



ESD Newsletter

May 2016

IZA Successfully Changes Bill that Would Have Threatened Use of ZnO in Tires

On 18 February 2016, a bill was introduced by Senator Allen in the California senate to eliminate the use of zinc oxide in tires. If passed, the Bill (SB 1260) would have created far-reaching implications for the zinc oxide industry and global automotive and transportation markets. The intent of the bill was to reduce zinc emissions to the environment by targeting sources that are indirectly associated with impaired water bodies.

IZA responded quickly and retained representation in Sacramento, while also holding a meeting with Senator Allen's office to illustrate deficiencies in the CA environmental assessment process as well as the lack of causal relationships between zinc sources and environmental concerns. IZA opposition was coordinated with others including the Rubber Manufacturers Association, tire and auto manufacturers, tractor and motorcycle manufacturers, car dealers, builder and contractor associations, and the CA Chamber of Commerce, among others. The Bill was revised on 29 March to remove all mention of zinc and tires.

The revised Bill seeks to develop a stormwater management plan and calls on the CA Department of Toxic Substances Control (DTSC) to review the potential environmental impacts of various zinc applications. To this end, IZA has initiated dialogue with the CA Water Board and DTSC to ensure that IZA is included in the process. IZA has the proper scientific data to help guide this process and will continue to engage relevant business networks located in California.

Please contact Dr. Eric Van Genderen for more information.

MMG Donates US \$1.39 Million to Combat Child Stunting and Anemia in Laos



MMG Limited has extended their partnership with UNICEF and the Lao Government through a second phase of funding for the 1000 Day Project, an initiative to fight child stunting and iron-deficiency anemia – two easily treatable diseases affecting more than 40% of children in Lao People's Democratic Republic.

Since its launch in 2012, the 1000 Day Project has benefited over 120,000 children and their families and is in line with two of the Sustainable Development Goals of 2030: Zero Hunger and Good Health and Well-Being.

Working in targeted, remote areas of Lao PDR, the program provides families with “Superkid” branded micronutrients containing zinc, and other nutrients. The program also works to integrate services into the national health system by offering vaccinations, screens for malnutrition, and maternal and child health education.

The second phase of the 1000 Day Project will extend support into additional provinces of Lao PDR. Some highlights from the initial phase include:

- 57,000 children provided with Vitamin A supplementation and 31,000 children received deworming tablets
- 2.5 Million sachets of Superkid distributed
- Training provided for over 1,600 health workers and Lao Women's Union Volunteers on appropriate feeding practices and micronutrients

You can read more about the program and its impact [here](#).

China: Restriction of Hazardous Substances Contained in Zinc Concentrate

In 2006, China set about to address environmental incidents in the Chinese non-ferrous metals refining industry by publishing National Standards GB204240-2006 which limited harmful elements in non-ferrous metal concentrates. In particular, a cadmium limit was set at 0.30%, which makes many zinc concentrates unsuitable for export to China.

| Current Standard - Maximum Allowed (%) | | | |
|--|------|------|------|
| | As | Cd | Hg |
| Zinc Concentrate | 0.60 | 0.30 | 0.06 |

Although this standard has been in effect since February 2007, the enforcement of policy has recently intensified following China's new 5-year plan. Cargo is increasingly being tested by China Inspection & Quarantine (CIQ) for compliance with this standard.

IZA is aware of several recent shipments rejected by CIQ because they exceeded limits for cadmium. Companies exporting zinc concentrates to China are advised to take this into consideration before concluding contracts. For more information, contact [Dr. Mik Gilles](#).

IZA Contributes to Resource Depletion Issue

Despite 20 years of research, no definitive methods for assessing mineral resources in life cycle assessment (LCA) have evolved. As a result, approaches to characterize abiotic depletion potential in LCA-related evaluation schemes (e.g., LEED in the USA and PEF in Europe)* could lead to incorrect decisions being made in many applications. For example, many LCA practitioners use estimates of Reserve Base as an indication of resource lifetime. However, as a market-based value, Reserve Base is an inappropriate metric for making comparative assertions of long-term material availability. To address this deficiency, a multi-year effort among numerous global mining and commodity associations (including IZA and mining companies), sought to improve the way that life cycle thinking was applied to the acquisition of mineral resources.

A recent publication describes new recommendations regarding more promising tools for use in life cycle sustainability assessments. It was suggested that practitioners should evaluate resource availability in parallel with traditional LCA, drawing upon expertise from other disciplines (financial and social sciences) to better characterize resource availability relative to stakeholder interests (corporations, national governments, etc.). Recommendations regarding mineral resource assessment are provided to ensure that future research has a sound basis and practitioners can incorporate the appropriate tools in their work.

For more information, contact [Dr. Eric Van Genderen](#).

*LEED = United States Green Building Council's Leadership in Energy and Environmental Design; PEF = European Commission's Product Environmental Footprint

California DTSC Obstructs Zinc Recycling



In a move that directly contradicts their mission, the California Department of Toxic Substance Control (DTSC) has revoked the Excluded Recyclable Material status for hazardous wastes generated by a metal finishing business (alloyers, steel mills, and tube & wire fabricators). As a result, metal-bearing wastes, such as drosses and skimmings, may now be subject to increased scrutiny before being exempted from hazardous waste classification. Unless addressed, these actions will create significant financial and legal liability for businesses through new permits, fees, shipping and disposal costs. It is also likely that revocation of recycling credits for metal finishers will increase as the conditions for exemption are challenged throughout the State.

The Zinc Coalition, spearheaded by the International Zinc Association (a group consisting of businesses and associations that advocate for the use of defensible science in regulations and policy decisions) is actively engaged in this issue. IZA is

currently in discussions with Cal EPA to identify a resolution that acknowledges the practical aspects of metals recycling and contribution to a sustainable society.

For more information, or to join the Zinc Coalition, contact [Dr. Eric Van Genderen](#).

Contact

Utah Recognizes Zinc BLM for Regulatory Use

The State of Utah has become the first jurisdiction in the United States to officially recognize use of the zinc Biotic Ligand Model (BLM) for generating site-specific water quality standards. Although limited to discharges to tributaries of the Great Salt Lake, this is a significant step towards improved standards for all zinc dischargers in North America and provides a precedent for expanded use and acceptance of the zinc BLM.

IZA is currently working with the US EPA to facilitate adoption of this tool at the federal level. The BLM is a state of the science approach to derive water quality standards which improves attainability of discharge limits by considering the overall water quality of the receiving stream.

