



**United Nations
Environment
Programme**



**World Health
Organization**

**First meeting of the Global Alliance to Eliminate Lead in Paints
Initial organizational meeting of contributors**

Geneva, 26–28 May 2010

Item 4 of the provisional agenda *

Background/overview of the Global Alliance

**International Conference on Chemicals Management: Reference
documents**

Information note by the Secretariat

1. The Secretariat is pleased to annex to the present note the following reference documents presented during Second session of the International Conference on Chemicals Management (ICCM2), Geneva, Switzerland, 11-15 May 2009:
 - Annex I: ICCM2 Resolution II/4: Emerging Policy Issues. B. Lead in paint
 - Annex II: Proposed actions on emerging policy issues (SAICM/ICCM.2/10/Add.1*: Refer to Annex IV for Lead in paint)
 - Annex III. Submission by the Intergovernmental Forum on Chemical Safety in relation to phasing out the use of lead in paint (SAICM/ICCM.2/INF/29)
 - Annex IV: Background information in relation to the emerging policy issues of lead in paint (SAICM/ICCM.2/INF/38)
2. Annexes are provided for information to the meeting participants at initial organizational meeting of contributors of the First meeting of the Global Alliance to Eliminate Lead in Paints and it is presented without formal editing.

* UNEP(DTIE Chemicals) /WHO(PHE) GAELP/1/1/Add.1

Annex I. ICCM2 Resolution II/4: Emerging Policy Issues

B. Lead in paint

II/4: Emerging policy issues

A

Introduction

The Conference,

Recognizing the need to take account of current and ever changing social needs in relation to implementation of the Strategic Approach to International Chemicals Management and the importance of having procedures that enable due attention to be given to issues which may not have been generally recognized, or sufficiently addressed,

Committed to meeting the need for open, transparent procedures for dealing with emerging policy issues that include effective dialogue with all Strategic Approach stakeholders,

1. *Takes note with appreciation* of the proposals for cooperative action relating to the emerging policy issues of lead in paint, chemicals in products, hazardous substances within the life cycle of electrical and electronic products and nanotechnologies and manufactured nanomaterials;

2. *Requests* the secretariat to implement, subject to available resources, the procedures set out in annex I to the present resolution for receiving nominations of emerging policy issues from stakeholders, screening them for completeness and prioritizing and assessing them for future consideration;

3. *Also requests* the secretariat to report on the progress made with the work on emerging policy issues to the Open-ended Working Group at its first meeting and to the Conference at its third session.

B

Lead in paint

The Conference,

Considering the decision by the World Summit on Sustainable Development to protect children's health from exposure to lead, as set out in paragraph 57 of the Summit's Plan of Implementation, which calls for the phase-out of lead in lead-based paints and in other sources of human exposure and for work to prevent, in particular, children's exposure to lead and to strengthen monitoring and surveillance efforts and the treatment of lead poisoning, and welcoming the actions identified to phase out lead in paint in the context of children's health and the environment at the meeting of ministers of the environment of the Group of Eight, held in Syracuse, Italy, from 22 to 24 April 2009,

Acknowledging the Dakar Resolution for Eliminating Lead in Paints, adopted by the Intergovernmental Forum on Chemical Safety at its sixth session, held in Dakar from 15 to 19 September 2008,

Recognizing the progress being made towards achieving a global phase-out of lead in automotive fuels by the Partnership for Clean Fuels and Vehicles,

1. *Endorses* a global partnership to promote phasing out the use of lead in paints as an important contribution to the implementation of paragraph 57 of the Plan of Implementation of the World Summit on Sustainable Development and to the Strategic Approach;

2. *Invites* all interested stakeholders to become members of the global partnership and, where appropriate, to commit themselves to contributing financial or in-kind resources or expertise towards the development and implementation of partnership activities;

3. *Requests* the global partnership to adopt terms of reference using the draft terms of reference presented to the International Conference on Chemicals Management at its second session¹ as their basis and to develop a business plan articulating clear milestones for progress in achieving a global phase-out of lead in paint in the following areas:

- (a) Raising awareness of toxicity to human health and the environment and alternatives;
- (b) Guidance and assistance to identify potential lead exposure;
- (c) Assistance to industry (manufacturers, wholesalers and retailers);
- (d) Prevention programmes to reduce exposure;
- (e) Promotion of national regulatory frameworks;

4. *Invites* the United Nations Environment Programme and the World Health Organization within their respective mandates and available resources to serve as the secretariat of the global partnership;

5. *Invites* the global partnership to report on progress to the Open-ended Working Group at its first meeting and to the International Conference on Chemicals Management at its third session.

¹ SAICM/ICCM.2/10/Add.1.

**Annex II. Proposed actions on emerging policy issues
(SAICM/ICCM.2/10/Add.1*: Refer to Annex IV for Lead in paint)**

**International Conference on Chemicals Management
Second session**

Geneva, 11–15 May 2009

Item 4 (f) of the provisional agenda**

**Implementation of the Strategic Approach to International Chemicals
Management: emerging policy issues**

Proposed actions on emerging policy issues

Note by the secretariat

1. As a result of the additional preparatory work undertaken following the informal discussions held in Rome on 23 and 24 October 2008, four emerging policy issues have been identified for detailed consideration at the Conference: nanotechnology and manufactured nanomaterials; chemicals in products; electronic waste; and lead in paints. Details of the preparatory work undertaken to select these issues can be found in document SAICM/ICCM.2/10.

2. Background material setting out how each issue meets the selection criteria for emerging policy issues developed during the informal discussions and explaining the rationale for the proposed actions is contained in an information document on each issue.² The facilitators of the preparatory work on each issue have conducted their work in accordance with the guidance provided by the informal Friends of the Secretariat planning group. The proposed actions set out in the present note are based on the original submissions made on each issue, taking into account, as far as possible, the views and additional information provided by Strategic Approach to International Chemicals Management stakeholders. Strategic Approach stakeholders were notified, including by email, that they could submit comments. There will be a further opportunity for participants in the session to discuss the rationale for the proposed actions at a technical briefing to be held on Sunday, 10 May 2009, from 9.30 a.m. to 1 p.m.

3. The proposed actions can be summarized as follows:

(a) *Nanotechnology and manufactured nanomaterials* (annex I): The co-facilitators have drawn attention to the rapidly increasing use of this technology since the adoption of the Strategic Approach and the evolving state of knowledge on potential environmental and health and safety risks. A range of cooperative actions is proposed, including raising awareness, sharing existing information and undertaking cooperative work. The attention of the Conference is drawn to the possible need to undertake intersessional work to explore issues relevant to developing countries and countries with economies in transition, and to a possible amendment to the Global Plan of Action of the Strategic Approach so as to include new work areas for nanotechnology and manufactured nanomaterials;

* Reissued for technical reasons.

