

MINUTES

GENERAL ASSEMBLY OF MEMBERS INTERNATIONAL CADMIUM ASSOCIATION Tuesday, April 8, 2003 – 9:00 AM

Double Tree Guest Suites Hotel – Fayetteville Suite
2515 Meridian Parkway
Research Triangle Park, NC 27709

CALL TO ORDER

The General Assembly of Members of the International Cadmium Association was called to order at 9:02 AM by its Chairman, Marc von Schwerin of Noranda Inc. The following persons were in attendance or were represented by their Proxy:

REPRESENTATIVE

Timothy G. Pugh
Kenneth L. Money
Jeffrey S. Mamarella
Natalie A. Gaydos
Marc von Schwerin
Kai Nykanen
Norman England
William O. Wildes, Jr.
Mark Caffarey

MEMBERS' PROXIES

Michael Ball(Proxy to Hugh Morrow)
Graham White(Proxy to Marc von Schwerin)
Gordon W. Hall (Proxy to Marc von Schwerin)
Siegfried K. Osswald(Proxy to Michael Taylor)
Claudine Lecomte(Proxy to Marc von Schwerin)
Jon Heliwell(Proxy to Marc von Schwerin)
Betsy R. Kraft-Lieberman

STAFF AND GUESTS

Robert Wang
Michael Taylor
Hugh Morrow

MEMBER COMPANY

Black & Decker Corporation
INMETCO
Millennium Chemicals
Millennium Chemicals
Noranda, Inc.
Outokumpu Zinc Oy
Portable Rechargeable Battery Association
SAFT America, Inc.
Umicore S.A.

MEMBER COMPANY

Acme Electric Corporation
Considar Metal Marketing, Inc.
Falconbridge Limited
Ferro GmbH
Floridienne Chimie S.A.
Johnson Matthey Colours Ltd.
Kraft Chemical Company

ORGANIZATION

BYD America Corporation
ICdA
ICdA

The Chairman then circulated an attendance roster for each attendee to sign, and each attendee introduced herself/himself and her/his affiliation. Hugh Morrow was appointed as the Secretary Pro-Tempore for the General Assembly of Members. The Chairman asked Mr. Morrow if a quorum of Members were present or represented by Proxy for the transaction of business. Mr. Morrow responded that 16 of the association's voting representatives were present in person or were represented by proxy, and thus a quorum was established for the transaction of business.

APPROVAL OF THE MINUTES OF OCTOBER 24, 2001 GENERAL ASSEMBLY OF MEMBERS

Chairman Marc von Schwerin stated that the Minutes of the previous General Assembly of Members, held on October 9, 2002 in London, UK, were distributed to the membership for review and approval in November 2002. Since that time, no additions or corrections to the Minutes had been received. Mr. von Schwerin asked if there were any additions or corrections to these Minutes as circulated. **There being no additions or corrections and upon motion duly made by Tim Pugh, seconded by Ken Money and approved by the General Assembly, the Minutes of the October 9, 2002 General Assembly of Members were approved as submitted.**

DISCUSSION OF THE FUTURE ORGANIZATION OF THE ASSOCIATION

Chairman Marc von Schwerin reviewed the discussions which were held with mainly European members of ICdA in Namur, Belgium on March 18-19, 2003 regarding the future organization of the association, and how it was to fund its activities in view of significant membership losses over the past two years. Michael Taylor discussed a cash flow analysis (attached as Annex I) for ICdA indicating that it had sufficient reserves and expected income sufficient to operate through September 2004, but would have no available funding beyond that time. Reasons cited for the present financial situation were the significant loss in cadmium producer memberships including the Pasmenco Group (Pasmenco Limited, Pasmenco Zinc Inc. and Budelco Zink BV), Met-Mex Penoles, Falconbridge, Britannia Zinc, along with significantly reduced cadmium production at formerly large producers such as Umicore S.A. Hugh Morrow showed a chart of total ICdA annual income from 1999 through 2004 (Annex II attached) indicating a reduction from about \$480,000 in 2001 to an expected income of \$180,500 in 2004. The present financial situation is due to loss of membership income and not expenditures above planned budgets. During the past three years, in fact, budgets were generally under spent resulting in the present surplus which has allowed the association to operate longer than anticipated. Norm England, President & CEO of PRBA and RBRC, indicated that the \$50,000 contribution from PRBA and RBRC was made with the understanding that it was to be spent to maintain the activities of the North American office. Tim Pugh asked whether PRBA/RBRC might be willing to make such a contribution on a continuing basis. Mr. Morrow's understanding was that this was a one time contribution although ICdA could certainly ask again in the future. Hugh Morrow also suggested that, through discussions he had had with Michael Taylor and Robert Eloy of SAFT, it might be possible to raise funds through other NiCd battery collection and recycling organizations such as the Battery Association of Japan, BEBAT in Belgium, STIBAT in the Netherlands, and GRS in Germany.

Mr. von Schwerin summarized the perceived mandate of the association as monitoring of and responding to regulatory proposals regarding cadmium, cadmium compounds and cadmium products in both Europe and North America, and subsequently reporting these activities to the membership. He added that the consensus of the discussions in Namur was that any science, research or technological issues requiring high level expertise should be carried out by qualified scientists on a contract or ad hoc basis. An Executive Summary of the Namur Workshop along with a detailed report of these discussions are attached to these Minutes as Annexes III and IV. The costs for scientific work would not be part of the regular ICdA budget and would be assessed against those with specific interests in the issue. Chip Wildes raised the question of exactly how such assessments would be made, and while every issue would probably be handled on a case-by-case basis, Marc von Schwerin indicated that it would probably have to be in proportion to the interests of all of the various stakeholders.

The Chairman indicated that there were basically five options for the association:

- Obtain Funding from International Zinc Association (IZA)
- Increase Association Income
- Decrease Association Operating Costs
- Combinations of the Three Above Options
- Cease ICdA Operations

Marc von Schwerin stated that he had explored the possibility of obtaining funding from IZA and there was interest in maintaining the operations of ICdA to shield the zinc industry from cadmium issues and that

there might be a possibility of obtaining some support from IZA. It was felt that ICdA should remain as an autonomous and independent organization. No formal request has yet been made to IZA which will have to be prepared and presented for the IZA Executive Committee meeting in June 2003. Several however mentioned that the zinc industry was not in particularly good shape at this time and such support might be difficult for them as well. The Chairman added that no one wanted to cease operations of the association entirely, and that perhaps a combination of IZA support, new revenue, and cost reductions was the best path out of our present financial difficulties.

It was pointed out that support from IZA would force some cadmium producers who are not members of ICdA to at least partially support some of its activities. On the other hand, present cadmium producers members of ICdA who also support IZA would in essence be paying twice to support the association and thus some system of crediting ICdA membership would have to be devised lest all cadmium producers simply leave the association and support it only through IZA which would probably result in even less total income.

The structure which was envisioned for 2004 would be a full-time Executive Director in Brussels and a part-time (80%) consultant in North America, reducing the cost of the North American operation from approximately \$200,000 to \$150,000. Science issues and research would be coordinated by the Executive Director in Brussels utilizing the expertise of IZA and the International Lead Zinc Research Organization (ILZRO). With these changes, operating costs could be reduced from approximately \$400,000 per year to \$350,000 per year. With \$180,000 in expected revenue available for 2004, the shortfall would then be about \$170,000 which would have to be addressed by existing reserves, new income or support from IZA. Norm England stated that he felt it only fair that Hugh Morrow be given the freedom to pursue outside consulting work since he was reducing his budget by \$40,000. Attendees at the meeting all agreed.

AMENDMENT TO THE BY-LAWS OF THE INTERNATIONAL CADMIUM ASSOCIATION

Chairman Marc von Schwerin explained that at present the association's By-Laws require that decisions which are not made in regular meetings be carried out by registered mail with a certain allowed time of response. In today's electronic world of communications, it is far more rapid and efficient to conduct such business by e-mail, and it generally ensures a much greater participation in decision making. Therefore, the Chairman introduced the following motion for consideration by the membership to amend its By-Laws:

In respect to the By-Laws of the International Cadmium Association, the first paragraph of provision 5 ii of the Internal Regulations in the By-Laws on page 10 shall be changed to read as follows (changes are underlined):

“Under exceptional circumstances, a written consultation of all Members concerning items of business for which an urgent decision is required but which do not warrant an Extraordinary General Meeting may take place by registered mail or by e-mail. Such a procedure shall be organized by the Chairman of the Board and/or the Executive Director(s) of the Association under instruction/consultation with the Chairman.”

Hugh Morrow noted that he had received ten proxies from members not in attendance approving the above change in the association's By-Laws. Upon motion duly made, seconded and approved unanimously by the meeting, the changes in the By-Laws were made as noted above.

