



MINUTES
NORTH AMERICAN REGULATORY AFFAIRS COMMITTEE
INTERNATIONAL CADMIUM ASSOCIATION
Thursday, April 28, 2011 – 9 AM EDT

Web Teleconference

<https://www2.gotomeeting.com/join/910473618>

1. CALL TO ORDER

The second meeting of the North American Regulatory Affairs Committee of the International Cadmium Association was called to order by its Chairman, Maxime Cossette of 5N Plus Inc., at 9:01 AM Eastern Daylight Time. Those participating in the meeting by web teleconference call were as follows:

REPRESENTATIVE

Maxime Cossette
Chris Baker
Matt Garamone
Al Hardies
Phil Rowley
Jeff Mamarella
Mark Booth
Chip Wildes
Mark Edwards
Paul Deveau

MEMBER COMPANY

5NPlus
Acme Aerospace, Inc.
First Solar Inc.
INMETCO
James M. Brown Ltd.
James M. Brown - USA
Rockwood Pigments (UK) Limited
SAFT America Inc.
Teck Resources Ltd. (IZA)
Xstrata Zinc (IZA)

STAFF AND GUESTS

Noomi Lombaert
Hugh Morrow

ORGANIZATION

International Cadmium Association
International Cadmium Association

2. WELCOME AND BACKGROUND

Chairman Max Cossette welcomed the participants on behalf of the International Cadmium Association. He noted the background of the development of the North

American Regulatory Affairs Committee, and described its first meeting in September 2010 as well as the issues with which it had been concerned in the past six months.

The Chairman also noted that the meeting must be held in compliance with the Statement of Compliance for the association as incorporated under Belgian Law. This statement is shown as Slide 3 of Annex I attached to these Minutes. All of the slides presented during this meeting are attached to these Minutes in Annex I.

3. MEETING AGENDA

Max Cossette then turned the meeting over to Senior Consultant Hugh Morrow to review the issues facing the North American cadmium industry. Mr. Morrow presented the meeting agenda (Slide 2 of Annex I) and stated that the meeting agenda was planned to review, discuss and adopt decisions for only three areas of concern. These three areas were the revision and/or enhancement of the Toxic Substances Control Act (TSCA) in the United States, the issue of cadmium in imported children's jewelry, and the problem of adverse publicity surrounding cadmium in glassware enamels. It was anticipated that a thorough discussion of these issues would result in viable positions and courses of action being adopted by the International Cadmium Association.

4. TOXIC SUBSTANCES CONTROL ACT (TSCA)

Revision of TSCA: Hugh Morrow reviewed the basic principles behind the revision of the Toxic Substances Control Act (See Slide 4 of Annex I) which has now been introduced in the U.S. Senate by Senator Frank Lautenberg of New Jersey as the "Safe Chemicals Act of 2011." This bill would require industry to provide a minimum data set to EPA and would require EPA to evaluate and prioritize chemicals in commerce based on their risk analysis of that data set. The purpose of this evaluation would be to reduce risk from those chemicals of highest concern, and, in addition, to require further evaluation of those chemicals that could pose an unacceptable risk. Mr. Morrow pointed out that cadmium would definitely be on the list of chemicals of high concern, and that the industry could anticipate having to prove its chemicals were safe and to perform further testing. Other participants noted that because of the recent agreement between the European Chemicals Bureau (ECHA) and EPA, it was highly likely that most soluble cadmium compounds would be considered Substances of Very High Concern (SVHC), the designation utilized in the EU. Similar Substitute-It-Now (SIN) and German Environmental Ministry (Umweltbundesamt) lists also all contain soluble cadmium compounds and thus they are expected to be included in TSCA as chemicals of high concern.

In response to a question concerning the minimum data set required, Mr. Morrow noted that the present wording of Lautenberg's bill specifies the minimum amount of information necessary for the Administrator to conduct a "screening-level risk assessment of the chemical substance, including information on the characteristics, toxicological properties, exposure and use of that chemical substance." This wording gives EPA a great deal of flexibility in developing the Minimum Data Set required. No specific information

is contained in the proposed Safe Chemicals Act of 2011 as to exactly what this minimum data set might be, although other information on US EPA websites indicates that the type of information would be similar to the Screening Information Data Sets (SIDS) required under other EPA programs.