** SAICM/ICCM.2/1.

² SAICM/ICCM.2/INF/34 (nanotechnology and manufactured nanomaterials); SAICM/ICCM.2/INF/35 (chemicals in products); SAICM/ICCM.2/INF/36 (electronic waste); SAICM/ICCM.2/INF/38 (lead in paint).

(b) *Chemicals in products* (annex II): The facilitator has drawn attention to the need to improve the accessibility and availability of information about chemicals in products, further to paragraph 15 (b) of the Overarching Policy Strategy of the Strategic Approach. Relevant products might include toys, furniture, jewellery, cars, clothes and electronics and their accessories. The facilitator proposes that the Conference should establish a working group to develop a proposal for an information system or framework of systems and action to tackle this issue;

(c) *Electronic waste* (annex III): The facilitator has drawn attention to various global cooperative actions related to hazardous chemicals that could be taken in response to the poor management of electronic and electrical equipment wastes and near end-of-life electrical equipment. Electronic waste is not covered explicitly under the Strategic Approach. The facilitator has reviewed current work under the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal and the work of other programmes and has proposed that the Conference should consider establishing a working group to tackle a number of priority issues in this regard;

(d) *Lead in paint* (annex IV): The co-facilitators have drawn attention to the continued use of lead in paint and propose that the Conference should consider establishing a global partnership to support concerted cooperative actions as a contribution to the implementation of paragraph 57 of the Plan of Implementation adopted by the World Summit on Sustainable Development³ and the implementation of the Strategic Approach.

4. As set out in document SAICM/ICCM.2/10, the Conference may wish to consider calling for cooperative actions on each issue as appropriate. In doing so, the Conference may wish:

(a) To assure itself that each issue is an emerging policy issue, drawing upon the relevant background document and the definition of an emerging policy issue and selection criteria developed during the informal discussions held in Rome on 23 and 24 October 2008;

(b) To forge consensus on priorities for cooperative action on the emerging policy issues and call for appropriate action.

5. As the Conference at its current session will perform its function in relation to emerging policy issues for the first time there are no precedents for the types of action, if any, for which the Conference might call. Such actions could include non-binding recommendations and requests for action addressed to the governing bodies of intergovernmental organizations, Governments, scientific bodies and civil society stakeholders, or the initiation of follow-up work under the auspices of the Conference itself through intersessional working groups, a subsidiary body, the secretariat or other mechanisms. With regard to work proposed to be undertaken under the auspices of the Conference, participants may wish to assess whether such work would be consistent with the functions of the Conference set out in paragraph 24 of the Overarching Policy Strategy and, by implication, the functions of the secretariat set out in paragraph 28 thereof. Participants may also wish to consider the financial viability of the actions proposed to be undertaken under the auspices of the Conference, drawing on the budgetary information provided in document SAICM/ICCM.2/INF/32 in relation to subsidiary bodies and other mechanisms for intersessional work.

³ Report of the World Summit on Sustainable Development, Johannesburg, South Africa, 26-August-4 September 2002 (United Nations publication, Sales E.03.II.A.1 and corrigendum).

Nanotechnology and manufactured nanomaterials

Explanatory note

1. The co-facilitators have developed the following set of elements as starting points for further deliberations should the Conference decide to develop a resolution on nanotechnology and manufactured nanomaterials.

Proposed elements of a resolution

[Resolution on cooperative actions on nanotechnology and manufactured nanomaterials]

2. There are potential benefits and new opportunities associated with the use of nanotechnology and nanomaterials, but also challenges, potential environmental health and safety risks and ethical and social issues. There is a need to raise awareness of these issues.

3. Nanotechnologies deal with visualizing, characterizing and manufacturing tailored materials, devices and systems typically in the size range between 1 and 100 nm.

4. Governments that have not yet done so may wish to consider the relevance of nanotechnology and manufactured nanomaterials to their national situation. This could be done by, for example, integrating nanotechnology considerations into the national profile.

5. Various activities are being undertaken by academic institutions, industry and Governments related to the environmental health and safety of manufactured nanomaterials and to their applications that may benefit the environment. Relevant stakeholders should consider making publicly available as much of this information as possible, including through clearing houses.

6. It is important to take into account the relevant work of intergovernmental and international organizations, in addition to the national and regional activities of Governments and non-governmental organizations. [The Organisation for Economic Cooperation and Development has opened up its two working parties⁴ to permit active participation by non-member economies and other observers. Non-member countries or other interested observers are encouraged to contact the Organization's secretariat and participate in the relevant working parties' activities].

7. Some Governments are devoting considerable resources to research and development into new applications based on nanotechnology. Those Governments may wish to consider balancing such resources with appropriate sums for research into the environmental health and safety implications.

8. There is a need to ensure that manufactured nanomaterials are produced and used in a way that will contribute to the 2020 World Summit on Sustainable Development goals related to chemicals. It is important for risk assessment and risk management strategies to be incorporated into this effort. Governments may wish to consider funding research into nanotechnology applications that may be useful in taking the actions called for in the Plan of Implementation of the World Summit on Sustainable Development, including in developing countries and countries with economies in transition.

9. While the environmental health and safety implications of manufactured nanomaterials continue to be explored, Governments and industry should consider taking measures to prevent or minimize exposure of workers and consumers, and releases to the environment, particularly for hazardous manufactured nanomaterials or where there is uncertainty as to the environmental and human health impact. Steps to inform downstream users through the entire supply chain via material safety data sheets or other means should be taken where appropriate.

10. [Although many national and regional activities dealing with manufactured nanomaterials are rapidly developing, many countries lack comprehensive policy frameworks. The lack of an inclusive global policy framework has also been noted.]

⁴ The two working parties are the working party on manufactured nanomaterials and the working party on nanotechnology.

11. [The special vulnerability of groups such as children, pregnant women and older persons to manufactured nanomaterials is recognized and therefore the need to take appropriate safety measures to protect their health is emphasized.]
12. [Further research and research strategies to support better analysis of the potential risks to human health and the environment are required.]
13. [The needs and capacities of developing countries and countries with economies in transition to cope with manufactured nanomaterials must be better understood.]
14. [With a view to minimizing risks posed by manufactured nanomaterials, the rights of countries to accept or reject manufactured nanomaterials with no discrimination between domestic products and imports is recognized.]
15. [Nanotechnology and manufactured nanomaterials are an important new and emerging issue. The International Conference on Chemicals Management at its second session decides to amend the Global Plan of Action of the Strategic Approach to International Chemicals Management to include the new work area “Nanotechnology and manufactured nanomaterials” and the new specific activities as set out in the appendix to the present resolution.]

