



International Cadmium Association

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Next ICdA Informational Meeting:

- The next ICdA informational meeting for members will be held on **Wednesday, May 17, 2006** at the offices of King & Spalding, 1700 Pennsylvania Avenue, N.W., Washington, DC 20006, USA, 2nd Floor, beginning at 10:00 AM. A luncheon will be served in the meeting room, and the meeting is expected to conclude by 3:00 PM. The full agenda, including guest speakers, will be announced in the near future.

Cadmium Pigments Committee Meeting:

- The next meeting of the ICdA Cadmium Pigments Committee will be held on **Thursday, February 23, 2006** at the ICdA offices, 168 avenue de Tervueren, B-1150 Brussels – BELGIUM, 1st Floor, beginning at 10:30 AM. A luncheon will be served at 1:00 PM and the meeting is expected to conclude by 4:00 PM.

ADMINISTRATIVE ISSUES

Review of the ICdA membership fees

- At the last ICdA General Assembly, it was agreed to readjust the budget and assessment rates into euros and increase the subscription fee to account for inflation rates since 1999.
- Approval for the revised budget and assessment rates has been requested and has been received from a large number of members. Further approvals are still needed from some members in order to come to a conclusion and start 2006 invoicing.

ICdA By-Laws

- ICdA registration as a not-for-profit organization in Belgium is in progress.
- The ICdA by-laws have been approved by a notary and most members have now filled out the procuration form identifying them as founding members and delegating a representative of the association for official submission of the By-Laws.
- We are still waiting for signatures of several members prior to finalizing the process.

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ACTIVITY UPDATE

Regulatory Affairs – Europe

EU Cadmium and Cadmium Oxide Risk Assessment and Risk Reduction Strategy:

- Human Health:
 - ICdA organised meetings and conference calls of the project team on occupational exposure to cadmium during the course of the last months to finalise the ICdA Technical Guidance Document for managing Cd exposure in the Workplace.
 - This document is presented as an ICdA/Eurométaux document and is an update to the 1996 Eurométaux 'Risk management of Cd in the workplace' document.
 - The guidance document promotes a multi-dimensional scheme involving monitoring and control at various levels (Cd in air, biological monitoring of the individual worker, personal hygiene and training).
 - This will be presented and discussed at the next risk reduction strategy meeting with the Belgian authorities on February 8th 2006. Furthermore, an occupational doctor of the company SAFT (at a site where results have shown to be good) will present the management of Cd exposure at their site. The management scheme is in line with the ICdA/Eurométaux Technical Guidance Document scheme.
 - The ICdA/Eurométaux Technical Guidance Document will be posted on the ICdA members only website when finalized (March).
- Environment and Targeted Risk Assessment on Cd in NiCd Batteries:
 - A **final** Risk Assessment Report (RAR) has been submitted by the Rapporteur on 31st December'05.
 - This final RAR is a compilation of 3 documents; 1) the RAR environment, 2) the 'update' document, and 3) the Targeted RAR on Cd in NiCd batteries.
 - ICdA has summarized the conclusions (which have not changed from the conclusions in the previous drafts) in an e-mail sent to the membership on 27/01/06. The final RAR is posted on the ICdA members only website.
 - ICdA is in the process of developing a communiqué on the results of the risk assessments.
- Conclusion i) work on 'Bioavailability of cadmium in sediments':
 - The Rapporteur has submitted a "Stage II report" concluding 'no risk' for the regional sediment scenario and no need for further work, using a very conservative approach. This report is a result of the latest discussions at TC NES IV'05 where it was proposed that the Rapporteur make a sensitivity analysis on the AVS required to reach a conclusion of 'no risk' for regional sediment, prior to extending the stage II to the monitoring AVS data.

