and global, with an ever-increasing number of suppliers, full traceability throughout the global supply chain is a daunting task. To comply with the SEC's reporting and disclosure requirement, a company must formulate a comprehensive program to achieving traceability and transparency. Formulating and executing such a program to comply with all regulations and exceed customer requirements should be a top priority.

On the business front, a shift in long-term investments in mines or mine-related business may shed new light and warrant further discussions. On the corporate governance front, conflict minerals will become an additional board and management issue to be monitored in enterprise risk management programs.

Overall, conflict minerals will have a real impact on the entire supply chain in all industries, with electronics on the front line. **SMT**

Dr. Hwang will present three lectures related to electronics manufacturing at the annual System Integration in Micro-Electronics Conference April 16-17, 2013, in Nuremberg, Germany, and four lectures in Penang, Malaysia, March 4 -7, 2013.

Dr. Hwang, a pioneer and longstanding contributor to SMT manufacturing since its inception as well as to the lead-free development, has helped improve production yield and solved challenging reliability issues. Among her many awards and honors, she has been inducted into the WIT International Hall of Fame, elected to the National Academy of Engineering and named an R&D Stars to Watch. Having held senior executive positions with Lockheed Martin Corporation, Sherwin Williams Co., SCM Corporation and IEM Corporation, she is currently CEO of H-Technologies Group providing business, technology and manufacturing solutions. She is a member of the U.S. Commerce Department's Export Council, and serves on the board of Fortune 500 NYSE companies and civic and university boards. She is the author of 350+ publications and several textbooks and an international speaker and author on trade, business, education and social issues. Her formal education includes four academic degrees, as well as the Harvard Business School Executive Program and Columbia University Corporate Governance Program. Contact her at (216) 577-3284; e-mail JennieHwang@aol.com.