[Next steps:

16. [Governments and industry should ensure that manufactured nanomaterials are treated in a precautionary manner throughout their life cycle.]
17. [Products containing nanomaterials are already on the market but standards for nanomaterials are not yet available. Governments should therefore make recommendations on how to handle nanomaterials safely based on existing knowledge.]
18. Governments and stakeholders should begin or continue dialogue to consider the potential benefits and risks of manufactured nanomaterials.
19. Governments, intergovernmental and international organizations, universities, the private sector and other stakeholders should make information on the use and risks associated with the life cycle of manufactured nanomaterials readily available to the general public [with an executive summary intended for non-scientists] to raise awareness and enable informed decisions. [Clearing-house mechanisms employing information and communication technologies substantially facilitate the useful sharing of national and international information in an efficient, simple and well-structured manner. Publicly accessible internet-based web portals providing access to information on nanotechnology research and policymaking may serve to promote informed decision-making and public acceptance of policy outcomes.]
20. [The capacity of civil society should be strengthened so that it may participate effectively in decision-making related to manufactured nanomaterials. [National education systems should be involved in sharing information on the potential benefits and risks of nanomaterials.]]
21. Researchers and academics should undertake further research to evaluate effectively the potential risks of nanomaterials [especially for particularly vulnerable groups, such as children, pregnant women and older persons.]
22. Governments and industry should continue to fill gaps in risk assessments relating to the entire life cycle of manufactured nanomaterials under real-world conditions.
23. [Industry should involve workers and their representatives when developing occupational health and safety programmes and measures, including risk assessment, selection of risk prevention measures and the surveillance of risks related to manufactured nanomaterials.]
24. Measures should be taken to prevent or minimize the exposure of workers and releases to the environment, [where appropriate] [particularly for hazardous manufactured nanomaterials or where there is uncertainty as to the environmental and human health impact of manufactured nanomaterials].
25. [Researchers using manufactured nanomaterials should cooperate with environment and health and safety experts and medical communities in existing and planned research programmes.]
26. [The international community should continue to develop, fund and share effective research strategies on potential risks to human health and the environment.]

27. Governments and organizations should consider how best to inform downstream users of nanomaterials about the health and safety risks and novel characteristics of manufactured nanomaterials, and establish what level of information is appropriate, using, for example, material safety data sheets.
28. [Industry should continue or initiate communications and awareness-raising within stewardship programmes on environmental and health and safety (occupational) aspects of manufactured nanomaterials, including workplace monitoring, and instigate further cooperative approaches between industry and other stakeholders.]
29. Governments and stakeholders should promote ways to share safety information on manufactured nanomaterials, while exploring the need for changes to current legislative frameworks, stewardship programmes and voluntary activities.
30. [Countries and organizations should establish partnerships, with a view to providing financial support, to assist developing countries and countries with economies in transition to build scientific, technical, legal and regulatory policy expertise related to the risks of manufactured nanomaterials.]
31. [Governments, according to their capacity, should cooperate in drawing up national codes of conduct, with the inclusion of all stakeholders and assisted by international organizations, and [encourage them to participate actively in global discussions] [evaluate the feasibility of developing global codes of conduct in a timely manner.]]
32. [Producers should provide appropriate information about the content of manufactured nanomaterials to inform consumers about potential risks through, as appropriate, product labelling and, as appropriate, websites and databases.]
33. Intergovernmental organizations and other relevant organizations should assist Governments to implement these actions.
34. [Governments and industry should seek to promote alternatives to nanomaterials.]
35. [The international community should develop and fund capacity-building for Governments and civil society, including in developing countries and countries with economies in transition.]
36. [Governments should establish a system of nanomaterial registration for specific uses.]
37. [Non-governmental organizations should be encouraged to be involved in aspects related to the sound management of nanomaterials.]
38. Governments, intergovernmental, international and non-governmental organizations, industry and other stakeholders should support these recommendations.
39. [The Conference requests the World Health Organization and the International Labour Organization to develop a guidance document on occupational health risks from nanotechnology and manufactured nanomaterials that is relevant to developed countries, developing countries and countries with economies in transition.]
40. [The Conference creates an intersessional working group to help to fulfil and implement paragraph 14 (g) of the Overarching Policy Strategy of the Strategic Approach to ensure that existing, new and emerging issues of global concern are sufficiently tackled by means of appropriate mechanisms. The working group is tasked with exploring issues relevant to developing countries and countries with economies in transition (including a review of existing information on nanotechnology, and information exchange on products containing nanomaterials, potential health and environmental effects). In addition, the working group develops documents relating to the social and ethical issues surrounding nanotechnology for developing countries and countries with economies in transition, together with legislative guidance on specific legal framework and policies relating to nanomaterials and nanotechnology.]
41. [The working group conducts its business during the intersessional period, primarily through electronic means and teleconferences, meeting in person on the margins of other existing meetings, as appropriate, and ensures that such work is open and transparent in nature.]
42. [The working group considers the following elements where appropriate:
 - (a) Exchanging information on products containing nanomaterials;
 - (b) Exchanging information on existing and proposed regulations and legislation;
 - (c) Exchanging information on the effects of nanomaterials on human health and the environment;

(d) Exchanging information and providing international support to strengthen existing national legislation relating to the protection of human health in relation to nanotechnology and manufactured nanomaterials;

(e) Exchanging information on product labelling;

(f) Building capacity to facilitate laboratory tests for nanomaterials;

(g) Building capacity to manage wastes containing manufactured nanomaterials;

(h) Developing legislative guidance on an extended producer liability scheme;

(i) Developing a thought-starter document on the social and ethical issues surrounding nanotechnology and manufactured nanomaterials for developing countries and countries with economies in transition].

43. [The working group reports on the progress of its work through the Strategic Approach website and to the International Conference on Chemicals Management at its third session].

44. The International Conference on Chemicals Management at its third session should consider the need for possible further action on this issue.]].

