

PROGRESS REPORT No. 3 June – September 2005

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Next ICdA General Assembly of Members:

 The next ICdA General Assembly of Members will be held on Tuesday, November 1, 2005 beginning at 8:30 AM in London, England during London Metals Exchange Week and during the same week as the International Zinc Association (IZA), International Lead Zinc Research Organization (ILZRO) and International Council for Mining and Metals (ICMM) meetings.

Cadmium Pigments EU Committee :

 A meeting will be held on November 1, 2005 to revise the needs of the EU pigments industry in preparation for the ongoing EU risk reduction strategy discussions on cadmium, and to discuss the pigment industry's request for exemption from Directive 2002/95/EC (ROHS).

Meeting with European Cadmium Platers:

• A meeting will be held on 2nd November with D. Elliott, President of the UK Surface Engineering Association and his Chairman, M. Olsen, of Ashton and Moore Ltd., an aerospace company which is involved in cadmium plating. A review of the market for cadmium plating in Europe, the effect of 91/338 and other regulations, and opportunities for cooperation between ICdA and the cadmium electroplating industry in Europe will be discussed.

ACTIVITY UPDATE

Regulatory Affairs – Europe

EU Cadmium Risk Assessment and Risk Reduction Strategy:

- Human Health:
 - ICdA organised a meeting of the project team on occupational exposure to cadmium on August 22nd to prepare for the ongoing discussions within the framework of the risk reduction strategy.
 - A consensus was reached to use the Eurométaux 1996 document as a basis for preparing an ICdA Technical Guidance Document for managing Cd exposure in the workplace.
 - Another meeting is planned on November 7th to prepare the guidance document to present for the Cd risk reduction strategy report.
 - The project team includes a representative of the pigment manufacturers, of



the battery manufacturers, of the zinc (and cadmium) producers, as well as identified experts from the associations.

- A report of the last meeting can be obtained by request to L.Regoli
- Environment:
 - A revised final draft Risk Assessment report has been submitted by the Rapporteur on 25th July '05. This version is posted on the ICdA members only website.
 - ICdA has reviewed the dossier and provided comments to the Rapporteur on 29th August '05, especially on the interpretation of the water monitoring data.
 - A 'Risk Assessment Update' document was also sent the 25th July, a result of the efforts from the European Industry in the previous months to update local data in the risk assessment.
 - ICdA has reviewed the dossier and provided comments to the Rapporteur on the 2nd September'05.
 - Copies of the 'Update' and industry comments can be obtained by request to L. Regoli
- Targeted Risk Assessment on NiCd Batteries:
 - A revised final draft has been submitted by the Rapporteur on 25th July '05.
 This version is posted on the ICdA members only website.
 - No comments were made by ICdA because the revision was followed closely through the revision process and the resulting report was mainly in line with industry's position. Comments were received from the UK and Sweden.
 - A copy of the Member State comments can be obtained by request to L. Regoli
- Conclusion i) work on 'Bioavailability of cadmium in sediments':
 - The Rapporteur has integrated the AVS model as presented by Industry into the risk assessment. A conclusion ii) (no risk) is reached for the regional scenario. The suggested increased PNEC'bioavailable' also results in a 'no risk' situation for most local sites.
 - Comments were received from the UK, Netherlands and Sweden. The Netherlands and Sweden argue that a more conservative approach should be used.
 - A conference call is being organized by the Rapporteur to come to a consensus. The ECB¹, Industry, and interested Member States are invited to participate. If consensus is not reached, the discussion will go to TC NES IV² in November '05.
 - We are in favor of reaching consensus at a conference call.

¹ ECB = European Chemicals Bureau

² TC NES IV = Technical Committee for New and Existing Substances (4^{th} meeting of the year)



- EU Risk Reduction Process
 - The consultants 'Ecolas' have issued a Risk Reduction Strategy Stage II Report in September 2005, containing a list of possible reduction measures.
 - A meeting between the Belgian authorities and Industry took place on September 19th at which this report was discussed, and at which a representative of each of the 3 industry sectors was present.
 - Industry recently provided comments on the Stage II report as well as further sector specific information. Commission is now planned for June at which the Rapporteur will review its risk reduction strategy intention with the Commission.
 - A report of the last meeting and ICdA submissions can be obtained from L.Regoli

EU Battery Directive :

- For the 2nd Reading of the revision of the Battery Directive, the Rapporteur, Hans Blockland has issued its 2nd Reading Report of the Parliament.
- The report proposes a ban on cadmium in portable batteries, binding collection and recycling targets, and producer responsibility for collection, recycling and disposal.
- Further timing:
 - The 2nd reading will take place in December 2005, at which main discussion items are the exemptions of the cadmium ban and the collection targets.
 - Entry into force is 2006, with a transposition and application for 2008.
- Recharge is driving the advocacy efforts. ICdA has followed the process through Recharge, and provides technical support related to the results of the risk assessments.