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- The report also assesses risks at local sites. A certain number of sites demonstrate borderline risk situations (depending on the AVS correction used) and the measuring of SEM/AVS at these sites is recommended.
- ICdA has submitted comments on the Stage II report, generally agreeing with the Rapporteur, but commenting that the very conservative approach should be seen as a pragmatic approach rather than a scientific one. Please contact L. Regoli for a copy of these comments.
- A final discussion at the next TC NES in March will draw this issue to a close.
- Conclusion i) on Cd toxicity in low hardness waters
 - This issue has been more or less 'dormant' for the last 2 years. However, in early January, the Rapporteur sent ICdA an official letter requesting the industry position on this issue.
 - Our position is basically still the one of 2 years ago (see letter to Rapporteur of August 2003 available on ICdA members only website). In addition, ICdA proposes to do a sensitivity analysis to delineate the zones of concern (very low hardness waters) and superimpose these with the Cd concentrations. It is thought that this could already provide some clear conclusions of risk or no risk without the need for additional testing as was done in the framework of the zinc risk assessment.
 - The conclusions on the sensitivity analysis will be added to the ICdA August 2003 position. Once the conclusions of the sensitivity analysis are done, this will be sent to the Rapporteur.
- EU Risk Reduction Process
 - The consultants 'Ecolas' will issue a Risk Reduction Strategy Stage IV Report in February 2006.
 - ICdA sent extensive comments on December 15th on the Stage III report and will review the Stage IV report carefully.
 - A meeting between the Belgian authorities and Industry will take place on the 8th February at which this report will be discussed, and at which a representative of each of the 3 industry sectors will be present.
 - Furthermore, the intention is for the Belgian authorities to commence the review of its risk reduction strategy with the Commission (DG Environment) at the EU Risk Reduction Strategy Group meeting in June 2006.

EU Battery Directive :

- The second reading plenary vote on the battery directive took place in the European Parliament on December 13th 2005.
- The main outcome of the vote concerning cadmium are:
 - A ban of portable batteries containing Cd. Exemptions are made
 - emergency systems, medical equipment
 - NiCd batteries in cordless power tools, with a request for the Commission to review this target after four years after entry into force.

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- Industrial and automotive batteries are exempt
- The introductory text of the Directive now makes reference to the 1988 Council Resolution on cadmium (which refers to the substitution principle).
- EU Member States will have Collection and Recycling Schemes for all end of life batteries with binding targets (75% recycling efficiency for NiCd).
- EU Member States will also have to organise the financing of collection and recycling schemes for spent batteries.
- Next steps: The text as adopted in plenary on 13 December will be subject to a conciliation process between the three institutions (the European Parliament, the Council of ministers and the commission) before its final publication in summer 2006.

EU RoHS Directive :

- Article 4(1) of Directive 2002/95/EC on the restriction of the use of certain hazardous substances in electrical and electronic equipment (ROHS) provides 'that from 1 July 2006, new electrical and electronic equipment put on the market does not contain lead, mercury, cadmium, hexavalent chromium, PBB or PBDE.'
- ICdA submitted a request for an *additional* exemption for cadmium used in pigments consistent with the current exemption granted to the cadmium coatings, and consistent with the prohibitions and exemptions listed under Directive 91/338
- The Oeko-Institut, Freiburg, and Fraunhofer IZM, Berlin, commissioned by the Commission services to assess the requests for exemptions from the requirements of the RoHS Directive, provided a report on 28th October 2005. The following conclusion is drawn on our request:
"On the basis of the available request for exemption together with its supporting documentation no general exemption for cadmium pigments can be recommended. The argumentation line was neither sufficient to prove scientific or technological impracticality of elimination / substitution nor was it sufficient to give evidence on adverse environmental, health or safety impacts of possible substitutes.
- The TAC will vote on our request for exemption based on this conclusion.
- Further information to counter-act the decision of the consultants is being compiled for discussion with the TAC committee members.

EU Water Framework Directive :

- The Commission is organising an Expert Advisory Forum (EAF) in Brussels on the 20th February to discuss the priority hazardous and priority substances Environmental Quality Standards as well as to discuss the methodology for substances prioritisation.
- ICdA continues to liaise with Eurométaux to discuss with DG Environment and DG Enterprise (last commentary file sent on January 4th '06). ICdA comments refer to setting a proper EQS for Cadmium, as well as voicing the concern on the objective of the WFD of 'ceasing of emissions' for 'Priority Hazardous Substances'. Specifically, the economic and technical feasibility of 'ceasing of emissions' of a naturally occurring substance such as cadmium has been raised.

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UK Trace Metal Environmental Quality Standard (EQS) Field Validation

- The UK Environment Protection Agency has launched a field validation study to evaluate the relevancy of different EQSs for metals in freshwater. The project is the result of the UK authorities' observation that the current EQS's, as set in EU (e.g. Water Framework Directive) are leading to big problems for the metals, while their ecological relevancy is not clear.
- The project draws on recent advances in measurement (DGT, chemical speciation modelling, and ecotox modelling (BLM, free metal ion)) and extends to the following metals; Ni, Zn, Cu, Pb, Cd.
- This study may be a significant step forward in assessing the validity of EQSs, and may act as a driver for deriving more realistic EQSs.
- ICdA has been directly involved in the funding of the study along with other metals associations and sits as advisor on the Project's board.
- Timing: the field sampling will occur in Spring 2006, and final reporting is expected by end of 2006.