Appendix

Proposed amendment to add a new work area to the Global Plan of Action of the Strategic Approach to International Chemicals Management pertaining to knowledge and information about nanotechnology and manufactured nanomaterials

Work areas pertaining to knowledge and information (objective 2)					
Work area	Activities	Actors	Targets/Time frame	Indicators of progress	Implementation aspects
Nanotechnology and manufactured nanomaterials	1. Increase understanding of the environmental health and safety implications, promote responsible development and environmentally beneficial applications, increase understanding of ethical considerations and develop and promote consensus standards on nanotechnology and manufactured nanomaterials.	National Governments, intergovernmental and international organizations, academic institutions, industry, non-governmental organizations.	2009–2015	Harmonized and validated methods for testing and assessment are available. Applications useful in attaining the WSSD goals are available. Governments and the public are aware of environmental health and safety and ethical, legal and social implications.	Coordination of the various modules by the Inter-Organization Programme for the Sound Management of Chemicals.
	2. Support and, where feasible, increase funding for research on nanotechnology implications and for applications that may be useful in meeting the actions called for in the Plan of Implementation of the 2020 World Summit on Sustainable Development goals, including such actions in developing countries and countries with economies in transition.	National Governments, intergovernmental and international organizations, academic institutions, industry.	2009–2020	Environmental health and safety implications of manufactured nanomaterials are better understood. Applications useful in meeting the WSSD goals are available.	It is important for risk assessment and risk management strategies to be incorporated into this effort.
	3. Take measures to prevent or minimize unintended exposure of workers, consumers and the general public, and releases to the environment, particularly for hazardous manufactured nanomaterials or where there is uncertainty as to the environmental or human health impact.	National Governments, intergovernmental and international organizations, academic institutions, industry.	2009–2012	Manufacturers and downstream users of nanomaterials are informed about hazardous nanomaterials. Measures to minimize exposure are in place.	Steps to inform downstream users through the whole supply chain via material safety data sheets or other means should be taken where appropriate.

Annex II

Information about chemicals in products

Explanatory note

1. The proposed actions, including the establishment of a working group to promote the implementation of paragraph 15 (b) of the Overarching Policy Strategy of the Strategic Approach in relation to improving information about chemicals in products, are based on the conclusions and recommendations arising out of an informal workshop on stakeholder information needs on chemicals in products, held in Geneva from 9 to 12 February 2009,⁵ taking into account additional comments received from Strategic Approach stakeholders during the preparation of the background information document and the present proposed actions.

Proposed resolution

Improving access to and availability of information about chemicals in products

The Conference,

Recalling the Overarching Policy Strategy of the Strategic Approach and its provisions on knowledge and information, which state, among other things, the objective of ensuring that information on chemicals throughout their life cycle, including, where appropriate, chemicals in products, is available, accessible, user-friendly, adequate and appropriate to the needs of all stakeholders,⁶

Mindful that confidential commercial and industrial information and knowledge should be protected in accordance with the provisions laid out in paragraph 15 (c) of the Overarching Policy Strategy,

Recognizing that international trade results in chemicals, including chemicals in products, being transported between regions, causing adverse impacts in particular cases, and may pose future risks to human health and the environment at various stages of the life cycle of a product, such as during production, use, recycling or disposal, and therefore gives the issue of chemicals in products a global dimension that entails appropriate international responses,

Recognizing also that knowledge and information about hazardous chemicals in products is fundamental to the sound management of chemicals throughout the life cycle of products and that chemicals in products are an important cross-cutting issue involving a broad range of stakeholders with specific information needs,

Recognizing further that, for effective and efficient information generation and accessibility, cooperative action is needed at all levels with the involvement of all relevant sectors and stakeholders, in accordance with national authorities and regulations and within available resources,

Welcoming the initiatives taken by Governments, industry, non-governmental organizations and others to facilitate the exchange of information on hazardous substances in products in some areas,

Noting, however, that no comprehensive global action has been developed to date for products that fall outside the purview of the Globally Harmonized System of Classification and Labelling of Chemicals,⁷ and that neither has the relative benefit of action in this area been developed in detail compared to efforts to reduce risks associated with better understood chemical exposure routes,

Recognizing that current efforts and capacities to provide information about hazardous chemicals in products and suitable and available alternatives are insufficient for informed

⁵ Organized by UNEP and Sweden and supported by Japan;
http://www.chem.unep.ch/unepsaicm/cheminprod_dec08

⁶ Report of the first session of the International Conference on Chemicals Management (SAICM/ICCM.1/7), annex II, para. 15 (b) (i).

⁷ *Globally Harmonized System of Classification and Labelling of Chemicals* (second revised ed.), New York and Geneva: United Nations, 2007, ST/SG/AC.10/30/Rev.2, ISBN 978-92-1-116957-7 (United Nations publication, Sales No. E.07.II.E.5).

decision-making to understand fully and, where needed, to protect human health and the environment from the risks that may occur throughout the life cycle of products,

Recognizing also that international cooperation on this issue is essential and that urgent action is needed to promote harmonization, thereby avoiding a patchwork of information systems while ensuring compatibility with existing systems and maximizing benefits to all relevant stakeholders,

Mindful that the efficient use of information requires the capacity to manage, interpret and apply the information available and that there is a need to raise awareness of the potential risks associated with chemicals in products and of suitable and available alternatives,

1. *Agrees*, with a view to taking appropriate cooperative actions, to consider further the need to improve availability and access to information on chemicals in products in the supply chain and throughout their life cycle, recognizing the need for further action to fulfil the overall objective of the Strategic Approach that by 2020 chemicals are used and produced in ways that minimize significant adverse effects on human health and the environment;

2. *Decides* to establish a working group, subject to available resources, with a mandate as set out in the annex to the present resolution, to review existing initiatives and other relevant information and to develop a proposal for an information system or framework of systems and actions, where appropriate, to meet the need to improve availability and access of information on chemicals in products;

3. *Recommends* that proposals for cooperative actions should take into account the Globally Harmonized System of Classification and Labelling of Chemicals and avoid any duplication of efforts under that system;

4. *Encourages* Governments, regional economic integration organizations, intergovernmental organizations and other international organizations, industry or business organizations, non-governmental and civil society organizations and academic institutions to participate in the working group;

5. *Urges* all Governments, intergovernmental organizations and non-governmental organizations, including from the private sector, to provide adequate human, financial and in-kind resources on a voluntary basis to support the working group;

6. *Invites* the United Nations Environment Programme and other interested organizations to provide support to the working group, including by developing and using relevant information and guidelines and compiling case examples, approaches and tools to be made available through the Strategic Approach clearing-house mechanism;

7. *Invites* the working group to report on the progress of its work through the Strategic Approach website and to the International Conference on Chemicals Management at its third session.

Appendix

Improving access to and availability of information about chemicals in products

Proposed terms of reference of the working group

1. The terms of reference that follow are for a working group with a mandate to develop a proposal for an information system or framework of systems and actions, where appropriate, to promote the achievement of paragraph 15 (b) of the Overarching Policy Strategy of the Strategic Approach which states:

To ensure, for all stakeholders: that information on chemicals throughout their life cycle, including, where appropriate, chemicals in products, is available, accessible, user friendly, adequate and appropriate to all stakeholders. Appropriate types of information include their effects on human health and the environment, their intrinsic properties, their potential uses, their protective measures and regulation.