Discussions were also held regarding the utilization of the REACH Cadmium Consortium registration dossier information by United States companies in order to comply with some of the provisions of TSCA, whether as a completely revised law or simply a program under TSCA enhancement. It was mentioned that there would be complications in utilizing this data because of intellectual property rights and that US companies would probably have to pay a fee and/or go through certain legal procedures to take advantage of this information. The committee participants requested that Noomi Lombaert discuss this issue with Dr. Christian Canoo of the REACH Cadmium Consortium and advise what steps would be necessary for US companies to avail themselves of the REACH Cadmium Consortium data.

Mr. Morrow also noted that the wording of the Lautenberg bill still referred to persistence and bioaccumulation as metrics for establishing chemicals of high concern requiring further investigation in spite of the fact that the U.S. EPA issued their *Framework for the Risk Assessment of Metals* many years ago which clearly indicates that persistence and bioaccumulation are not relevant for evaluating the risks of metals. It was also noted that the European Union as well, in its latest amendment to Annex XIII of the REACH Directive clearly notes that the criteria for the identification of persistent, bio-accumulative and toxic substances does not apply to inorganic substances such as cadmium and its compounds, except for organo-metallic substances.

Mr. Morrow went on to add that passage of Lautenberg's Safe Chemicals Act of 2011 appeared somewhat unlikely in 2011 because of the lack of the introduction of a corresponding bill from the Republican-controlled House of Representatives, and much higher priority political issues in Congress such as the U.S. economy, the wars in Afghanistan, Iraq and Libya, and the U.S. elections in 2012. He felt that the International Cadmium Association should continue to monitor the progress of TSCA revision, support pro-industry positions taken by larger associations such as the North American Metals Council (NAMC), and should file cadmium-specific comments only if directly relevant to cadmium industry issues (see Slide 7 on Annex I). The majority of participants on the conference call appeared to agree with this position, which will be reported to the ICdA Board of Directors.

Enhancement of TSCA: Hugh Morrow pointed out that, because passage of a complete revision of TSCA was unlikely in 2011, the Obama Administration and the Democratically-controlled EPA are undertaking what they describe as "Enhancement of the Existing Toxic Substances Control Act." Under this program, for example, the Inventory Update Rule (IUR) and the Significant New Use Rule (SNUR) have been updated and made more stringent. Of specific relevance to the cadmium industry is the recent proposal which EPA has made to invoke Section 8(d) of TSCA to require cadmium health and safety studies data by early 2012. This new proposal was issued in

response to the Sierra Club's request of May 2010 which EPA announced it would grant on August 30, 2010. The full text of EPA's recent Action Initiation List statement in this regard is shown on Slides 5 and 6 of Annex I attached.

Mr. Morrow pointed out that EPA had issued this proposal as a direct rule which would take effect in one year from announcement if unopposed. If ICdA notified EPA that it intended to oppose the rule, then EPA would be forced to issue a Notice of Proposed Rulemaking (NPR) and would have to offer a period for public comment. Their overall rulemaking process in this case would probably be much longer than the direct rule option. Participants on the call discussed the two options, and which would be in the best interests of the industry. Considering the EPA statement in its entirety which includes both the reporting of cadmium health and safety studies and the establishment by the Consumer Product Safety Commission (CPSC) of voluntary industry standards for cadmium in children's products, it was decided that the best course for the industry to adopt was not to oppose the TSCA Section 8(d) Rule on Cadmium and to cooperate as fully as possible with EPA and CPSC. It was however felt that in announcing this position to US EPA, the ICdA should point out the sensitive nature of confidential business information (CBI) and that there were many examples where certain information concerning the chemical composition, particle size or particle size distribution or other processing details of a cadmium compound or cadmium-containing product should not properly be released to the general public (see Slide 7 of Annex I).

5. CADMIUM IN CHILDREN'S JEWELRY

Hugh Morrow reviewed the situation in the last two years with regard to cadmium found in children's jewelry. Most of the jewelry in question originated either in India or China and was imported into the United States or Europe. Discovery of this problem resulted in considerable adverse publicity, prohibition in the European Union, and a flurry of legislation at the State level in the United States. Mr. Morrow pointed out that legislation now existed in Minnesota, Connecticut, Illinois and California in the United States, and that similar proposed legislation prohibiting cadmium-containing children's jewelry had been introduced in Florida, Hawaii, Kentucky, Massachusetts, Maine, Michigan, Mississippi, New Jersey, South Dakota, Tennessee, and Washington (see Slide 8 of Annex I).