UPDATE ON CADMIUM MARKET ISSUES

In order to accommodate Robert Wang of BYD America Corporation, the order of the agenda was changed and cadmium market and regulatory issues were reviewed ahead of the Membership Report and Financial Report. Hugh Morrow summarized the present state of the worldwide cadmium market, and his presentation is attached to these Minutes as Annex V. Mr. Morrow's conclusions were that primary cadmium production was decreasing significantly due to a reduction in worldwide zinc production. Cadmium stocks had also been depleted or were rapidly being depleted. The U.S. DLA, for example, has no more excess cadmium to sell from its stockpile. However, secondary cadmium production from the

recycling of nickel-cadmium (NiCd) batteries continues to increase. Primary production of cadmium continues to rise in Asia (Japan, Korea and China), but to decrease in Europe and the Americas. Consumption of cadmium is increasingly dominated by the NiCd battery application and again Asia, particularly China and Japan, is by far the strongest cadmium consumption area in the world. The increases in cadmium consumption in China have been spectacular in the past few years and far exceed their increases in production. Thus, much of the world's cadmium is now going to China and Japan for NiCd battery production. The recent increase in Chinese cadmium consumption, in fact, is remarkably similar to the huge increase in Japanese cadmium consumption during the period from 1985-1995. Now, however, there is significant cadmium consumption in both China and Japan. With this seeming imbalance between supply and demand, cadmium prices would be expected to increase. Thus far, however, only modest increases have been realized as excess stocks have been worked out of the system. Mr. Morrow indicated that he had recently presented a detailed paper on the cadmium market at *Metal Bulletin's* Minor Metals Conference in Hong Kong and that copies of this paper would be distributed to the membership.

UPDATE ON CADMIUM REGULATORY ISSUES

European Union Regulatory Issues - Michael Taylor presented the update on European Community regulatory issues, a copy of which is attached to these Minutes as Annex VI. The European Commission (DG Enterprise) has recently introduced a new tool called Extended Impact Assessment (EIA) designed to add some balance to proposals aiming to ban certain substances. One of the first directives to fall under the scrutiny of an EIA is the (anti NiCad) Battery Directive and a website has recently been opened inviting comments from stakeholders. This input will form part of a new study carried out by an EC-commissioned consultant, intended to lend more transparency to the process. In conjunction with CollectNiCad, ICdA has submitted a number of items for consideration.

The Cd/CdO Risk Assessment carried by the Belgian Rapporteur has been completed though is still subject to some fine tuning. In particular, industry is looking forward to a revised version after the exclusion of the now discredited Jarup report which contained calculation errors in its assessment of the impact of cadmium on human health.

The draft New Chemicals Policy continues its passage through the institutions and industry and will also be opening a consultation website in the spirit of transparency created by EIA. Euromeatux will be holding a workshop on the subject in May.

The WEEE and RoHS directives were passed into EU law in February this year for transposition into national law by August 2004. The RoHS bans cadmium from EEE from July 2006.

On the Limitation on Marketing and Use of Dangerous Substances and Preparations, the RPA report on cadmium in plastics, pigments and plating was acknowledged as flawed by DG Enterprise. Further news and meetings are expected soon on this Directive.

North American and International Regulatory Issues – Hugh Morrow gave a short review of current North American and International issues, a copy of which is attached to these Minutes as Annex VII. In the North American arena, issues of concern include the U.S. EPA's continuing program on the Waste Minimization Prioritization List (WMPL), U.S. government opposition to the EU's proposed revision of the Battery Directive, the NAFTA CEC Sound Management of Chemicals program, and the New York Academy of Science's report on cadmium in the New York harbor watershed. The U.S. EPA's former program on persistent, bioaccumulative and toxic (PBT) materials which formerly included many nonferrous metals has now been significantly modified so that metals are not directly concerned in that program. In addition, issues such as bioavailability of metal species are being examined as well as the effects of other factors. However, lead, cadmium and mercury are still listed on EPA's Waste Minimization Prioritization List and there will be future action to reduce emissions and increase recycling of these metals as much as possible.

The U.S. Department of Commerce and U.S. Trade Representative's office continue to support industry's position against the ban on NiCd batteries in the EU proposed revision of their Battery Directive. The

International Cadmium Association has been working with them and with other battery industry and recycling organizations to submit formal comments to the European Commission regarding this proposed revision under the Extended Impact Consultation Document discussed in the European Union Regulatory Affairs report above.

The NAFTA Commission for Environmental Cooperation (CEC) Sound Management of Chemicals (SMOC) program continues to focus first on mercury with activities for the future now evolving for lead. Cadmium will presumably be the third metal considered as there are already United States – Canada binational programs, for example, to severely limit the emissions of cadmium into the Great Lakes and effectively eliminate them within a given time frame.

The New York Academy of Sciences report on cadmium in the New York harbor watershed has wrongly blamed a huge proportion of cadmium contamination in the watershed on nickel-cadmium batteries, and minimized contributions from other sources such as fertilizers, fossil fuel combustion, iron and steel production, cement production and natural sources. However, the recently issued final report concludes that the New York Harbor Consortium, the group of academics addressing this issue, is very unsure of their information, and is not sure that they can do much more than encourage more recycling.

The major international issues on which the association has been working include the OECD NiCd battery collection and recycling program, the UNECE LRTAP Heavy Metals Protocol, the UNEP Heavy Metals Program, and the UNEP Prior Informed Consent (Rotterdam Convention) activities. Mr. Morrow noted that the OECD program was winding down with the final resolution of comments from the European Commission and Germany on the “Experiences Document” which are being resolved through the mediation of Environment Canada.

The UNEP Heavy Metals program, which met in Nairobi in February 2003, has been trying to develop concerted worldwide action on mercury, which has been opposed by the United States and other countries. Again the Nordics are leading proponents of programs against lead, cadmium and mercury with proposals to virtually ban all products from these metals on a world wide basis.

The UNECE Long Range Transboundary Air Pollution (LRTAP) Heavy Metals Protocol has recently exhibited renewed activity. A meeting was held in Geneva on March 20-21, 2003 to develop a work plan for review of the Heavy Metals Protocol in 2005. The nonferrous metals industry was represented by John Atherton of the International Council for Mining and Metals (ICMM). Unfortunately for industry, the committee formed to review product control measures will be headed by Sweden, and the committee to review best available technologies (BATs) to minimize emissions will be headed by Germany. Both of these countries have strong and well-known biases against cadmium.

The second major activity of the UNECE LRTAP program will be an international workshop to be held in Munich, Germany on May 12-14 on the corrosion of heavy metals. This workshop will examine not lead, cadmium and mercury, but also zinc, copper, nickel, chromium and stainless steel. Industry’s overall message will be that metallic emissions to the environment from corrosion of metals is small and that the contribution to long range transboundary air emissions is extremely small.

Hugh Morrow also reviewed the UNEP Prior Informed Consent (PIC) protocol or Rotterdam Convention. Although this protocol involves only pesticides and mercury and has yet to come into full force, legislative programs are apparently underway within the European Commission to apply PIC procedures to cadmium-containing products on the grounds that they are banned or severely restricted (BSR) chemicals in some countries. At this point, it is unclear whether the European Commission has imposed a new regulation without any kind of review or whether certain countries are attempting to expand the UNEP PIC procedure to certain metals and metal products as well as pesticides. The International Cadmium Association is working with the U.S. Department of Commerce, U.S. Department of State, and the Office of the U.S. Trade Representative to determine whether such regulations would constitute a violation of World Trade Organization (WTO) agreements.

MEMBERSHIP REPORT

Hugh Morrow reviewed changes in membership and members' status since the last General Assembly of Members held on October 9, 2002 in London, UK. His report is attached to these Minutes as Annex VIII. Since October 2002, one new member has joined the association, First Solar, LLC, of Perrysburg, Ohio, USA. First Solar is a manufacturer of cadmium telluride solar cells. Four resignations were received over the past six months – Britannia Zinc Ltd., BP Solar Inc., Falconbridge Limited, and PCS Phosphate Co., Inc. The reasons cited include plant closure, exit from the CdTe solar cell business, economic downturns in the zinc industry, and only limited involvement of the association in fertilizer issues. Outokumpu Base Metal Oy and Outokumpu Norzink AS have now combined the individual memberships for their two companies into a single membership under the name of Outokumpu Zinc Commercial B.V. Their new representatives and contacts details are given in Annex VIII.

FINANCIAL REPORT FOR 2002

Michael Taylor reviewed the association's Financial Report for 2002 which is attached to these Minutes as Annex IX. Expenses for 2002 were under budget overall. Mr. Taylor reviewed the few areas where expenses exceeded budgeted amounts. The one big item, previously budgeted but paid in 2002, was for the extranet software providing more efficient, prompt news updates to members and expected to be launched in Summer 2003.

NEW BUSINESS

Question was brought up regarding lobbying of the EU Parliament with respect to the New Chemicals Policy. Mike Taylor stated that Eurometaux performed most of the parliamentary lobbying on behalf of the nonferrous metals industry, and ICdA will do it only if it is very product specific.

NEXT MEETING DATE

Ordinarily, the International Cadmium Association holds its Fall meeting during London Metal Exchange (LME) week in London, UK. It was pointed out, however, that this week in recent years has increasingly been packed with meetings of other associations such as the International Zinc Association (IZA) and the International Council on Mining and Metals (ICMM), and that in the past few years the ICdA has not been able to attract any additional meeting attendees by holding its meeting during LME Week. Therefore, it was suggested that ICdA should hold its next General Assembly of Members the week after LME Week, possibly in the UK, or in the same place and on a date close to a CollectNiCad meeting in Europe in the Fall. The Chairman pointed out that ICdA, in any event, should have its Fall meeting after IZA's Fall meeting to consider what action IZA has taken with respect to ICdA support, and that he would coordinate with Michael Taylor and Hugh Morrow to establish the most satisfactory meeting time.