2. The working group is proposed to be established under the auspices of the International Conference on Chemicals Management, subject to available resources.

Overall objective

3. The overall objective of the working group is to promote the implementation of paragraph 15 (b) of the Overarching Policy Strategy of the Strategic Approach and related activities in the Global Plan of Action, in particular those relating to information management and dissemination in the case of chemicals in products.⁸

Specific objectives

4. The working group shall:

(a) Review existing information systems pertaining to chemicals in products, together with other relevant information;

(b) Develop a proposal for an information system or framework of systems and actions, where appropriate, to promote implementation of the Strategic Approach with regard to information about chemicals in products.

5. The working group shall carry out its work taking into account paragraph 15 (c) of the Strategic Approach relating to confidential commercial and industrial information and give priority to the following issues:

(a) Identifying and prioritizing product groups and the circumstances of exposure where risks may occur;

(b) Determining scientifically the hazardous chemicals of concern;

(c) Identifying the relevant stakeholders and their specific information needs, providing further suggestions as to which information to provide and in what format;

(d) Providing additional information on how Governments and stakeholders will gain access to the proposed information system(s) and how it (they) will operate;

(e) Analysing the costs and benefits to industry, Governments and others in providing and gaining access to the information system(s), in addition to any potential constraints associated with providing the information such as confidential commercial and industrial information;

(f) Devising appropriate methods to make information on chemicals in products available to all stakeholders.

⁸ The following activities in the Global Plan of Action are identified of particular relevance: 108, 111 and 112.

6. The working group may also consider the following key elements in its work, where appropriate:

- (a) Complementary activities of other relevant emerging issues;
- (b) Work and activities undertaken in other multilateral or international forums with a relevance to information systems, including the Marrakech Process on Sustainable Consumption and Production;⁹
- (c) Work undertaken within individual industry sectors and across their supply chain to facilitate information exchange;
- (d) Specific challenges and needs of developing countries and countries with economies in transition, such as capacity-building needs, technical and financial needs and technology transfer needs;
- (e) Special needs of small-sized and medium-sized enterprises and the informal sector, as appropriate.

7. The working group shall, in carrying out its work, use the outcome of the informal workshop on stakeholders' information needs on chemicals in products,¹⁰ held in Geneva from 9 to 12 February 2009, recognizing the informal nature of the workshop, and shall use other relevant information available from participants in the working group.

8. In carrying out its work the working group shall take into account the Globally Harmonized System of Classification and Labelling of Chemicals and endeavour to avoid any duplication of efforts under that system.

Participation

9. The working group is a voluntary and collaborative entity engaging various stakeholders including governmental, non-governmental, public and private stakeholders, in which all participants agree to work together in an open, transparent and systematic way to achieve the overall objective as stated above. A fair geographical distribution among participants in the working group, reflecting all United Nations regions, is highly desirable.

10. Participation in the working group is open to any Government, regional economic integration organization, intergovernmental organization, international, regional or national organization, industry or business organization, non-governmental and civil society organization or academic institution. To enhance the efficiency of the working group and taking into account the methods of work set out below, it is recommended that the number of participants should be kept to a manageable level.

11. It is recommended that participants should have expertise in relevant technical issues in at least one of the two following areas:

- (a) Relevant environment or health policy;
- (b) Functioning and provisions of relevant chemicals management frameworks and agreements.

Method of work

12. The working group shall conduct its business during the intersessional period, primarily through electronic means and teleconferences, meeting in person and on the margins of other existing meetings, as appropriate. The work shall be conducted in an open and transparent manner.

13. English shall be the working language of the working group.

⁹ The Marrakech Process on Sustainable Consumption and Production is a global multi-stakeholder process to support the implementation of sustainable consumption and production and the elaboration of a 10-year framework of programmes on sustainable production and consumption that will be reviewed by the Commission on Sustainable Development during the 2010–2011 two-year cycle. See: <http://www.unep.fr/scp/marrakech/>

¹⁰ Organized by the United Nations Environment Programme and Sweden and supported by Japan; http://www.chem.unep.ch/unepsaicm/cheminprod_dec08/

14. A chair shall be designated from among participants to facilitate the overall coordination of the group.
15. The members of the working group shall seek to reach agreement by consensus. Should consensus not be reached, the range of views shall be reflected in the report to be submitted to the International Conference on Chemicals Management.
16. The working group shall apply the rules of procedure of the International Conference on Chemical Management, *mutatis mutandis*, except when otherwise stated in the present terms of reference.

Resources

17. The working group shall carry out its work subject to available resources. Each entity or individual, upon becoming a member of the working group, is encouraged to contribute resources (financial or in-kind) or expertise to the development and implementation of working group activities. Members shall work to identify potential relevant governmental or other institutional donors with an interest in providing resources to support the working group. Countries and organizations in a position to do so are encouraged to make resources available.

Annex III

Electronic waste

Explanatory notes

1. Electronic waste is a significant global issue of a cross-cutting nature requiring the effective cross-sectoral implementation of Strategic Approach objectives pertaining to risk reduction, knowledge and information and illegal international traffic, together with the successful integration of such implementation efforts with various international and national instruments and programmes for waste management and product design, including those of the private sector.
2. While several activities contained in the Global Plan of Action of the Strategic Approach are germane to the issue,¹¹ no work areas specifically pertain to electronic waste.
3. Of the various actions proposed by stakeholders contained in document SAICM/ICCM.2/INF/36, the facilitator of the present issue proposes that the Conference should consider establishing a working group to identify further and promote innovative initiatives and pragmatic actions to tackle the problem of electronic waste. The working group would complement efforts by existing bodies and would consider the various stages of the electrical and electronic goods supply chain, taking into account the special circumstances of developing countries and countries with economies in transition, including small island developing States. The facilitator wishes to draw attention to some linkages between this issue and that of chemicals in products.
4. In drafting the following proposed resolution for consideration by the Conference the facilitator has endeavoured to avoid duplication of activities under the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal.