The problem is that all of these bills impose different requirements that in turn require toymakers to adhere to different standards for different markets. Most of the existing or proposed bills are based on total cadmium content in the article, as opposed to an extractable cadmium content which is the basis of the American Society for Testing and Materials (ASTM) voluntary standard F963. The existing legislation in Illinois and Minnesota is based on a leachable cadmium level of 75 ppm using ASTM F963. The proposed standard in New York has imposed an extremely low 0.5 ppm leachable cadmium level pending establishment of final legislation.

Other differences in the bills presented in the different jurisdictions are based on whether the legislation applies to the total product, its surface coating or what is termed "an

accessible substrate,” which is of course very hard to define. The cadmium levels restricted are from 0.5 ppm to as high as 300 ppm, and the cut-off age for the definition of children ranges from 6 to 13 years old. Some legislation is already in effect, but the proposed enforcement dates for other bills vary from July 1, 2011 to July 1, 2013.

Conference call participants agreed that it would be in the industry’s best interests to make it publicly known that the industry opposed the use of cadmium in children’s jewelry. It was agreed that the industry should cooperate in whatever manner possible with both EPA and CPSC to establish voluntary industry standards based on ASTM F963 based on extractable cadmium levels. Mr. Morrow pointed out that the February 2011 report of CPSC on cadmium in children’s jewelry took the position that there was little relationship between total cadmium content and extractable cadmium content, and that it was the extractable cadmium content which resulted in human health and environmental effects. Therefore, their conclusion was that extractable or soluble cadmium level should be regulated rather than total cadmium content. The Chairman reiterated his position that the cadmium industry’s statement on cadmium-in-children’s-jewelry should be more widely disseminated. Thus far, the association’s position has been stated only to the Consumer Product Safety Commission. It was generally agreed that it would be desirable to post the industry position on this issue prominently on our public website, www.cadmium.org.

Hugh Morrow also reviewed the actions of the CPSC with regard to cadmium in children’s jewelry (see Slide 8 of Annex D). Late in 2010, CPSC Commissioner Inez Tennenbaum warned Chinese toy manufacturers at a major conference of the toy-making industry in Hong Kong that the use of cadmium as a substitute for lead, which has now been prohibited, would not be tolerated. In response to the Sierra Club petition of 2010, the CPSC has deferred its decision on prohibition of cadmium in children’s products until August 2011 at which point they are required to provide an update on what actions they are undertaking. The CPSC also issued an extensive briefing package, including the results of its own testing, on February 9, 2011, and plans to work with ASTM Subcommittees on the F963 voluntary test standard. The CPSC briefing package was previously distributed to all Members of the North American Regulatory Affairs Committee, and is available to any other ICdA member should they wish a copy.

6. CADMIUM IN JEWELRY vs. CADMIUM IN GLASS ENAMELS

Hugh Morrow discussed the position which ICdA had taken on cadmium in children’s jewelry vis-à-vis the issue of cadmium contained in enamels on glassware. During 2010, 12 million McDonald’s glasses with cadmium-containing enamel decorations of figures from the Shrek movies were recalled based on alarmist article by an Associated Press writer and political activism by a California Democratic Congresswoman. Other articles and further tests have been conducted on other children’s-oriented glassware in late 2010 resulting in more negative publicity regarding cadmium in consumer products. These issues are shown in Slide 10 of Annex I attached.

Mr. Morrow explained that the cadmium and pigment industry position has always been that cadmium-sulfide-based pigments are virtually insoluble and that these pigments encapsulated in plastics, glasses, ceramics and enamels are completely insoluble. He, however, also pointed out that the general public would not appreciate these technical differences based on solubility between cadmium in jewelry and cadmium in glassware enamels. Therefore, the ICdA is faced with making a decision on a public position or course of action with regard to cadmium in jewelry versus cadmium in glassware enamels. After considerable discussion and some excellent compromise proposals by meeting participants, it was decided that the best course of action was to adopt a position to restrict extractable cadmium levels in children's products in cooperation with the Consumer Product Safety Commission (CPSC) and the voluntary industry standard developed through ASTM F963. This position enables the industry to base safety considerations not on cadmium content but on cadmium extraction levels utilizing a standardized industry test and not a test designed by environmental groups "to simulate handling by a child." Basing the association's position on the level of extractable cadmium then becomes simply a clarification of our previously issued statement to the CPSC rather than a change to the original statement.