ADJOURNMENT

There being no further business before the General Assembly of Members and upon motion made by Chip Wildes, seconded by Tim Pugh, and approved by the meeting, the General Assembly of Members of the International Cadmium Association was adjourned by Chairman, Marc von Schwerin, at 12:27 PM.

Respectfully Submitted,

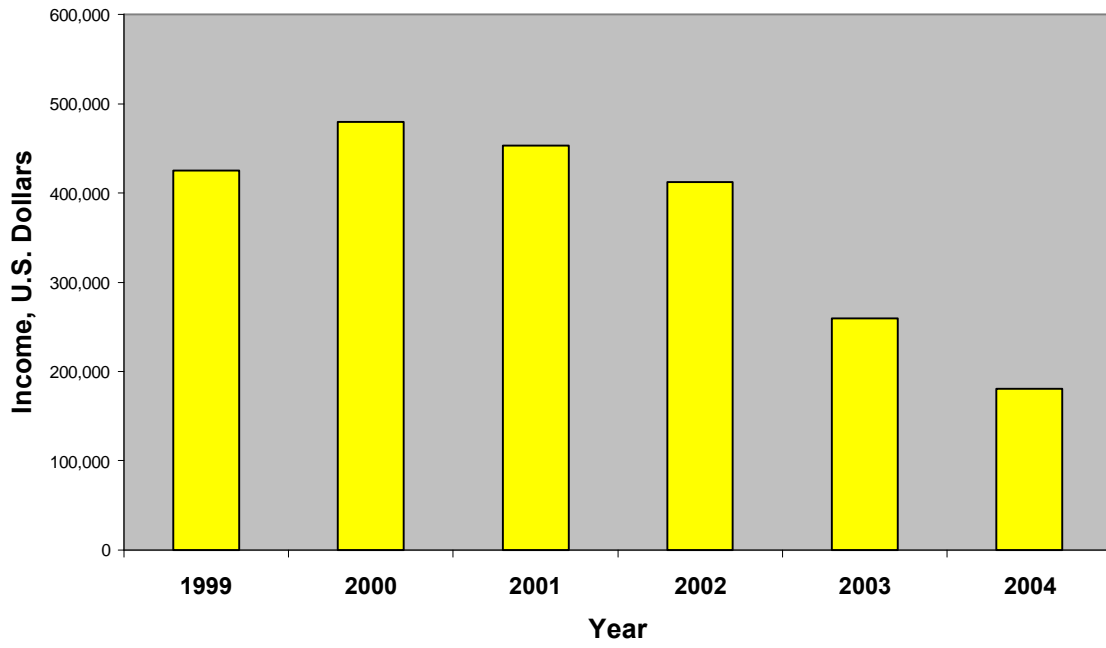
Hugh Morrow
Secretary, Pro-Tempore

ANNEX I

ICdA Financial Situation March 2003 in USD

	2003	2004		
Deposit Account 31/12/02	132000	ex 2003	118804	
Checking Account 31/12/02	8310			
Receivables 2003	262500	Recv 2004	180500	(BZL, Falco, X, Umicore)
Late payments rec'd	61494			
PRBA/RBRC	50000			
ICdA USA 2003 paid 2002	16000			
Funds 2003	530304	Funds 04	299304	
2002 Rent Paid 2003	4500			
Budget 2003	392000	Bdgt 04	394000	
Total Expenses	396500	Exp 04	394000	
Net	133804		-94696	Sep-04
Wind down USA	15000			
Net	118804			

Total International Cadmium Association Income



**EXECUTIVE SUMMARY
NAMUR, BELGIUM WORKSHOP
INTERNATIONAL CADMIUM ASSOCIATION
MARCH 18-19, 2003**

SUMMARY OF THE PROBLEM

- **ICdA membership income will be reduced significantly in 2004 to \$180,000 because of :**
 1. Resignations of Pasmenco, Penoles and Falconbridge.
 2. Closure of Britannia Zinc.
 3. Lower cadmium output by certain producer members.
- **Primary producers will account for only 45% of ICdA income in 2004 compared to traditional levels of 80%.**
- **Present membership dues will be insufficient to fund full-time representation in both Europe and North America. ICdA has sufficient income to maintain full-time operations only through September 2004.**

INTERNATIONAL CADMIUM ASSOCIATION'S MANDATE

- **The need for regulatory monitoring on cadmium issues in both Europe and North American spheres was acknowledged.**
- **ICdA's prime mandate was seen to be the monitoring of regulatory affairs, responding to and engaging with the appropriate regulatory officials, and reporting to the membership. In-depth scientific research and supporting studies should be handled by contracted expertise and funded independent of the normal ICdA operational budget.**

PRELIMINARY WORKSHOP CONCLUSIONS

- **The International Cadmium Association has the following funding options:**
 1. Secure funding from International Zinc Association (IZA).
 2. Double its present membership income.
 3. Reduce operating expenses to meet present budget.
 4. A combination of elements of items 1, 2 and 3 above.
 5. Cease operations.
- **A "hybrid merger" with IZA was discussed which might include the following elements:**

1. **A certain measure of funding is provided by IZA.**
 2. **ICdA retains an autonomous structure, shielding the zinc industry from cadmium issues.**
 3. **ICdA focus is on regulatory affairs monitoring, responding and reporting, with scientific research conducted by contracted experts on an ad hoc basis.**
 4. **A full-time Executive Director of the association headquartered in Brussels to direct worldwide activities and monitor European regulatory affairs along with a part-time consultant in North America to monitor North American and international regulatory affairs.**
- **A funding proposal will be prepared in the coming weeks for submission to IZA's Executive Committee meeting in early June 2003. Ability to secure funding from IZA will determine subsequent courses of action.**

**SUMMARY
NAMUR, BELGIUM WORKSHOP
INTERNATIONAL CADMIUM ASSOCIATION**

**Hotel Les Tanneurs de Namur
Namur, Belgium
March 18-19, 2003**

INTRODUCTION

Marc von Schwerin, Chairman of the International Cadmium Association (ICdA), opened the workshop at 10:03 AM. He asked all workshop attendees to introduce themselves and their affiliation. Those in attendance were as follows:

<u>NAME</u>	<u>AFFILIATION</u>
Colin Thirlaway	Black & Decker Corporation
Claudine Lecomte	Floridienne Chimie SA
Hugh Morrow	International Cadmium Association
Michael Taylor	International Cadmium Association
Murray Cook	International Zinc Association
Raymond Sempels	International Zinc Association – Europe
Norman Gibson	James M. Brown Ltd.
Jon Heliwell	Johnson Matthey Colours Ltd.
Marc von Schwerin	Noranda, Inc.
Emil Josendal	Outokumpu Norzink AS
Robert Eloy	SAFT SA
Jacques David	SNAM

Mr. von Schwerin explained that the present situation of the association, with key member resignations, closures of some cadmium production facilities and declining financial reserves, necessitated consideration of reorganization alternatives to determine the best course of action. He emphasized that this workshop was simply a brainstorming session and that any proposals would have to be approved by the entire ICdA membership. The Chairman indicated that he envisioned four alternatives or combination of alternatives for the association at present – increasing revenues, decreasing costs, gaining support from the International Zinc Association (IZA), or closing the association.

PRESENT FINANCIAL STRUCTURE

Michael Taylor reviewed the association’s present financial structure. ICdA maintains two offices, one in Brussels for Europe and one near Washington for North America. The International Cadmium Association is the result of the merger of The Cadmium Council and the Cadmium Association approximately 10 years ago. It has traditionally been a zinc/cadmium producer dominated organization with roughly 80% of its funding coming from these producers. However, because of major producer resignations in 2002 and 2003 (Pasminco, Penoles, Falconbridge and Britannia Zinc) and reductions in cadmium output (Umicore), association revenues from primary producers in 2004 are only expected to be about 50% of total revenues. The International Cadmium Association is an independent association and there is no formal link between

ICdA and the zinc associations. At the present time, zinc production and therefore cadmium production is decreasing which results in decreased producer revenue.

Taylor also pointed out that most of ICdA's NiCd battery producer members were large contributors to CollectNiCad in Europe. Hugh Morrow added that Sanyo, SAFT, Panasonic and Black & Decker were also large contributors to the Portable Rechargeable Battery Association (PRBA) and the Rechargeable Battery Recycling Corporation (RBRC) in North America and to the Battery Association of Japan (BAJ) in Asia.

Mr. Taylor presented a summary of the association's financial situation for 2003 and 2004 which is attached to this summary. Marc von Schwerin noted that this analysis had been done at his request. Taylor indicated that ICdA has sufficient funds and expected income to maintain operations through September 2004. Hugh Morrow stated that he had received confirmation of the \$25,000 donation from PRBA and an additional grant of \$25,000 from RBRC for 2003 with the proviso that the funds would be utilized to maintain the activities of the North American office.