Proposed resolution on hazardous substances and electronic waste

The Conference,

Recalling that the implementation of the Strategic Approach to International Chemicals Management and its objectives and the relevant work areas of the Global Plan of Action are based upon a life-cycle approach to the sound management of chemicals, including waste management,

Recalling also the objectives of the Strategic Approach to enhance synergies between the activities of Governments, international institutions and multilateral organization secretariats and to enhance cooperation on the sound management of chemicals between Governments, the private sector and civil society at the national, regional and global levels,

Recognizing the work of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal on this issue, in particular that pursuant to the Nairobi Declaration on the Environmentally Sound Management of Electrical and Electronic Waste,¹²

Recognizing also that:

- (a) Electronic waste is a growing and critical concern as a result of its illegal dumping, which results in the transboundary movement of its hazardous constituents such as heavy metals and brominated flame retardants;
- (b) There is a lack of capacity to recycle electronic waste in developing countries and countries with economies in transition, leading to the release of hazardous substances causing harm to human health and the environment;
- (c) There is a pressing need for clean technology and environmentally friendly design for electronic and electrical products, which would include phasing out those hazardous substances used in production and included in components;
- (d) Products with low upgradability and recyclability can contribute to higher amounts of waste being generated;

¹¹ For example, work activities 44, 54, 71–73, 80, 83, 84 119, 186, 190, 194 and 204.

¹² UNEP/CHW.8/16*, Annex IV.

(e) Second-hand, near end-of-life electronic and electrical products that function for limited periods of time can contribute to the problem of electronic waste;

(f) Product stewardship and extended producer responsibility is important in the life-cycle management of electronic and electrical products;

(g) There is a need to establish robust national policies and legislation, with diligent enforcement, relating to producers' and traders' responsibilities and take-back and recycling schemes with set targets,

1. *Agrees* to establish a working group on electronic waste, subject to available resources, to tackle the following issues as a priority:¹³

(a) Reducing and eventually phasing out the use of restricted or hazardous substances in electrical and electronic equipment and waste electrical and electronic equipment;

(b) Developing effective global strategies, including incentives for the reduction of toxic substances in electrical and electronic equipment and measures to minimize human exposure;

(c) Developing substitute or alternative chemicals and eventually phasing out hazardous substances in electrical and electronic products and electronic waste through environmentally friendly product design, procurement and consumption, while also minimizing product obsolescence;

(d) Undertaking a scientific study of the fate of hazardous substances, in particular brominated flame retardants in electronic waste during processing, especially in developing countries and countries with economies in transition;

(e) Developing a global information database to exchange and disseminate information on the hazardous substances found in electrical and electronic products and waste, which would include available guidance on the sound management of such waste and substances;

(f) Establishing a global framework or mechanism to provide solutions and guidance to prevent harmful near end-of-life exports of used electronic goods that may not technically be waste but for which the environmental liabilities of their import far outweigh the benefits to the receiving country;

2. *Invites* the working group to conduct its business during the intersessional period, primarily through electronic means and teleconferences, meeting in person and on the margins of other meetings, as appropriate, and to work in an open and transparent manner;

3. *Also invites* the working group to report on the progress of its work through the Strategic Approach website and to the International Conference on Chemicals Management at its third session.

¹³ Appendix 3 contains additional cooperative actions that may be considered by the working group.

Appendix

Electronic waste

Priority areas for consideration by the proposed working group

- (a) Reduction and eventual phase-out of restricted or hazardous substances in electrical and electronic equipment and waste electrical and electronic equipment**
 - (i) Tackling the need to understand the complexities of eliminating hazardous chemicals and substituting materials in electrical and electronic equipment and also providing information on life-cycle impacts of newer materials or chemicals;
 - (ii) Undertaking cooperative actions between countries in the uniform adoption of restrictions on and phase-out of the use of hazardous substances in electrical and electronic equipment, in addition to in the development of harmonized eco-labelling for electrical and electronic equipment and electronic waste;
 - (iii) Promoting environmentally friendly design aspects for electrical and electronic equipment, including easier upgradability, higher recyclability and improved energy efficiency;
 - (iv) Researching substitutes or alternatives that are non-hazardous chemicals and their implementation in electrical and electronic equipment through design changes;
 - (v) Developing effective global strategies, including incentives for the reduction and eventual phase-out of toxic substances in electrical and electronic products and electronic waste to minimize human exposure, by means of environmentally friendly product design, procurement or consumption, while also minimizing product obsolescence;
 - (vi) Developing and implementing pilot projects on electronic waste that will reduce the quantity of and hazards posed by waste produced in various regions, including Latin America, Asia and the Pacific and Africa and in small island developing States, with the consequent sharing of experiences and possible technology transfer such as reduction or replacement of mercury with suitable alternatives in fluorescent lamps for efficient energy lighting;
 - (vii) Undertaking a scientific study of the fate of priority hazardous substances, especially brominated flame retardants in electrical and electronic waste during processing;
- (b) Information needs about hazardous substances in electronic products and electronic waste along the product chain in their life cycle**
 - (i) Filling data gaps on exposure routes and establishing an appropriate format by which to supply information;
 - (ii) Presenting and communicating information on hazardous substances in electrical and electronic equipment and electronic waste to stakeholders with a view to protecting human health and the environment;
 - (iii) Developing a global system to exchange information on hazardous substances in electrical and electronic equipment and electronic waste that would complement the Globally Harmonized System of Classification and Labelling of Chemicals, bearing in mind the entire supply chain;
 - (iv) Developing a global information database on the hazardous substance content of electrical and electronic products and waste that would include guidance on sound management;
 - (v) Labelling electrical and electronic products adequately to provide information about the hazardous substances contained in the products, including their origin and a tracking system based on life cycle;
 - (vi) Harmonizing the criteria for the classification of hazardous substances and the rules on labelling and packaging for hazardous substances in electronic waste;
- (c) Development of technical guidance and capacity-building**
 - (i) Developing and harmonizing definitions and categorization of hazardous substances in electronic waste as reflected in national regulations and legislation;

- (ii) Building the capacity of developing countries and countries with economies in transition, in addition to small island developing States, in sound hazardous chemicals management;
- (d) Governance**
- (i) Establishing a global framework or mechanism to provide solutions and guidance to prevent harmful near end-of-life exports of used electronics that may not technically be waste but for which the environmental liabilities of their import far outweigh the benefits to the receiving country;
 - (ii) Identifying gaps in national legal frameworks and developing appropriate national, regional and global frameworks on sound hazardous chemicals management in electrical and electronic equipment waste;
 - (iii) Developing legislative guidance for extended producer responsibility, individual producer responsibility and product stewardship, especially in developing countries and countries with economies in transition, with regard to hazardous substances in electrical and electronic equipment and electronic waste;
- (e) Awareness-raising and education**
- (i) Promoting awareness of hazardous substances in electrical and electronic equipment and waste electrical and electronic equipment and of the need for national, regional and global control actions to all stakeholders, especially policymakers, lawmakers, regulatory authorities, Customs authorities, women, young people and the media;
 - (ii) Developing a global system of information exchange on hazardous substances in electrical and electronic equipment and waste electrical and electronic equipment, bearing in mind the entire supply chain;
 - (iii) Promoting labelling systems to inform the users of the hazards in products, the need for recycling and mechanisms in place for safe disposal;
 - (iv) Linking the electronic waste issue with the other emerging issues on information on chemicals in products and the Marrakech Process.¹⁴