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.'
- The Oeko-Institut, Freiburg, and Fraunhofer IZM, Berlin, were commissioned by the Commission services for assessing the requests for exemptions from the requirements of the RoHS Directive.
- Based on this assessment, a draft decision will be proposed to the TAC for vote, most likely by the end of the year or early 2006.
- 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

EU Water Framework Directive :

• The Commission's proposal on the Environmental Quality Standards (EQS) for priority hazardous and priority substances has still not been issued and is now expected in December 2005.



- ICdA has liaised with Eurométaux to provide a series of comments to DG Environment (Comments of June 15th) and DG Enterprise (Comments of June 15th, September 9th), as well as meet with DG Environment to discuss these comments in detail. 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 emisisons' 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.
- A copy of the Eurométaux comments made during the summer are available upon request to L. Regoli

Regulatory Affairs – North America

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

- Activities during most of 2005 have involved the Science Advisory Board's (SAB) review of EPA's draft Framework for Metals Risk Assessment which was issued in July 2004. Since that time, prolonged work has established the panel to review the document, and produced a charge for that panel. A number of meetings, teleconferences, and public comment periods were forthcoming and a draft report was produced in March 2005. Public comments were introduced by the North American Metals Council in April 2005, and the Science Advisory Board's "Review of EPA's Draft Framework for Inorganic Metals Risk Assessment" was released on September 15, 2005.
- The SAB Review is somewhat critical of EPA's Draft Framework. They note that the purpose of the document is unclear and is not clearly separated into logically distinct areas.
- SAB also notes that scientific synthesis in the human health and ecological sections is incomplete, and that the state of knowledge is overstated or simplified in some areas and understated or not discussed in other areas.
- SAB also recommends that critical evaluations of the tools and methods for metals risk assessment be discussed more fully, and that the number of recommendations be reduced or consolidated.
- EPA will now review the SAB report, make revisions and finalize the Framework which will probably take at least two to three months. An opportunity for public comment will be provided in connection with an SAB Executive Committee Meeting to discuss the SAB report.
- ICdA will continue to attend the NAMC meetings and meetings with EPA and other US Government departments on this issue and to provide specific comments on cadmium issues where appropriate.

State of Washington Proposed Program on PBT Substances

• In 2002, the North American Metals Council had successfully obtained a commitment from the Washington State Department of Ecology not to include



any metals on its PBT lists until the Science Advisory Board (SAB) had completed its review of EPA's draft Metals Assessment Framework.

- However, now with a new Democratic governor, this decision was initially reversed and they had planned to list lead and cadmium specifically as PBTs and to develop action plans to actively eliminate these metals of concern in the State of Washington.
- After protests from NAMC and reminders to them about the EPA Metals Assessment Framework and Ecology's previous commitment not to list cadmium as a PBT, the Department once again shifted its position. They will not list lead and cadmium as PBTs, but they will be footnoted, along with mercury. However, it has been implied that they may take action against lead and cadmium under another state authority.
- The latest action is that the Washington Department of Ecology plans to release for public comment the version of the proposal which classifies certain metals as PBTs and defers creating action plans for those metals. NAMC and ICdA will file comments on that proposal when it is released.

State of New York Harbor Project

- In 2003 and 2004, the New York Harbor Consortium undertook work on cadmium contamination in the harbor watershed as part of its project on five toxicants of concern (mercury, cadmium, PCBs, dioxins and PAHs). In spite of some inflammatory rhetoric and reports on cadmium contamination in the harbor and its sources, ICdA, PRBA and INMETCO were able to obtain a final report which emphasized the positive role of NiCd battery recycling rather than some of the more negative statements from some consultants' reports.
- The Harbor Consortium is now nearing completion of its work on dioxins and PAHs and is considering mechanisms by which all of the work it has carried out can be synthesized into one final project.
- While the proposals call for discussion of how the science and societal needs interact, and how to best improve watersheds for the future, a technical area of study has emerged in which cadmium is specifically mentioned. This is the process of how contaminants such as cadmium move through waters as suspended solids and wind up in the New York Harbor. For example, to what extent does cadmium adhere to suspended solids and in what form and how is it transported into and out of the New York Harbor.
- The New York Harbor Consortium may ask for ICdA participation if they decide to proceed with this project. At this point, the concepts will be discussed at their November 2005 and March 2006 meetings.

NAFTA CEC Program on Children's Health

 The final report, "Taking Stock: 2002 North American Pollutant Releases and Transfers" was issued in May 2005 by the Commission for Environmental Cooperation (CEC) of the North American Free Trade Agreement (NAFTA). After strong criticism from the metals industry through the North American Metals



Council (NAMC), the NAFTA CEC had instituted a peer review process which has resulted in a greatly improved analysis and report. The final report barely mentions any metals, with the exception of mercury and lead, and focuses on issues of real concern to children in North America.