A point was also raised in discussions as to which legislation or regulation under United States law would take precedence in these situations. All of these matters could equally well be covered by the Food and Drug Administration (FDA) regulations, the Consumer Product Safety Commission (CPSC) standards, or local, State or Federal legislation. Mr. Morrow stated that he felt the only way to establish the relative hierarchy would be to inquire from some of the agencies involved or seek legal opinion on the question. Since ICdA will be trying to work with the CPSC, he felt that inquiry of that agency would be the best course at this time.

7. SUMMARY OF REGULATORY AFFAIRS COMMITTEE DECISIONS

Chairman Max Cossette and Hugh Morrow then reviewed the various discussions during the web-meeting and teleconference and the decisions taken as follows:

Toxic Substances Control Act

TSCA Revision: ICdA will continue to monitor the progress of the revision of the Toxic Substances Control Act, will cooperate with and endorse the general positions of larger, umbrella industry organizations (such as NAMC) with respect to provisions opposed by industry as a whole, and will comment on cadmium-specific provisions or issues only if specifically required.

TSCA Enhancement: ICdA will not oppose the EPA-proposed TSCA Section 8(d) Rule requiring the submission of unpublished health and safety studies regarding cadmium, cadmium compounds or cadmium-containing products which could reasonably be expected to be incorporated into consumer products. In announcing this decision to EPA, members noted that a cautionary provision should be made regarding confidential

business information, and the justifiable need to protect some of that information from general public access.

Cadmium in Children's Jewelry

The North American Regulatory Affairs Committee endorsed the position that the association would cooperate with the Consumer Product Safety Commission (CPSC) and the American Society for Testing and Materials (ASTM) to develop voluntary standards for cadmium in children's products based on extracted or soluble cadmium levels.

Cadmium in Glassware Enamels

The North American Regulatory Affairs Committee endorsed the same position with respect to glassware enamels on children's products as it had on cadmium in children's jewelry that the association would cooperate with CPSC and ASTM to develop voluntary standards for cadmium in children's products based on extracted or soluble cadmium levels.

8. NEXT MEETING DATE AND MEETING ADJOURNMENT

Chairman Max Cossette indicated that the next meeting of the North American Regulatory Affairs Committee would probably be held in September 2011 due to other meetings and upcoming vacation schedules. There being no further business before the committee, the Chairman adjourned the meeting at 11:10 AM Eastern Daylight Time.

Respectfully Submitted,

Hugh Morrow
Secretary, Pro-Tempore

Approved,

Maxime Cossette
Chairman

International Cadmium Association

North American Regulatory Affairs Committee

Webconference - Teleconference

Thursday, April 28, 2011 @ 9 AM EDT

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Meeting Agenda

- Welcome and Introduction – Max Cossette
- Compliance with Association Law – Hugh Morrow
- Toxic Substances Control Act (TSCA)
 - Revision of TSCA: Safe Chemicals Act of 2011
 - Enhancement of TSCA: Section 8(d) Cadmium Rule
- Cadmium in Children’s Jewelry
 - Existing and Proposed State Legislation
 - Consumer Product Safety Commission Actions
- Cadmium in Glassware Enamels
 - ICdA Position on Enamels vs. Jewelry
 - Total Cadmium Content vs. Extracted Cadmium Levels ₂

STATEMENT OF COMPLIANCE

- The purpose of the meeting is to address, under the applicable confidentiality rules, issues concerning Cadmium and Cadmium compounds producers and importers and more particularly their obligations under the several regulations.
- The minutes kept during the meeting will have to reflect all significant matters discussed during the meeting.
- No discussions will be held, formally or informally, during specified meeting times or otherwise, involving, directly or indirectly, express or implicit agreements or understandings related to: (a) any company's price; (b) any company's terms or conditions of sale; (c) any company's production or sales levels; (d) any company's wages or salaries; (e) the division or allocation of customers or geographic markets; or (f) customer or suppliers boycotts; or (g) any disclosure of information which may affect applicable rules on Competition Law.
- The International Cadmium Association (ICdA), as a group will make no recommendations of any kind and will not try to reach any agreements or understandings with respect to an individual company's prices, terms or conditions of sale, production or sales levels, wages, salaries, customers or suppliers.