¹⁴ The Marrakech Process on Sustainable Consumption and Production is a global multi-stakeholder process to support the implementation of sustainable consumption and production and the elaboration of a 10-year framework of programmes on sustainable production and consumption that will be reviewed by the Commission on Sustainable Development during the 2010–2011 two-year cycle. See: <http://www.unep.fr/scp/marrakech/>

Annex IV

Lead in paint

Explanatory notes

1. Consistent with the guidance provided by the informal Friends of the Secretariat planning group, the proposed actions are specific to the issue of lead in paint. While lead in paint is a significant source of exposure, there are other uses of lead in products such as batteries and toys that may also be significant sources of exposure. Several contributors suggested therefore that the scope of the proposed actions should be broadened to include other sources of human exposure to lead. The Conference may wish to consider modifying the scope of the proposed actions in its deliberations.
2. The proposed action has been developed by the co-facilitators based on the proposal submitted to the Conference at its second session by an ad hoc working group of the Forum Standing Committee of the Intergovernmental Forum on Chemical Safety. Comments received by the co-facilitators while carrying out the preparatory work on this issue have been used to amend the present submission as appropriate.
3. The proposed partnership would use as models the partnership formed during the World Summit on Sustainable Development to promote clean fuels and vehicles, which has been very effective, and the Global Mercury Partnership established by the United Nations Environment Programme.¹⁵

Proposed resolution

Global partnership to promote the implementation of the measures contained in paragraph 57 of the Plan of Implementation of the World Summit on Sustainable Development on phasing out the use of lead in paint

The Conference,

Recalling the commitment made in paragraph 57 of the Plan of Implementation of the World Summit on Sustainable Development¹⁶ to phase out lead in lead-based paints and in other sources of human exposure and to work to prevent, in particular, children's exposure to lead and strengthen monitoring and surveillance efforts and the treatment of lead poisoning,

Acknowledging the Dakar Resolution for Eliminating Lead in Paints adopted by the Intergovernmental Forum on Chemical Safety at its sixth session,¹⁷

Recognizing the progress being made towards achieving a global phase-out of lead in automotive fuels by the Partnership for Clean Fuels and Vehicles established under the United Nations Environment Programme,

Recalling its commitment under the Dubai Declaration on International Chemicals Management¹⁸ to work towards closing the gaps and addressing the discrepancies in the capacity to achieve sustainable chemicals management between developed countries on the one hand and developing countries and countries with economies in transition on the other by addressing the special needs of the latter and strengthening their capacities for the sound management of chemicals and the development of safer alternative products and processes, including non-chemical alternatives, through partnerships, technical support and financial assistance,

Recalling also paragraph 7 (d) of the Overarching Policy Strategy of the Strategic Approach, which aims to promote and support the development and implementation of, and further innovation in, environmentally sound and safer alternatives, including cleaner production, informed substitution of chemicals of particular concern and non-chemical alternatives,

¹⁵ http://www.chem.unep.ch/mercury/partnerships/new_partnership.htm.

¹⁶ *Report of the World Summit on Sustainable Development*, Johannesburg, South Africa, 26 August-4 September 2002 (United Nations publication, Sales No. E.03.II.A.1 and corrigendum), chap. I, resolution 2, annex.

¹⁷ SAICM/ICCM.2/INF/5.

¹⁸ SAICM/ICCM.1/7, annex I.

1. *Agrees* that a global partnership to support concerted action to promote the phasing out of lead in paint will be an important contribution to both the implementation of paragraph 57 of the Plan of Implementation of the World Summit on Sustainable Development and the implementation of the Strategic Approach to International Chemicals Management;
2. *Decides* to establish a global partnership to promote the phasing out of lead in paint under the auspices of the International Conference on Chemicals Management and in accordance with the terms of reference set out in the appendix to the present resolution;
3. *Encourages* Governments, regional economic integration organizations, intergovernmental organizations and other international organizations, industry or business organizations, non-governmental and civil society organizations and academic institutions to participate in that global partnership;
4. *Recognizes* that attaining the goals and objectives of the global partnership will require sufficient human, financial and in-kind resources, and therefore encourages all Governments, intergovernmental organizations and non-governmental organizations, including from the private sector, to provide such resources on a voluntary basis;
5. *Requests* the [secretariat of the Strategic Approach to International Chemicals Management] [Chemicals Branch of the Division of Technology, Industry and Economics of the United Nations Environment Programme], within available resources, to service the global partnership;
6. *Invites* the global partnership to report on progress in its work to the International Conference on Chemicals Management at future sessions.

Appendix

Lead in paint

Terms of reference for a global partnership to promote the implementation of the measures contained in paragraph 57 of the Plan of Implementation of the World Summit on Sustainable Development on phasing out the use of lead in paint

1. The following terms of reference are for a global partnership to phase out the use of lead in paint to support implementation of paragraph 57 of the World Summit on Sustainable Development Plan of Implementation,¹⁹ in which participants agreed to:

Phase out lead in lead-based paints and in other sources of human exposure, work to prevent, in particular, children's exposure to lead and strengthen monitoring and surveillance efforts and the treatment of lead poisoning.

2. The global partnership is established under the auspices of the International Conference on Chemicals Management.

Overall goal

3. The overall goal is to promote the implementation of paragraph 57 of the Plan of Implementation by preventing children's exposure to lead via paints containing lead and to minimize occupational exposures to lead in paint.

Objectives

4. The broad objectives are to phase out the manufacture and sale of paints containing lead and eventually to eliminate the risks from such paint, since such substances contribute to childhood lead exposure. Specific objectives are:

(a) To raise the awareness of government authorities and regulators, private industry, manufacturers, consumers, workers, trade unions and health-care providers about the toxicity of lead in paints and the availability of technically superior and safer alternatives;

(b) To catalyse the design and implementation of appropriate prevention-based programmes to reduce and eliminate risks from the use of lead in paint. When processes for phasing-out lead are put in place in installations manufacturing paint, arrangements must be made to ensure a fair transition that protects workers' health [and employment];²⁰

(c) To provide assistance to paint manufacturers that continue to produce and market paints containing lead to enable them to phase out lead from their paints;

(d) To promote the establishment of appropriate national regulatory frameworks to stop the manufacture, import, sale and use of paints containing lead for applications likely to contribute to childhood lead exposure;

(e) As appropriate, to promote international third-party certification of new paint products to help consumers to recognize paint and coatings without added lead;

(f) To provide guidance and promote assistance to identify and reduce potential lead exposure in and around housing, such as household dust, and also in childcare facilities and schools in which paint containing lead is present. Guidance and assistance should also be provided to industrial facilities producing or using paint containing lead to reduce workers' lead exposure.

