



International Cadmium Association

168 Avenue de Tervueren/Box 4 • B-1150 Brussels, Belgium

Tel.: +32(0)2-776 0077 • Fax: +32(0)2-777 05 65

Email : ccanoo@cadmium.org

PROGRESS REPORT January – June 2007

Issue date: September 15, 2007

Next ICdA Informational Meeting:

- The next ICdA General Assembly of Members will be held on Thursday, October 11, 2007 beginning at 1300 hrs (1:00 PM) at The Royal Aeronautical Society, 4 Hamilton Place, London W1J 7BQ United Kingdom, and will include presentation and discussion of the proposed 2008 ICdA program and budget as well as reviews of regulatory and market issues for the industry. All ICdA members are urged to attend.

ACTIVITY UPDATE

Regulatory Affairs – Europe

EU Cadmium and Cadmium Oxide Risk Assessment :

- The requested additional studies (conclusion i) on Cd ecotoxicity in very soft waters have been completed, as scheduled during this summer, partly at NIVA (Norway) for a fish test and partly at the University of Ghent for the *Daphniae-Longispina* tests.
- Those studies were funded by the European Cd-Industry
- The conclusions were presented at the TCNES III on September 13th 2007 by the Belgian Rapporteur: “no further adjustment of the PNEC in very soft water is necessary and the previously agreed regional PNEC of 0.08 µg/L is proposed for all waters with hardness lower than 40 mg CaCO₃/L.”
- Due to a late distribution of the final NIVA report, a written procedure has been started for four weeks, allowing Member states to address their comments to the Rapporteur

EU Risk Reduction Strategy (RRS)

- The RRS-meeting on cadmium and compounds took place in Brussels on May 10th, 2006.

ICdA North America

9222 Jeffery Road, Great Falls, Virginia 22066, USA

Tel.: +1(703)759.7400 • Fax: +1(703)759.7003

E-mail : icdamorrow@aol.com



International Cadmium Association

168 Avenue de Tervueren/Box 4 • B-1150 Brussels, Belgium

Tel.: +32(0)2-776 0077 • Fax: +32(0)2-777 05 65

Email : ccanoo@cadmium.org

- The proposed measures by the Belgian rapporteur were largely agreed, with some reservation on the final wording and with remarks from Sweden requesting for additional measures, f.i. marketing & use restrictions and better emission control.
- The Commission (DG Environment, DG Enterprise, DG Employment) will issue the final document on the retained proposals.
- ICdA staff met with DG Environment and DG Enterprise representatives in order to explain our position: (1) the Rapporteur's proposals are based on the findings of the Risk Assessment, (2) no understanding of the rationale for additional measures.
- There is still a good chance to see that dossier of RA & RRS completed before the implementation phase of REACH, starting June 2008.

REACH : a new chemicals regulation

- The REACH regulation entered into force on June 1th 2007 and will repeal the current legislation on existing substances as from June 2008..
- A Cd REACH Consortium has been formed, effectively since July 1st 2007. The first General Assembly of the Consortium took place in Brussels on September 4th.
- Ten Consortium Members already signed the Agreement, eight are ICdA-members and two are not.
- A special website, also linked to our www.icdamembers.org website, will inform interested parties and Members of the evolution of the Cd-dossier.
- ICdA members interested to join or to inform about the Consortium are invited to contact Fa oise Petit at f.petit@izaurope.com

Regulatory Affairs – North America

Status of U.S. EPA Framework for Metals Risk Assessment

- EPA Released Its Final Framework for Metals Risk Assessment on March 8, 2007.
- Report EPA 120/R-07/001 is available on the internet at www.epa.gov/osa/metalsframework.
- Conclusions of the report beneficial to industry and consistent with our position include:
 1. "Inorganic metals and metal compounds have unique characteristics that should be considered when assessing their risks."
 2. The Metals Framework is applicable to all metals.

ICdA North America

9222 Jeffery Road, Great Falls, Virginia 22066, USA

Tel. : +1(703)759.7400 • Fax : +1(703)759.7003

E-mail : icdamorrow@aol.com



International Cadmium Association

168 Avenue de Tervueren/Box 4 • B-1150 Brussels, Belgium

Tel.: +32(0)2-776 0077 • Fax: +32(0)2-777 05 65

Email : ccanoo@cadmium.org

3. Bioaccumulation factors and bioconcentration factors are not appropriate for the ranking of metals. Emphasis for metals should rather be placed on the Biotic Ligand Model supported by industry.
4. The Framework does include language on bioaccumulation in relation to human health issues, but recognizes the importance of metallic form, the specific target organ or tissue, and the specific metal's kinetics.
5. The Framework recognizes that metals occur at natural levels which are not harmful to human health or the environment and that these naturally occurring levels should be considered in regulations.
6. The Framework also recognizes that some metals are essential.
7. The Framework emphasizes the importance of metal's form (metallic, soluble salt, insoluble salt) and particle size in determining effects.
8. Framework stresses that bioavailability is the most important factor for assessing the hazards and risks of metals.