Regulatory Affairs – North America

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

- As previously reported, a panel of the EPA's Science Advisory Board (SAB) had reviewed the Draft Framework for Metals Risk Assessment and submitted a large number of comments, criticisms and recommendations for changes. NAMC¹ has now submitted comments urging the SAB to modify the Panel's comments, and has had extensive discussions with EPA on this matter. As hoped, the SAB took sharp exception to the Panel's Draft Report and indicated it would accept the report only if the conclusions were changed to reflect overall approval of the draft Metals Framework and if their recommendations were prioritized, with lesser issues re-characterized and suggestions and moved to an appendix. The SAB also directed the panel to provide support for its criticisms of the human health section or eliminate those criticisms.
- On January 25th '06, the SAB issued its final report on the draft Metals Framework which adopts many of industry's positions including the principle that bioconcentration and bioaccumulation factors (BCF/BAF) do not apply to metals and cannot be used for national assessments or hazard ranking for metals. While this statement is a decided victory to the metals industry, the report also notes that some kinds of 'bioaccumulation' of metals can occur in humans and can be measured by certain types of models. It is unclear at this point what this may mean for the metals industry. EPA will now take the SAB recommendations and revise the draft Metals Framework, completion of which is now expected by late Spring.
- ICdA continues to work with NAMC on developing the metals industry positions.

¹ North American Metals Council

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Industry Lawsuit Against U.S. EPA Toxic Release Inventory (TRI) Rule for Lead

- In 2001, the Ad Hoc Metals Coalition (the informal precursor to the North American Metals Council) along with the National Federation of Independent Business (NFIB) filed a lawsuit challenging the newly promulgated Lead TRI Rule which severely lowered threshold reporting levels for lead, and thus required many more businesses to report their lead emissions. The lowering of these standards was based on the classification of metals as PBTs, and thus could potentially apply to cadmium as well as all other metals. In its lawsuit, industry charged that EPA was “arbitrary and capricious” in applying the PBT criteria to metals and that the subsequent events had indeed shown that the application of PBT criteria to metals was not justified. However, in a shocking decision in the District Court for the District of Columbia, the judge ruled that “Congress did not require EPA to employ any particular methodology when considering threshold reduction” and that “it did not require a threshold revision to be based on exacting proof.” In short, the Court held that EPA can indeed be arbitrary and capricious in applying these standards and that it was enough for EPA to find even a small amount of lead in the environment, conclude that it could cause harm, and that local communities therefore have the right to more information about if and how much lead is released into the environment around them. The Court essentially gave EPA carte blanche in lowering reporting thresholds regardless of the scientifically established risk involved, the real need to report such risk or the cost involved to the businesses concerned.
- As previously noted, this decision and actions pertinent to the lowering of reporting thresholds for cadmium in Canada could have a future effect on TRI reporting thresholds for cadmium in the United States. For this reason, ICdA continues to monitor developments closely.

State of Washington Proposed Program on PBT Substances

- The State of Washington’s Department of Ecology, after considerable discussions with the NAMC and extensive comments by ICdA, has accepted industry’s recommendations that metals not be classified as Persistent, Bioaccumulative and Toxic (PBT) chemicals and has relied on our language to treat metals as a separate category, in the same manner of EPA’s Office of Solid Waste has done, referencing the EPA Framework for Metals Risk Assessment Review. However, the Washington Department of Ecology has decided to list lead and cadmium as “metals of concern” pending completion of the EPA Framework for Metals Risk Assessment. They have indicated that, under this classification, they “may prepare chemical action plans”, but also could revise the list of metals of concerns. Thus, the EPA Framework for Metals Risk Assessment is critical for establishing future initiatives which might be undertaken in the State of Washington and probably other U.S. states as well.
- ICdA will be monitoring potential developments in other U.S. states.