Mr. Taylor enumerated some of the cost reductions which have been achieved by the association including hiring an assistant in the Brussels office on a half-time rather than a full-time basis and sharing her cost with CollectNiCad and moving into a lower rent office in North America. However, these cost reductions have been offset by the withdrawal of Umicore's partial support for the ICdA European Managing Director, necessitating a revision of the 2003 budget (see attached revised budget). Taylor also noted that \$15,000 has been cumulatively allocated in the 2001, 2002 and 2003 budgets for formal closure of The Cadmium Council as a legal entity.

DISCUSSION OF FINANCIAL ISSUES

Norman Gibson stated that the inclusion of "reserves" was clouding the financial picture. He felt that the association must have income equal to expenditures for any given year, and that for both 2003 and 2004 ICdA's expenditures exceeded its income. However, Mr. Taylor and Mr. Morrow noted that specific levels of reserves are not included in any yearly budget nor required by our By-Laws, but are merely the result of under expenditures over the past few years. Mr. Gibson then requested a breakdown of membership income by general categories. Mr. Morrow responded that for 2003, approximately \$160,000 was expected from producers, \$20,000 from recyclers, \$66,000 from consumers, and \$10,000 from others.

Murray Cook raised question about whether members were invoiced in U.S. dollars or Euros, and how the changing comparative strengths of the dollar and Euro might be affecting ICdA's revenue. Mr. Taylor responded that dues are based on U.S. dollars but that about 50% of income was invoiced in Euros and about 50% of expenses were in Euros. Whereas the association was previously benefiting from the strong dollar, the situation is now reversed. Mr. Taylor indicated that he continually updates cash flow analyses to correct for changing conversion rates.

Raymond Sempels reminded the workshop that the International Zinc Association – Europe provides "in-kind" contributions to ICdA through the services of Dr. Frank van Assche and his assistant, Lidia Regoli, to address scientific issues. He also noted the efforts of Umicore in assuring that the EU Risk Assessment on Cadmium and Cadmium Oxide was performed under the "rapporteurship" of Belgium and not Sweden, and that all zinc/cadmium producers in Europe contributed to this effort through the former Zn/Cd Steering Committee of Eurometaux. Sempels expressed the opinion that ICdA should remain an autonomous and independent organization, and that there were a considerable number of very important issues for the association to address.

Hugh Morrow stated that he was willing to reduce North American office operating expenses by approximately \$40,000 by reducing his working week to 4 days. He offered to proceed with a formal closing of The Cadmium Council, which has already been provided for in the budget, and changing his status from employee to consultant to achieve this saving.

Michael Taylor was asked about his status as a Umicore employee. He responded that he was on secondment to ICdA under a contract expiring December 31, 2003. He would prefer to remain on

secondment thereafter as a Umicore employee for obvious employee benefits reasons and because the cost of setting up and running an independent consultancy in Belgium is notoriously expensive.

Emil Josendal asked how many days per week would be necessary to ensure sufficient service for the association, but Robert Eloy commented that, while less time meant less expense, it also meant less effectiveness in promptly handling urgent matters and attending important meetings.

Murray Cook advised the workshop that the International Zinc Association and International Lead Zinc Research Organization (IZA/ILZRO) were currently reconsidering their own structures and examining integration, and that some time was already devoted to cadmium issues. Norman Gibson expressed the view that support from IZA – Europe might result in some savings but would not provide a solution to the current difficulties. Jon Heliwell suggested that networking and joint funding of projects between various interested associations was an excellent way to achieve results which might not be accomplished by any one group acting alone. Ray Sempels added that perhaps the “in-kind” contributions of IZA – Europe should be valorized to establish just how much they are contributing towards cadmium issues. He suggested that external experts or consultants would be very expensive to handle all the cadmium issues, and that there definitely a need for ICdA to coordinate the monitoring and management of cadmium issues.

At this point, ICdA and IZA staff were excused from the workshop and closed discussions were held amongst ICdA members only. After lunch, the discussion resumed on ICdA’s activities and finances.

INTERNATIONAL CADMIUM ASSOCIATION’S ACTIVITIES & FINANCES

Marc von Schwerin summarized the closed discussions held before lunch amongst the members in attendance. They agreed that the most important activity for the association was to stay aware of all human health and environmental issues related to cadmium in both Europe and North America. They felt that scientific responses, where appropriate, should be made by the scientifically-qualified organizations such as ILZRO or by individual contractors with the proper expertise. The financing issue for the association still required resolution. Mike Taylor presented the time allocation for the association which is attached to this summary. Hugh Morrow commented that the budget can equally well be allocated across each of the individual expense areas such as salaries, travel and meetings, office rent, etc.

The Chairman indicated that the possibilities for increased dues and/or new members have pretty well been exhausted, but that support from IZA and cost cutting measures still appear to have some merit. Even though representation is required in both North America and Europe, it might be possible to eliminate the North American office and have one regular full-time employee in Brussels and one consultant in North America. IZA wishes ICdA to remain in existence as a separate entity to address cadmium issues and keep the zinc industry at “arm’s length” from these issues. While, to a certain extent, most nonferrous metals may be considered “heavy metals”, separate strategies are required for each metal. Ray Sempels also pointed out that ICdA has many consumer and end user members while IZA is mainly a primary producer organization.

Robert Eloy mentioned that if higher dues were requested from SAFT, he would have to explain to his management the reasons for the increase and what extra services would result. He urged closer cooperation between ICdA and CollectNiCad and suggested a better image for ICdA. Eloy suggested that a levy might be placed on all cadmium products to finance association activities which then would be passed on to consumers, but there may be legal restrictions preventing the imposition of such levies.

Murray Cook stated that the International Zinc Association enjoys the membership of a very large share of the world’s zinc producers, and thus the cadmium producers as well. Support through IZA would therefore capture support from many cadmium producers who are not presently members of ICdA. However, it would also raise the issue of double payment for some producers who are members of both IZA and ICdA. Cook indicated that he would have to sell the idea of ICdA support to IZA which would require their Board being convinced that ICdA was an efficient and cost-effective organization.

Raymond Sempels suggested linking ICdA fees to the level of zinc production, similar to Eloy's point noted above, so that all cadmium generated was assessed for the purposes of ICdA income. However, ICdA would need to establish what service it was providing for this support and that it was worthwhile even for zinc producers who did not process their cadmium. Norman Gibson added that it would be tactically important that the Chairman of ICdA always be a representative of a zinc/cadmium producer.

Other suggestions made to raise the association's income include the possibility of gaining support from the three NiCd battery recyclers who are not currently members (Accurec, Nippon Recycling Centre, and Cobar Ltd.) and/or increased contributions from consumer members such as the pigment producers. Robert Eloy also reported that he felt that additional support might be obtainable through Toho Zinc in Japan, the largest Japanese cadmium producer and a major recycler of NiCd batteries.

CONCLUSIONS & SCOPE FOR FURTHER DEVELOPMENT

From the foregoing discussions, some general conclusions were reached as well as some general questions which require further discussion and development. All proposals would have to be approved by the ICdA membership, and any proposals for IZA support would have to be considered by the IZA Executive Committee meeting in June 2003. Presumably any proposals could then be ratified by the ICdA General Assembly and the IZA Annual General Meeting, both in October 2003 in London.

1. It was concluded that an autonomous, independent ICdA is needed to monitor and lobby on behalf of the cadmium industry on a worldwide basis. One possibility mentioned was a "hybrid merger" between IZA and ICdA whereby independence could be preserved within an IZA structure. A Brussels-based headquarters with a North American consultancy is envisioned with continued synergy on scientific issues with IZA Europe and perhaps sharing of administrative costs.
2. Financial suggestions and details might include:
 - New structure be as simple as possible to promote transparency,
 - Resignation period for members of two years instead of one to promote financial stability,
 - Liabilities should be covered by reserves held in trust fund,
 - Mike Taylor would have to check with Umicore and the Belgian authorities to establish his continued secondment situation,
 - IZA might become the employer of the ICdA Managing Director
3. While the North American office presence could be reduced, the question is to what level, and how will North American members respond to such a reduction.
4. The Chairman concluded that ICdA should ideally remain self-funding and enumerated 4 options or combination of options, in order of preference:
 - Reach a package agreement with IZA
 - Double the ICdA income to meet its expense level
 - Operate with just one manager
 - Closure

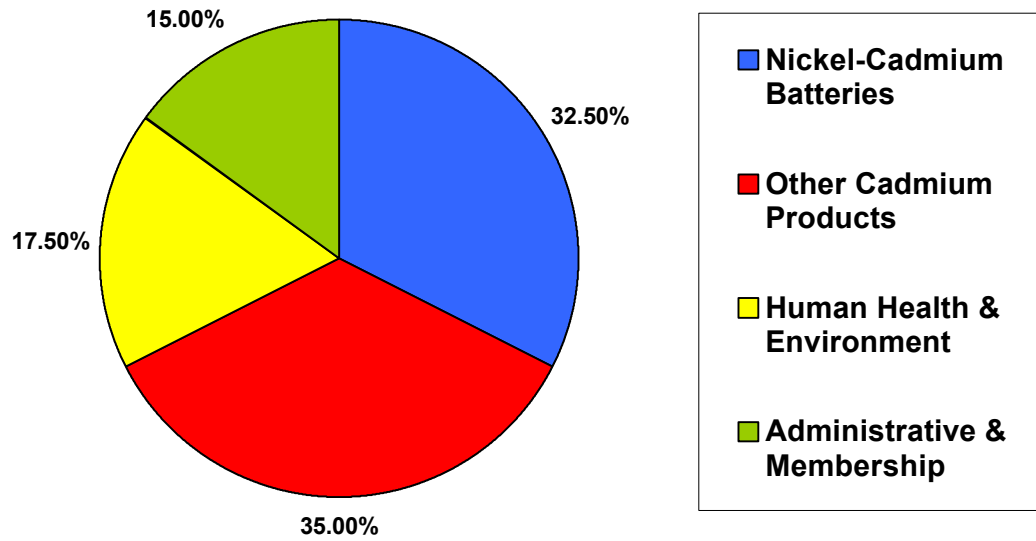
For example, the association might be able to operate with a combination of partial support from IZA, some increase in income from members, and some reduction in expenses through reduction in staff time.