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Toxic Substances Control Act (TSCA)

- Revision of TSCA
 - Require Industry to Provide Minimum Data Set
 - Require EPA to Prioritize Chemicals Based on Risk
 - Reduce Risk from Chemicals of Highest Concern
 - Require Further Evaluation of Chemicals That Could Pose an Unacceptable Risk
 - Provide Broad Public Access to Chemicals Data
- Enhancement of Existing TSCA
 - EPA Plans to Invoke TSCA Section 8(d) to Require Cadmium Health and Safety Data by Early 2012

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Cadmium Health and Safety Data Reporting under TSCA Section 8(d)

- “On August 30, 2010, EPA granted a request from the Sierra Club to use Section 8(d) of TSCA to require producers, importers, and processors of cadmium and cadmium compounds to submit to EPA lists or copies of ongoing and completed **unpublished health and safety studies** concerning cadmium and cadmium compounds that are reasonably **likely to be incorporated into consumer products**. Sierra Club made this request through a Citizen’s Petition filed under TSCA Section 21.”

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Cadmium Health and Safety Data Reporting under TSCA Section 8(d)

- “The petition also asked that the Consumer Product Safety Commission (CPSC) take certain actions, including the establishment of standards restricting cadmium in children’s products, especially metal jewelry. The health and safety studies that EPA would require under this rule would be used to help determine if a potential hazard exists from cadmium or cadmium compounds and whether a product should be banned as a hazard substance under guidelines established by CPSC.”

– From EPA’s March 2011 Action Initiation List

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ICdA Action Options on TSCA

- TSCA Revision
 - Legislation Unlikely to be Completed in 2011
 - Endorse NAMC and AAI Positions on TSCA Revision
 - File Cadmium-Specific Comments If Required
 - Do Not Respond Except to Cadmium-Specifics
- TSCA Enhancement
 - Accept the Proposed Section 8(d) Cadmium Rule and Submit Any Unpublished Cadmium Studies. We May Have to Submit Confidential Business Information.
 - Oppose the Proposed Section 8(d) Cadmium Rule and Force EPA to Issue Notice of Proposed Rulemaking

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Existing or Proposed State Legislation on Cadmium in Children's Jewelry

- Existing: MN, CT, IL, CA
- Proposed: FL, HI, KY, MA, ME, MI, MS (Died in Committee), NJ, NY, SD, TN, WA
- All Based on Total Cadmium Content Except
 - IL and MN: 75 ppm soluble cadmium per ASTM F963
 - NY: 0.5 ppm leachable cadmium pending determination
- Differences in the Proposed Legislation
 - Total Product, Surface Coating or Accessible Substrate
 - Cadmium Level Restricted: 0.5, 40, 75 or 300 ppm
 - Definition of Children's Age Cutoff: <6 to <13 years
 - Proposed Enforcement Dates: July 1, 2011 to July 1, 2013

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Consumer Product Safety Commission's Actions

- CPSC Warns Chinese Manufacturers Against Use of Cadmium in Children's Products
- CPSC Deferred Decision on Sierra Club Petition for Six Months, Provide Update in August 2011
- CPSC Staff Briefing Packaging on Sierra Club Petition Issued on February 9, 2011
- CPSC Staff to Work with ASTM Subcommittees on F963 Standard and Test Method for Toy Jewelry to Develop Voluntary Standards on Cd

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ICdA Positions on Cadmium in Jewelry vs. Cadmium in Enamels

- Position Already Taken on Cadmium in Jewelry
- Technical Arguments on Different Positions
 - Complete Insolubility of Cadmium Sulfide-Based Pigments in Plastics, Glasses, Ceramics and Enamels
- Political Difficulties of Different Positions
- ICdA Course of Action
 - Restrict Cadmium in All Children's Products?
 - Restrict Extractable Cadmium in Children's Products in Cooperation with CPSC?
 - Take No Further Position on Cadmium in Enamels

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Summary of ICdA Actions

- Toxic Substances Control Act
 - TSCA Revision: Monitoring & NAMC Cooperation
 - TSCA Section 8(d) Rule: **Decision Required**
- Cadmium in Children's Jewelry
 - Cooperation with the CPSC and ASTM to Develop Voluntary Standards Based on Solubility
- Cadmium in Glassware Enamels
 - **Decision Required**

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