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Regulatory Affairs – International

UNECE Heavy Metals Protocol

- Activity on the United Nations Environmental Commission for Europe's (UNECE) Long Range Transboundary Air Pollution (LRTAP) program increased in 2005 and is scheduled to accelerate more in 2006. The Heavy Metals (HM) Protocol under LRTAP involves lead, cadmium and mercury, and certain countries have been working to expand the list of "heavy metals" of concern and include cadmium-containing products not previously identified.
- Efforts to include new metals (Cu, Zn, Ni, As, Cr and Se) in the Protocol has led to the strong involvement of the U.S. and Canadian governments, largely through the efforts of the North American Metals Council and the Mining Association of Canada. The U.S. and Canadian involvement has resulted in firm language that, while information may be gathered on other metals, any efforts to include them in the Protocol must proceed through science-based, transparent processes already established in the Protocol.
- A second significant issue, a proposal by European countries to use a "critical loads" methodology for estimating the effects of long range transport of metals, received serious scientific review at a workshop in Baltimore, Maryland in November, expressing reservations about the use of the concept. At the Executive Body meeting of UNECE LRTAP in December, several nations, including Canada, the UK and Norway raised concerns as well. In meetings with the US EPA on the HM Protocols, they too have indicated a reluctance to push forward with the critical loads approach for the UNECE Heavy Metals Protocol. However, a number of European nations continue to advocate its use and occupy much of the UNECE agenda with this issue.
- Of more direct interest to the cadmium industry is the effort by certain countries to gather information on specific cadmium-containing products and virtually "target" them for elimination. An informal working group has been formed to review the sufficiency and effectiveness of the Heavy Metals Protocol with respect to products and product groups. This working group includes representatives from USA, Canada, Sweden, The Netherlands and ICdA. Comments have now been submitted by ICdA on the first two drafts of the sufficiency and effectiveness review prepared by Sweden. Unfortunately, the Swedish review considers only European measures which are largely bans and prohibitions of cadmium-containing products and does not examine other risk reduction measures such as recycling. The Swedish review also contains little or no information on technological developments or changing economic conditions since the adoption of the HM Protocol in 1998 as required in the Protocol itself. These issues will be discussed in detail at a Heavy Metals Task Force meeting to be held in Dessau, Germany, February 7-9, 2006 which will be attended by ICdA and other metals industry representatives

UNEP Heavy Metals Program

- The Governing Council (GC) of the United Nations Environment Programme met in February 2005 in Nairobi. During that meeting, a decision was taken, Decision 23/9

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III on Lead and Cadmium, which has been previously described in ICdA memos and Progress Reports to members. The ICdA was invited by John Buccini, Director of UNEP and well known to many from his previous work at OECD and Environment Canada, to submit information on cadmium in a number of key areas and to nominate a representative to the working group on lead and cadmium.

- The ICdA submitted 16 documents on a wide variety of cadmium-related subjects to UNEP. These documents have been posted on the UNEP website and the ICdA members-only website. ICdA has also nominated Lidia Regoli to serve on the UNEP Working Group on Lead and Cadmium. Dr. Craig Boreiko of the International Lead Zinc Research Organization will also serve on the Working Group to help represent the interests of the cadmium industry. A first meeting will be held in mid-2006.

Intergovernmental Forum on Chemical Safety (IFCS) Heavy Metals Proposed Program

- The Swiss Agency for the Environment has proposed a program on health and environmental concerns associated with the heavy metals – Hg, Cd and Pb – and global needs for further international or multilateral environmental agreements or commitments. The workshop will focus on the negative effects of the three metals with “a goal to convince policy makers on the urgent need to start global action to reduce harmful heavy metal emissions.”
- The workshop would be held as part of the IFCS V Meeting to be held in Budapest, Hungary, September 24-29, 2006. Unfortunately, it presupposes the harmful risks of the three metals instead of objectively examining whether or not a real risk is present, and presupposes a policy need to severely reduce heavy metal emissions even further in spite of the fact that the emissions for these three metals have already been reduced about 90% in the past ten years. It also duplicates to a large extent work already being carried out under the UNECE LRTAP program, the UNEP Heavy Metals Program, and possibly even others such as SAICM which are also being advanced at this time.

General comment on the International Regulatory Activities

- Given the increased activities of a number of International forums reviewing environmental and human health impacts of Cd and Pb, the ICdA, the Lead Development Association International and the International Council for Metals and Mining have agreed to consider a collective strategy and a pooling of resources to follow these activities.
- Furthermore, for use at these forums, it has been suggested that these associations combined should develop a paper reviewing the changes which have happened to these metals over the past ten years by examining emissions and use patterns in 1995 compared to 2005, coupled with the information from recent risk assessments.

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