ICdA Financial Situation March 2003 in USD

	2003	2004		
Deposit Account 31/12/02	132000	ex 2003	93804	
Checking Account 31/12/02	8310			
Receivables 2003	262500	Recv 2004	180500	(BZL, Falco, X, Umicore)
Late payments rec'd	61494			
PRBA	25000			
ICdA USA 2003 paid 2002	16000			
Funds 2003	505304	Funds 04	274304	
2002 Rent Paid 2003	4500			
Budget 2003	392000	Bdgt 04	392000	
Total Expenses	396500	Exp 04	392000	
Net	108804		-117696	Sep-04
Wind down USA	15000			
Net	93804			

	2002			2003			
	EUR	USA	Total	EUR	USA	Total	
Accounting	5,000	6,500	11,500	5,000	6,500	11,500	
Audit fee			0			0	
Bank charges	1,000	200	1,200	100	150	250	
Documentation etc.	3,000	0	3,000	1,000	0	1,000	
Insurance & taxes	250	850	1,100	1,700	850	2,550	
Meetings	7,500	10,000	17,500	5,000	8,000	13,000	
Motor Car Expenses	7,500	0	7,500	7,500	0	7,500	
Office Services	5,000	2,500	7,500	1,000	2,000	3,000	
Office Supplies	3,000	2,000	5,000	2,000	1,500	3,500	
Postage	2,000	1,000	3,000	500	500	1,000	
Professional fees	0	0	0	0	0	0	
Rent & rates	20,000	8,400	28,400	18,000	8,400	26,400	
Repairs & Maint.	1,500	1,000	2,500	500	800	1,300	
Salaries/Benefits	110,000	143,699	253,699	132,000	144,940	276,940	->net increase 22,000 (Umicore 52,000 less 30,000 staff saving
Stationery/photocopy	2,000	1,500	3,500	500	1,000	1,500	
Stats	3,000	0	3,000	0	0	0	
Subscriptions	500	500	1,000	0	300	300	
Sundries	500	500	1,000	500	300	800	
Phone/fax	5,000	2,500	7,500	3,500	2,300	5,800	
Training	0	0	0	0	0	0	
Travel	20,000	15,000	35,000	17,000	12,000	29,000	
Regulatory			0		0	0	
ICMM Membership			2,000		0	2,000	
USA Wind down			5,000		0	5,000	
Total	196,750	196,149	399,899	195,800	189,540	392,340	

International Cadmium Association Project Allocation



Cadmium Market Report

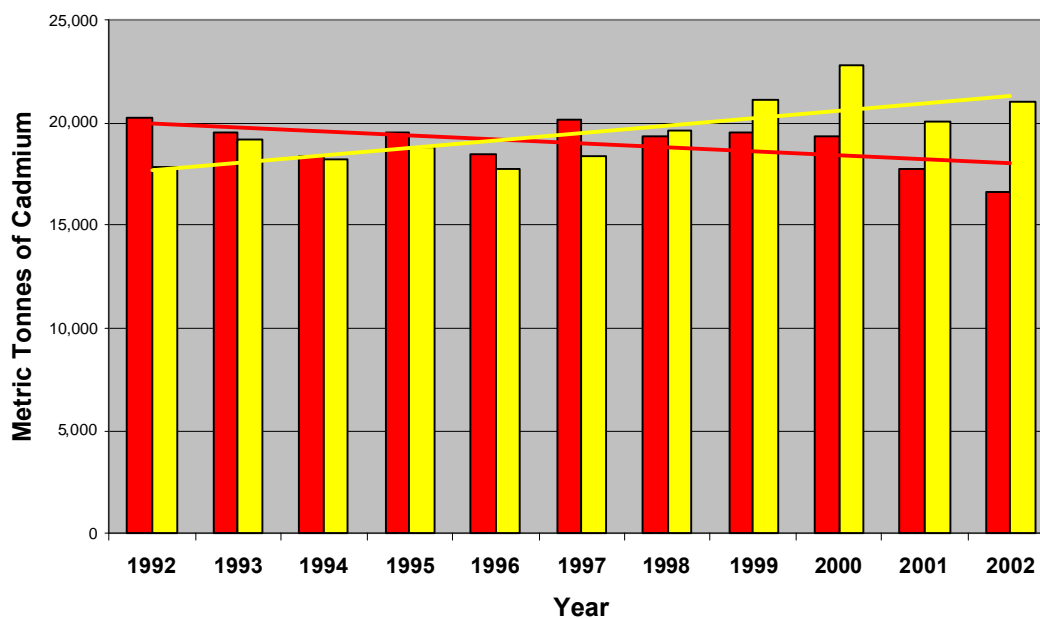
**International Cadmium Association
General Assembly of Members**

Double Tree Guest Suites Hotel

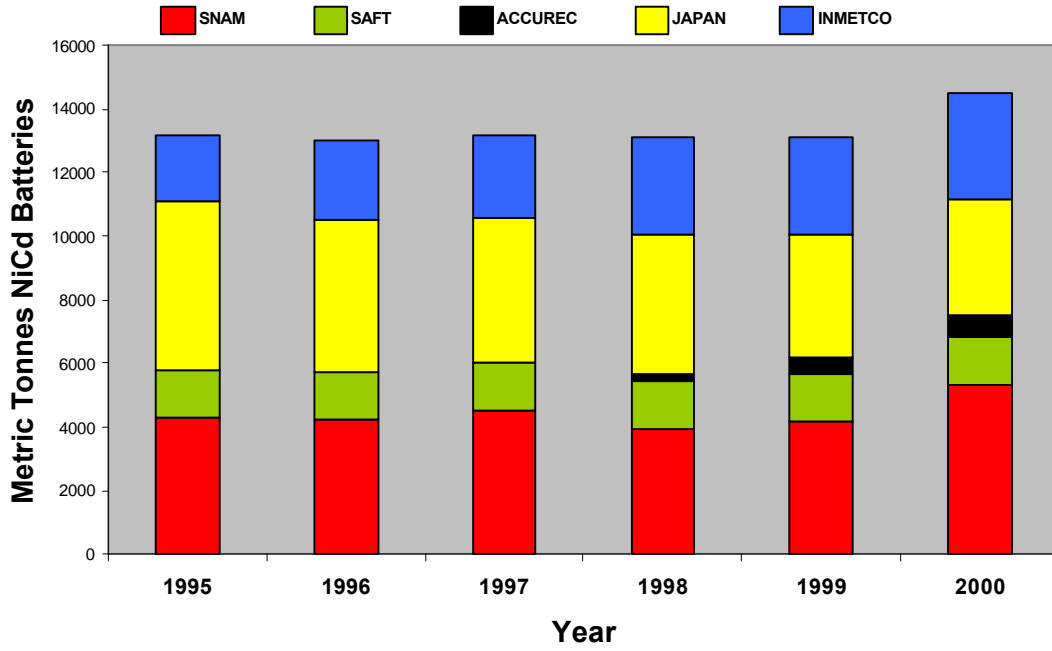
Research Triangle Park, NC USA

April 8, 2003

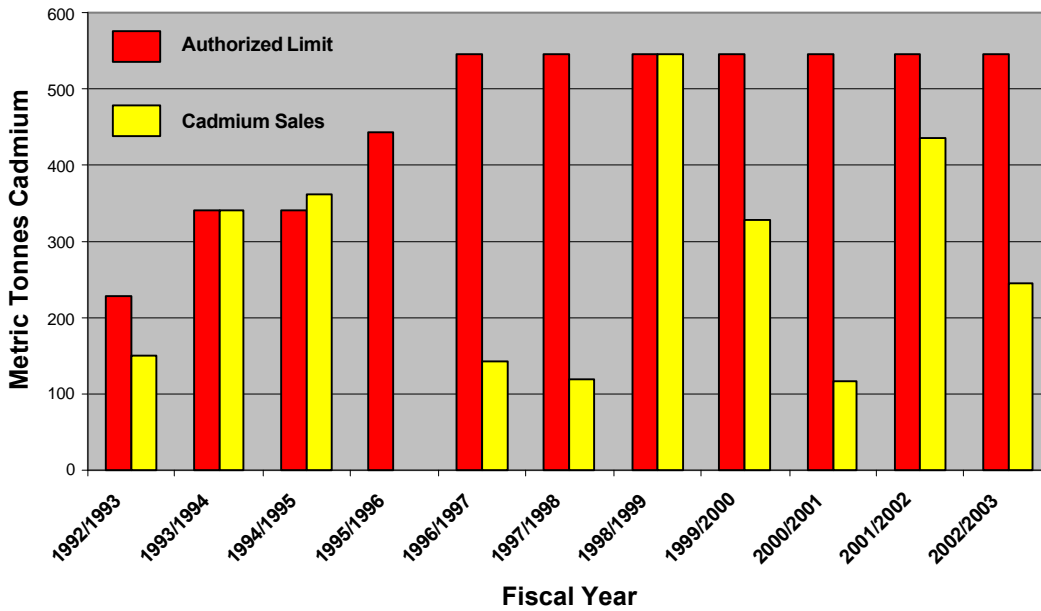
Cadmium Production and Consumption, 1992 - 2002