U.S. EPA Toxic Release Inventory (TRI) Lead Rule

- The U.S. Court for the District of Columbia ruled that EPA was not required to follow any particular scientific methodology, as contended by industry, in establishing a lead TRI reporting threshold.
- However, with release of the Metals Framework, the TRI Office has stated that it will reconsider some of its metal regulations to be consistent with the Framework.
- At a February 27, 2007 meeting, TRI Chief Rebecca Moser stated that their office was "cross-walking" the Metals Framework with TRI evaluation methods to assess and classify their validity and applicability.
- This activity is said to include a re-examination of the Lead TRI Rule which is based largely on the classification of lead as a PBT.
- This issue is important to the cadmium industry because of reports that the TRI Office may be considering a Cadmium TRI Rule similar to the Lead TRI Rule which would drastically lower the cadmium reporting thresholds.

NAFTA Commission for Environmental Cooperation (CEC) Reports

- NAFTA CEC Sound Management of Chemicals (SMOC) Working Group Meeting was held in Monterrey, Mexico on April 18-19, 2007 to work on the four proposed concept areas under the *Puebla Priority Strategy to 2020*.
- The goals of this strategy are to reduce the risks from chemicals of concern to North America with initial priority on mercury and several persistent organic pollutants (POPs); to develop and implement a sustainable regional approach to monitoring, biomonitoring and assessment of toxic chemicals with emphasis on pollution in Mexico; to improve environmental performance through a chemicals use sector approach to sound management of toxic substances; and to establish a foundation for chemicals management across North America with an emphasis on upgrading Mexico's performance.

ICdA North America

9222 Jeffery Road, Great Falls, Virginia 22066, USA

Tel.: +1(703)759.7400 • Fax: +1(703)759.7003

E-mail : icdamorrow@aol.com



International Cadmium Association

168 Avenue de Tervueren/Box 4 • B-1150 Brussels, Belgium

Tel.: +32(0)2-776 0077 • Fax: +32(0)2-777 05 65

Email : ccanoo@cadmium.org

- U.S. EPA is looking for industry input including specific case histories of voluntary initiatives which have been successful in implementing these four goals.
- U.S. EPA minimized industry concern over new chemicals being added to the NAFTA CEC SMOC's programs, and emphasized that mercury and some POPs as well as improving Mexico's chemicals management programs were the main focus for the foreseeable future.

U.S. EPA Integrated Risk Information System (IRIS)

- IRIS is an EPA database containing scientific information on the accepted levels of potential adverse human health effects from various chemicals and substances.
- The database is widely used and recognized as an authoritative source for toxicology information, and is periodically updated to reflect the latest scientific information.
- The latest update of the IRIS Cadmium File was initiated in February 2003, a literature search completed in July 2003, and a first draft of the revision started in February 2006. This draft is expected to be complete in April 2008 with a final report expected in September 2009.
- The International Cadmium Association as well as any other interested parties will have ample opportunities at every step of the process to comment on the revised IRIS Cadmium File.

Regulatory Affairs – International

UNECE Heavy Metals Protocol

- The Sufficiency and Effectiveness Review for the Heavy Metals Protocol was completed in 2006, and included no specific wording on further prohibitions on cadmium products.
- The 2007 Task Force on Heavy Metals Work Plan included studying options for further heavy metal emissions, health and ecosystem benefits of lower heavy metal emissions, and other approaches to evaluating the effects of heavy metal emissions than the critical loads model.
- A meeting of the Task Force on Heavy Metals was held in Vienna on June 6-8. Some of the information presented by the USA, Canada, Sweden and Germany at that meeting may be found at www.unece.org/env/tfhm/meetings.htm.
- While Sweden did emphasize that some Parties to the Convention had taken additional measures against cadmium-containing products, no action was taken at the Vienna meeting against cadmium products and most of the discussion centered on mercury products.
- Everyone appeared to agree that heavy metal emissions have declined significantly since the base year of 1990 although some countries maintained that either official inventories were grossly underestimated or that there was still

ICdA North America

9222 Jeffery Road, Great Falls, Virginia 22066, USA

Tel.: +1(703)759.7400 • Fax: +1(703)759.7003

E-mail : icdamorrow@aol.com



International Cadmium Association

168 Avenue de Tervueren/Box 4 • B-1150 Brussels, Belgium

Tel.: +32(0)2-776 0077 • Fax: +32(0)2-777 05 65

Email : ccanoo@cadmium.org

great uncertainty in emission levels and that therefore heavy metal emissions needed to be reduced further because of these uncertainties.