- There is, however, one specific chapter (Chapter 9: Special Analysis on Chemicals Linked to Cancer/Birth Defects) which reported on cadmium. This chapter notes that cadmium is listed under California Proposition 65 as causing birth defects and cancer, but that reporting on cadmium and cadmium compounds was not included in this report because the reporting threshold in Canada is much lower than in the United States and Mexico. Thus, consistent data could not be obtained from all three countries.
- This anomaly, however, raises the question of whether or not regulators in the United States and Mexico might consider lowering the reporting threshold for cadmium as the U.S. EPA had done for lead. Lowering the lead reporting threshold, on the other hand, has forced U.S. EPA to undertake the entire Metals Assessment Framework to evaluate metals rather than the PBT approach previously used. There is also considerable political opposition to the lowering of the lead reporting threshold, and therefore it is felt that U.S. EPA will not easily undertake to lower the cadmium reporting threshold as well.
- ICdA will continue to monitor any proposal for lowering of the reporting threshold for cadmium by U.S. EPA, and will strongly oppose such a proposal through NAMC as it opposed the lowering of the reporting threshold for lead in the past.

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 has increased during 2005. The Heavy Metals Protocol under this treaty which involves lead, cadmium and mercury has become an area of increased focus and efforts by certain countries to expand the "heavy metals" of concern and to include cadmium-containing products and product groups not previously identified.
- Meetings of the Heavy Metals Working Group were held in March 2005 in Berlin and in June 2005 in Geneva. ICdA was present at both meetings and made a presentation on the relative contributions of various sources to total human cadmium exposure at the Berlin meeting. ICdA also attended the higher level Working Group on Strategies and Review (WGSR) in Geneva in September to represent both ICdA and the International Council on Mining and Metals (ICMM).
- 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.

- 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. Once again the efforts of the metals industry have stopped that exercise, at least for the time being. Nations are encouraged to submit information they wish on products and product groups, but not to "target" specific cadmium-containing products. ICdA has made the specific comment again that most cadmium air emissions arise not from the production, use or disposal of cadmium products but from the use of materials in which cadmium is present as an impurity such as fertilizers and fossil fuels.
- The next meeting of the UNECE LRTAP will be an Executive Body (EB) meeting in December in which ICdA will participate. A number of meetings of the Heavy Metals Working Group are also scheduled for 2006 and ICdA will participate in them as well.

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 III on Lead and Cadmium, which was previously described in an ICdA memo to all members. While the latest effort appears to be only an initial data gathering exercise, it appears as if certain countries are again determined to place severe restrictions on cadmium-containing products on a global scale through the UNEP program as they are trying to do through the UNECE LRTAP Heavy Metals Protocol as well. The linkage between the two programs is somewhat unclear except that UNEP is more global in nature and presumably might be able to cover pathways other than air transport. Both however are United Nations programs.
- As a result of UNEP GC Decision 23/9 III, the International Cadmium Association
 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 International Cadmium Association has now submitted 16 documents on a wide variety of cadmium-related subjects to UNEP, and these documents have been posted on their public website. ICdA has also nominated Dr. Lidia Regoli to serve on the UNEP Working Group on Lead and Cadmium. The association also expects to liaise closely with the International Lead Zinc Research Organization (ILZRO) and Lead Development Association International (LDAI) in this working group and on this program to ensure that global product prohibitions on cadmium products are not included.

Strategic Approach for International Chemicals Management (SAICM)

• An even further reaching program, designated SAICM, has been gathering momentum during 2005. This program arose during the UNEP Governing



Council Meeting in February 2002 and was endorsed at the World Summit on Sustainable Development (WSSD) held in Johannesburg in September 2002. While specific goals remain unclear, it appears as if the EU may attempt to export its REACH (Registration, Evaluation and Authorization of Chemicals) Program to the rest of the world through SAICM, to seek aggressive formulations of the precautionary and substitution principles, and to eliminate whole categories of chemicals, including "heavy metals", by the year 2020 based solely on their hazards rather than their actual risks.

- Because of the generic nature of these programs and proposals, the issues thus far have been covered by the International Council on Mining and Metals (ICMM), the North American Metals Council (NAMC), Eurometaux and the Mining Association of Canada. NAMC in particular has been very vocal and effective in engaging the U.S. Government to support the interests of the metals industry.
- At the latest SAICM meeting in Vienna in September, the metals industry pressed for the removal of the term "heavy metals" and insertion of language affirming the importance of science-based conclusions. It also persuaded the meeting to list specific metals of concern such as lead, cadmium and mercury rather than utilize the more encompassing term "heavy metals." The U.S. Government also argued for substituting concepts of risk rather than hazard throughout the meeting document.
- The metals industry is receiving strong support from the United States, Canada, Australia, New Zealand and Russia in these meetings. Direct metals industry participation is being provided by the North American Metals Council (NAMC) and the International Council on Mining and Metals (ICMM).
- The International Cadmium Association continues to monitor this program closely through NAMC and ICMM, and to contribute specific information and commentary on cadmium issues where appropriate.