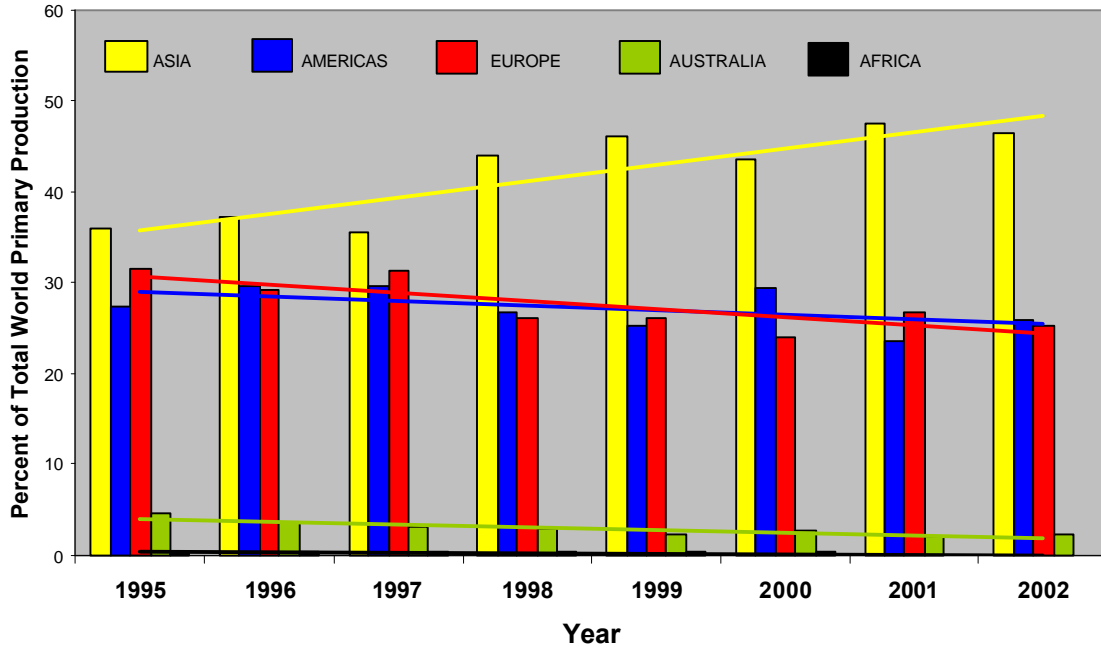
Worldwide NiCd Battery Recycling, 1995 - 2000



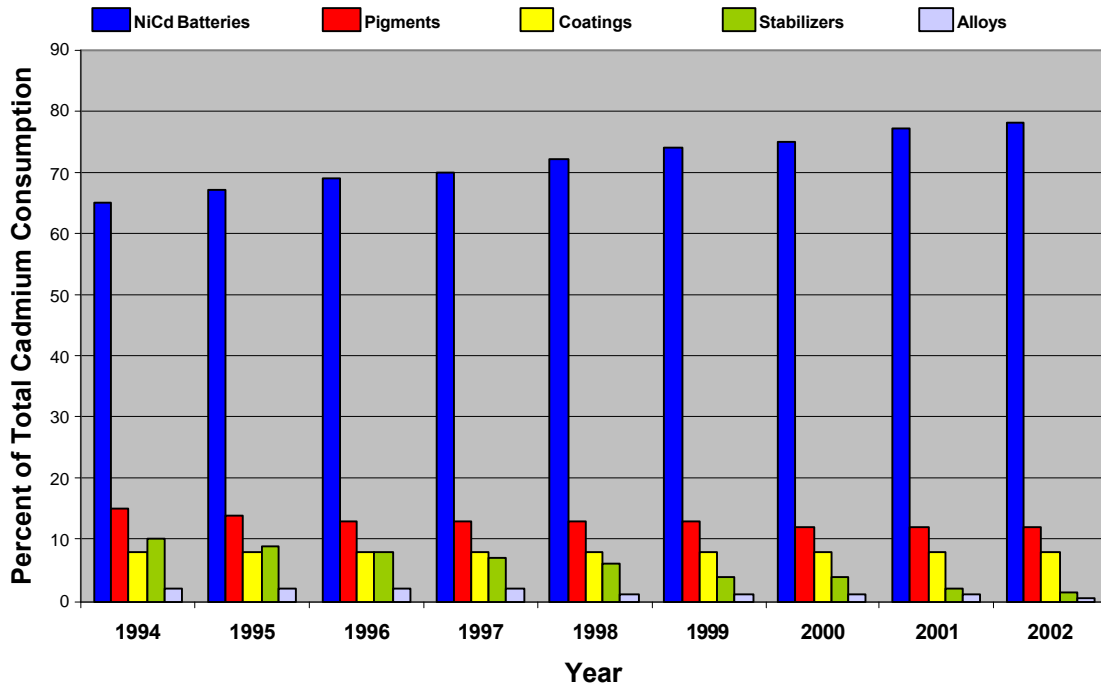
DLA Cadmium Disposals, 1992 - 2003



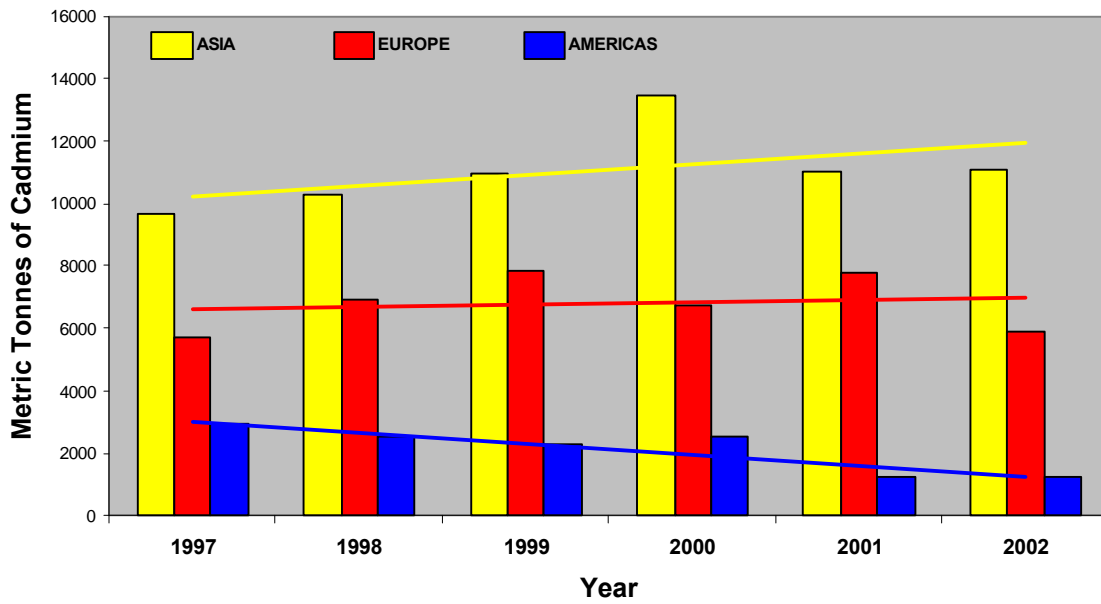
Geographical Trends in Cadmium Production, 1995 - 2002