- Craig Boreiko of ILZRO was able to challenge some of the statements regarding heavy metals effects based on the critical loads approach and will in future be included in the technical groups developing that approach. A workshop on Critical Loads for Heavy Metals has been scheduled for November 2007 in England and Dr. Boreiko has been invited to attend.

UNEP Heavy Metals Program

- A “Scientific Review” on Cadmium was prepared by a Danish consultant for UNEP in 2006. This review expresses a largely Nordic viewpoint, is highly specific to EU data, and was strongly criticized by industry and several UNEP nations. However, the Intergovernmental Forum on Chemicals Safety (IFCS) strongly supported the review and called for global programs on mercury, lead and cadmium.
- The UNEP Governing Council (GC) met in Nairobi, in February 2007 to consider further actions on the heavy metal programs. The UNEP GC acknowledged “data and information gaps” in the scientific review on cadmium (and lead as well) and requested action to fill those gaps.
- However, in deference to IFCS, the UNEP GC noted the perceived heavy metal pollution problems in developing nations such as Africa, and encouraged governments and others to reduce cadmium risks throughout the whole life cycle. The GC also requested an inventory of existing risk management measures for cadmium and cadmium-containing products.
- During the summer of 2007, UNEP requested input from governments and interested parties on a number of different areas where they felt information gaps existed. The ICdA is in the process of developing and submitting information to UNEP for the Cadmium Scientific Review by September 30, 2007. ICdA has already notified UNEP that our comments previously made in August 2006 on this draft have largely been ignored and has reiterated our previous comments.

IFCS Proposed Program on Heavy Metals

- Conference entitled “Health and Environmental Concerns Associated with Heavy Metals: Global Need for Further Action?” organized by Switzerland in September 2006 in Budapest with emphasis on pollution problems in developing nations.
- IFCS issued “Budapest Statement” calling for worldwide legally binding programs for mercury, lead and cadmium. Norway and Switzerland subsequently proposed global action on mercury, lead and cadmium at the UNEP GC meeting in Nairobi which was not adopted.
- The IFCS Forum Standing Committee (FSC) is looking at cadmium for discussion at their next meeting in September 2008 in Dakar or Nairobi. Lead Development Association International and the International Council and Metals and Mining are involved in the process.

ICdA North America

9222 Jeffery Road, Great Falls, Virginia 22066, USA

Tel.: +1(703)759.7400 • Fax: +1(703)759.7003

E-mail : icdamorrow@aol.com



International Cadmium Association

168 Avenue de Tervueren/Box 4 • B-1150 Brussels, Belgium

Tel.: +32(0)2-776 0077 • Fax: +32(0)2-777 05 65

Email : ccanoo@cadmium.org

WHO/FAO JECFA PTWI for Cadmium

- The Provisional Tolerable Weekly Intake (PTWI) for cadmium has been maintained at 7 micrograms per kilogram of body weight per week (7 $\mu\text{g}/\text{kg-bw}/\text{wk}$) by the Joint Expert Committee on Food Additives (JECFA) of the World Health Organization (WHO) and the Food and Agriculture Organization of the United Nations (FAO) at both their 2003 and 2005 meetings.
- The EU Risk Assessment and Nordic Reviews on Cadmium have suggested that the PTWI should be much lower, in the range from 1.4 to 3.5 $\mu\text{g}/\text{kg-bw}/\text{wk}$.
- Current intake levels, based on many studies, appear to range from 0.7 to 2.8 $\mu\text{g}/\text{kg-bw}/\text{wk}$ which is only 10% to 40% of the current PTWI standard, but 50% to 80% of the proposed Nordic standard.
- JECFA is currently requesting data on cadmium in rice, wheat, potatoes, leafy vegetables, mollusks and national food cadmium consumption data from nations to further study this issue.

ICdA North America

9222 Jeffery Road, Great Falls, Virginia 22066, USA

Tel.: +1(703)759.7400 • Fax: +1(703)759.7003

E-mail : icdamorrow@aol.com