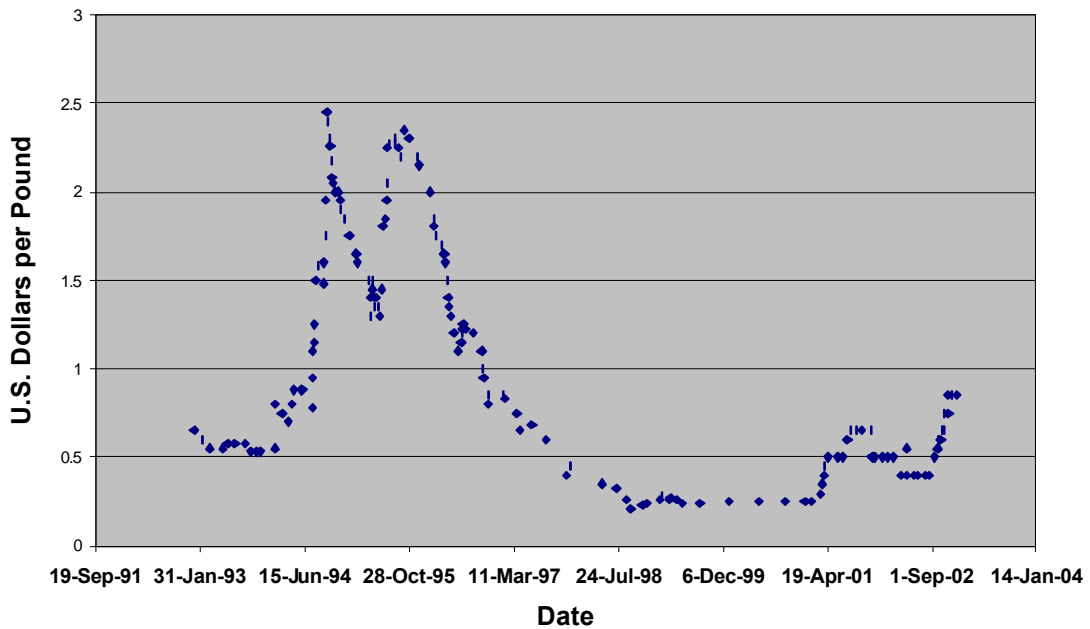
Worldwide Cadmium Consumption Patterns, 1994 - 2002



Trends in Apparent Cadmium Consumption, 1997 - 2002

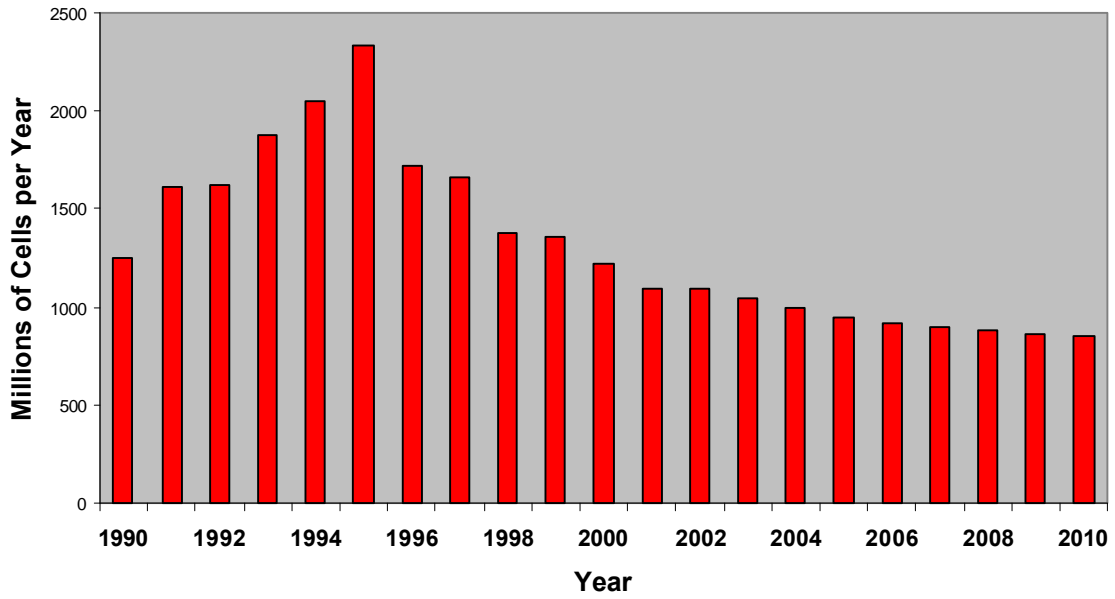


Metal Bulletin 99.99 Cadmium Price, 1993-2002

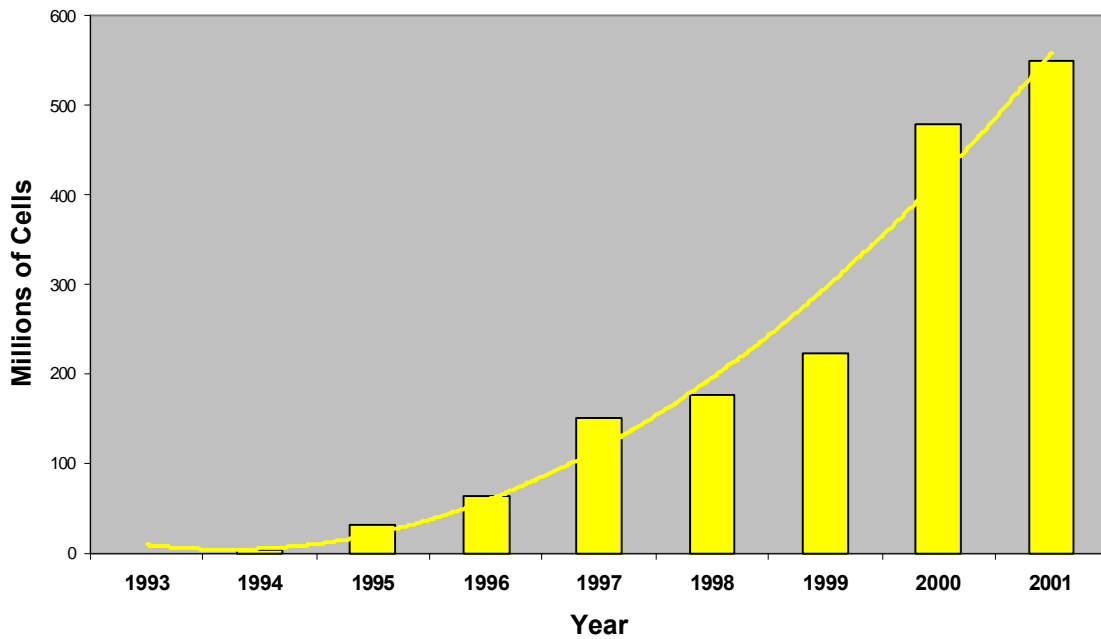


World NiCd Battery Production, 1990 - 2010

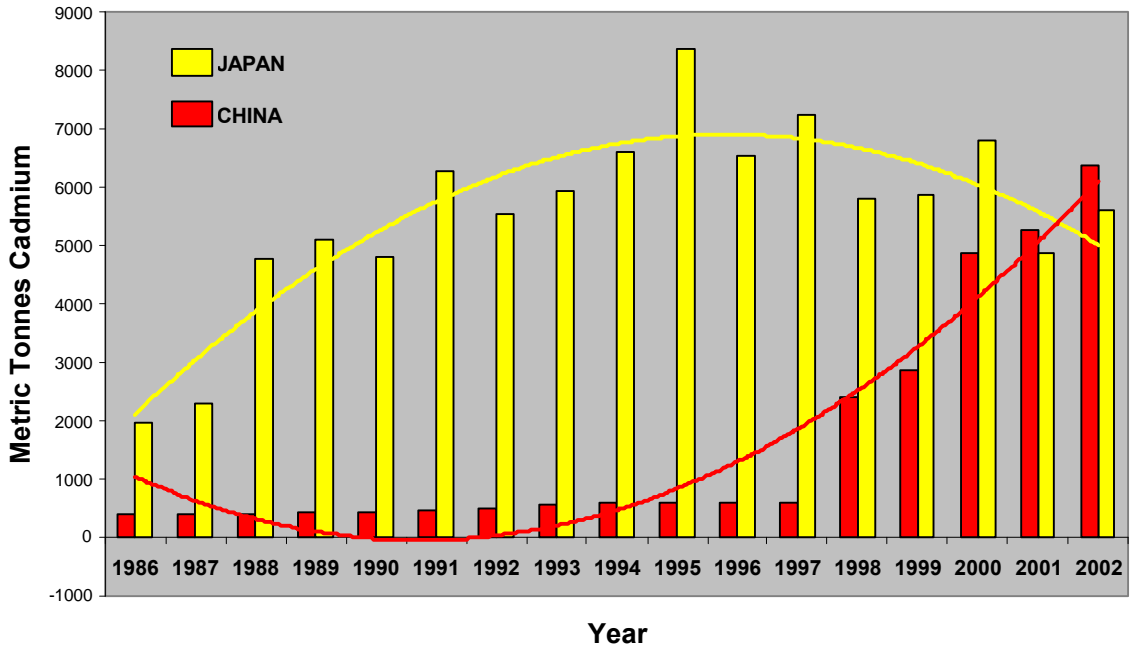
Source: Institute for Information Technology(2002)



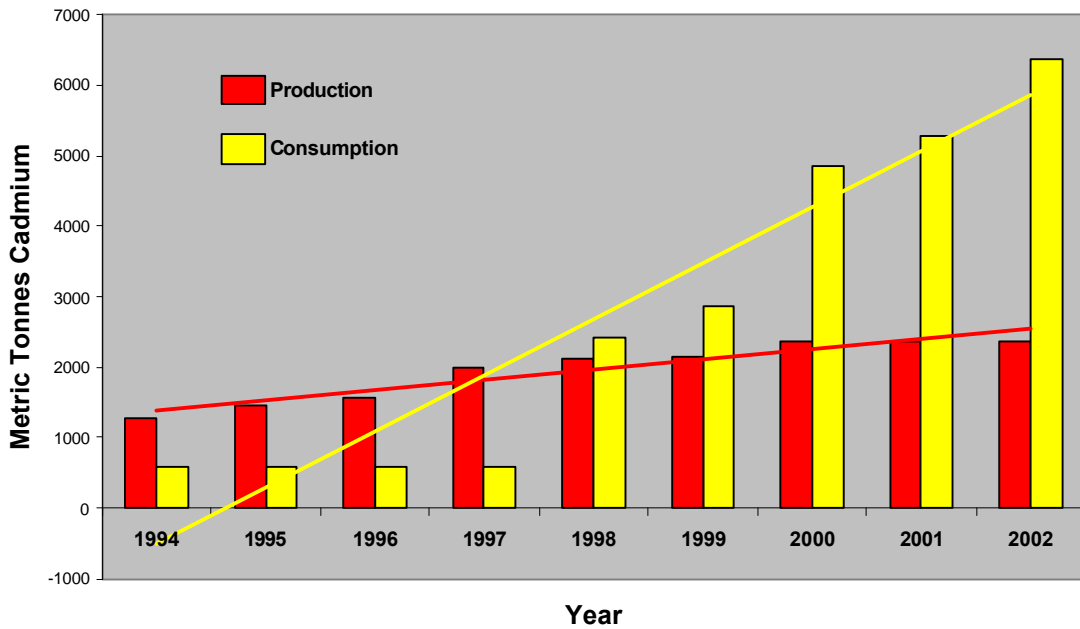
Chinese NiCd Battery Production, 1993 - 2001



Cadmium Consumption, Japan and China



Chinese Cadmium Production and Consumption



Summary

- **Primary Cadmium Supply Decreasing**
- **Cadmium Recycling Increasing**
- **Excess Cadmium Stocks Depleted**
- **Cadmium Prices Low But Increasing**
- **Applications Dominated by NiCds**
 - **Consumer: Power Tools, Emergency L&S**
 - **Industrial: Railways, Aircraft, UPS, EVs**
- **Greatest Growth in Chinese NiCds**

Summary

- **Growth in Other Third World Areas?**
- **Is Chinese Growth New Growth or Shift of Production from Japan?**
- **European Commission's Proposals**
 - **Revision to Battery Directive 91/157**
 - **Would Ban NiCds from 1 Jan 2008**
 - **Awaiting Results of Risk Assessments**
- **Industry's Recycling Programs**
 - **Japan, USA, Canada, Europe**

EUROPEAN REGULATORY ISSUES 2003

**EXTENDED IMPACT ASSESSMENT (EIA)
BATTERY CONSULTATION (April)**

**BELGIAN Cd/CdO RISK ASSESSMENT
FINISHED (almost)**

**NEW CHEMICALS POLICY
INTERNET CONSULTATION (May)**

WEEE and RoHS BECOME LAW

**LIMITATIONS AND USE OF DANGEROUS
SUBSTANCES
(RPA REPORT)**

Regulatory Affairs Report North American and International Activities

**International Cadmium Association
General Assembly of Members**

Double Tree Guest Suites Hotel

Research Triangle Park, NC USA

April 8, 2003

Major North American Cadmium Issues

- **U.S. EPA Waste Minimization Priority List (Pb, Cd and Hg)**
- **U.S. Opposition to Cadmium Ban in EC Battery Directive Revision**
- **NAFTA CEC SMOC Program**
- **NY Academy of Sciences Cd Rpt**

Major International Cadmium Issues

- **OECD NiCd Battery Collection and Recycling Program**
- **UNECE LRTAP Heavy Metals**
- **UNEP Heavy Metals Program**
- **UNEP Prior Informed Consent**

UNECE LRTAP Heavy Metals Protocol

- **Expert Group on Heavy Metals**
 - **Met in Geneva March 20-21**
 - **Nonferrous Metals – ICMM**
 - **Develop Work Plan for Review of the HM Protocol Scheduled for 2005**
 - **Sweden – Product Control Measures**
 - **Germany – BATs for Cd, Pb, Hg Emissions**

UNECE Corrosion of Heavy Metals Workshop

- **Munich – May 12-14, 2003**
- **Organized by Sweden & Germany**
- **Papers on Cu, Pb, Zn, Cd, Cr, Ni**
- **Industry Message: Heavy Metals Contribution to Atmospheric Emissions from Corrosion Small**

**MEMBERSHIP REPORT
INTERNATIONAL CADMIUM ASSOCIATION
April 8, 2003**

NEW MEMBERS

First Solar, LLC

First Solar, LLC, a manufacturer of cadmium telluride (CdTe) solar cells located in Perrysburg, Ohio, USA joined the International Cadmium Association effective January 1, 2003. Their representatives to ICdA and contact details are as follows:

First Solar, LLC
28101 Cedar Park Boulevard
Perrysburg, Ohio 43551 USA
Telephone: +1 419 662 8500
Facsimile: +1 419 662 8525
Representative: Ken Smigielski
Environmental Health & Safety Engineer
ksmigielski@firstsolar.com
Alternate: Larry Hicks
Environmental Health & Safety Manager

RESIGNATIONS

Britannia Zinc Ltd.

MIM Holdings Ltd. has closed its Britannia Zinc Ltd. plant at Avonmouth, Avon in the United Kingdom and has ceased zinc and cadmium production. Britannia Zinc has accordingly submitted its resignation from membership in the International Cadmium Association, but will honor its financial commitments to the association for 2003 and 2004 in accordance with the By-Laws.

BP Solar, Inc.

BP Solar, Inc., a cadmium telluride (CdTe) solar cell manufacturer with operations in Fairfield, California, USA and Sunbury-on-Thames, UK, has decided to exit the CdTe solar cell business, and submitted its resignation from membership in the International Cadmium Association in December 2002. BP Solar has paid its 2002 ICdA dues, and, in accordance with the By-Laws, will honor its financial obligations to the association for 2003.

Falconbridge Limited

Falconbridge Limited, an integrated nonferrous metals producer headquartered in Toronto, Ontario, Canada, submitted its resignation from membership in the International Cadmium Association on October 25, 2002 for economic reasons related to the zinc business. Falconbridge has paid its dues for 2002 and has agreed to pay its final dues for 2003 in accordance with the association's By-Laws.

PCS Phosphate Co., Inc.

PCS Phosphate Co., Inc., a producer of phosphate fertilizers located in Northbrook, Illinois, USA has submitted its letter of resignation from the International Cadmium Association, citing only peripheral interests in cadmium-in-fertilizer issues, lack of work by the association on these issues, and the necessity to strictly justify all expenditures at the present time. PCS Phosphate has paid both its 2002 and 2003 dues in full.

CHANGES IN MEMBERS STATUS

Outokumpu Base Metal Oy and Outokumpu Norzink AS

As reported in the October 24, 2001 Membership Report, Outokumpu Base Metal Oy acquired Norzink AS in April 2001. Outokumpu Base Metal Oy and Outokumpu Norzink AS have now reorganized into a single unit known as Outokumpu Zinc Commercial B.V. (Winterthur Branch), which will be the new single member company representing Outokumpu's interests in the ICdA. Its Official Representative and contact details are follows:

Outokumpu Zinc Commercial B.V.
Lagerhausstrasse 3, Post Office Box 2178
CH-8401 Winterthur, Switzerland
Telephone: +41 52 212 1722
Facsimile: +41 52 212 8397
Representative : Lars-Goran Bjorkqvist
Commercial Director
Lars-goran.bjorkqvist@outokumpu.com
Alternate : Sandra Kempers
sandra.kempers@outokumpu.com

ANNEX IX

2002 ICdA BUDGET AND RESULTS

	Budget			Result		
	EUR	USA	Total	EUR prov	USA	Total
Accounting	5000	6500	11500	4460	8013	12473
Audit fee			0	0		0
Bank charges	1000	200	1200	200	140	340
Documentation etc.	3000	0	3000	0	0	0
Insurance & taxes	250	850	1100	581	316	897
Meetings	7500	10000	17500	4783	9246	14029
Motor Car Expenses	7500	0	7500	7508	0	7508
Office Services	5000	2500	7500	0	2508	2508
Office Supplies	3000	2000	5000	1248	1895	3143
Postage	2000	1000	3000	488	560	1048
Professional fees	0	0	0	11979	0	11979
Rent & rates	20000	8400	28400	18000	8400	26400
Repairs & Maint.	1500	1000	2500	1200	1051	2251
Salaries/Benefits	110000	143699	253699	106723	144038	250761
Stationery/photocopy	2000	1500	3500	957	1383	2340
Stats	3000	0	3000	0	0	0
Subscriptions	500	500	1000	0	379	379
Sundries	500	500	1000	78	243	321
Phone/fax	5000	2500	7500	5173	2447	7620
Training	0	0	0	0	0	0
Travel	20000	15000	35000	14318	14967	29285
Regulatory			0	8268	5000	13268
Memberships			2000		0	3000
USA Wind down			5000		0	5000
Total	196750	196149	399899	185964	200586	394550

Extranet

LISEC/EBRC/USA