Membership

¹⁹ *Report of the World Summit on Sustainable Development*, Johannesburg, South Africa, 26 August-4 September 2002 (United Nations publication, Sales No. E.03.II.A.1 and corrigendum), chap. I, resolution 2, annex.

²⁰ One contributor proposed deleting "employment" as it views this issue beyond the scope of the Strategic Approach.

5. The global partnership is a voluntary and collaborative relationship between various parties, whether governmental, non-governmental, public or private, in which all participants agree to work together systematically to attain the overall goal of phasing out the use of lead in paint.
6. The global partnership is open to Governments, intergovernmental organizations and representatives of civil society and the private sector that support the partnership goal. It is open also to any other entity or individual who agrees to work towards the goal of the partnership.
7. Participation will be encouraged from the following groups:
- (a) Representatives of national Governments including those:
 - (i) That have already phased out the use of lead in paint in their countries and are willing to share experiences and provide help to those who are now prepared to do so;
 - (ii) Where paints containing lead continue to be sold;
 - (b) Representatives of relevant intergovernmental organizations (such as the World Health Organization, the United Nations Environment Programme, the International Labour Organization, the United Nations Industrial Development Organization and the United Nations Institute for Training and Research);
 - (c) Representatives of the lead industry and the paint and coatings industry,
 - (d) Representatives of international and national companies that manufacture paints and coatings; and possibly of their relevant trade organizations;
 - (e) International and national medical, housing and public health organizations;
 - (f) Academics with expertise in relevant fields;
 - (g) Representatives of international and national non-governmental organizations that work on environmental health issues and that have experience of public outreach and awareness campaigns or of implementation of prevention programmes at the community or national levels;
 - (h) Trade unions at the local, national and international levels, so as to foster the effectiveness of the partnership.

Guidance for a working definition of “lead paint”

8. The following criteria are used as a working basis for defining “lead paint”:
- (a) The term “lead paint” includes paints, varnishes, lacquers, stains, enamels, glazes, primers or coatings used for any purposes;
 - (b) Lead is added to the paint, varnish, lacquer, stain, enamel, glaze, primer or coating;
 - (c) The total lead concentration is defined on a weight percentage of the total non-volatile portion of the product or in the weight of the dried paint film.

Activities

9. Partnership activities may include:

(a) Actions proposed to tackle lead in paint, including the significant exposures that result from previous lead paint applications on buildings:

- (i) Exchanging information on the effects of lead on health;
- (ii) Exchanging information on pathways of exposure to lead paint for children and adults;
- (iii) Providing technical expertise in the design and implementation of studies to estimate the distribution of levels of lead in blood in the populations of other nations;
- (iv) Encouraging nations to monitor health to estimate the prevalence of lead in human blood;
- (v) Building capacity and sharing information to monitor health to estimate the prevalence of lead in human blood;
- (vi) Building capacity and providing training to develop and maintain high-quality laboratory testing for lead in blood;
- (vii) Encouraging nations to conduct monitoring to estimate the prevalence of lead in the environment (for example, in water, soil and animals);
- (viii) Exchanging information on lead levels in paints in various countries;
- (ix) Exchanging information on national, provincial, State and local regulations and legislation on lead concentrations in paints permitted in various countries;
- (x) Exchanging information on labelling and certification systems with regard to the presence and concentrations of lead in paint;
- (xi) Discussing and providing technical assistance on steps that could be taken to phase out lead from paints and surface coatings such as lacquers, veneers and powder coatings worldwide;
- (xii) Encouraging the use of financial incentives to support the use of lead-free paints;
- (xiii) Developing guidelines for establishing national standards, including those that would permit the use only of lead-free paints;
- (xiv) Encouraging nations to require that only lead-free paint may be used in construction activities or renovations being supported with government funds;
- (xv) Providing guidance for and information on effective enforcement of national standards, including on how to avoid smuggling of lead paint;
- (xvi) Building the legal enforcement capacity of environmental health officers in ministries, local authorities and mines;
- (xvii) Providing international support to developing countries by devising further methods to enact comprehensive legislation to phase out lead paint completely;
- (xviii) Exchanging information and providing international support to strengthen and harmonize existing national legislation that focuses on protecting public health in relation to the phase-out of lead paint;
- (xix) Sharing knowledge on the availability of substitutes to replace lead compounds in paints;
- (xx) Assessing the hazards of substitutes for lead compounds in paint;
- (xxi) Assessing the feasibility of the voluntary phase-out of the production of lead in paint in cooperation with business and industry, including at the (sub)regional level;
- (xxii) Encouraging wholesalers and retailers to halt sales of lead paints;

- (xxiii) Encouraging nations to conduct housing surveys to estimate the prevalence of lead paint in their housing stock;
- (xxiv) Developing guidelines with descriptions of simple analytical methods and test kits to identify lead paints;
- (xxv) Building capacity and providing information and knowledge in human and laboratory equipment to facilitate laboratory tests for lead paint;
- (xxvi) Building capacity and providing information and knowledge to help officials in a range of ministries to test for lead paint;
- (xxvii) Exchanging information on methods to make housing and other buildings with lead paint safe for occupancy by children and pregnant women;
- (xxviii) Minimizing risks of previously applied lead paint in buildings by using effective containment;
- (xxix) Enhancing the elimination of lead paint in schools and other buildings where children will be present, given children's susceptibility to lead;
- (xxx) Exchanging information on suggestions for warning labels on new cans of paint alerting users to the health risks that could result if the surfaces being prepared for repainting contain lead paints;
- (xxxi) Exchanging information on safe methods to conduct repair or renovation activities on the interior and exterior of homes and other buildings that contain lead paint to minimize exposures to residents and workers and to minimize releases to the environment (including from wastes) that may contribute to future exposures;
- (xxxii) Discussing and building capacity on how to reach health providers, caretakers and parents on how to minimize children's exposure to lead from lead paint hazards as part of efforts to minimize exposures to all sources of lead exposure in the household;
- (xxxiii) Discussing steps to teach renovators, painters and other professionals how to minimize children's exposure to lead from lead paint;
- (xxxiv) Exchanging information on steps to warn workers of their vulnerability and exposure to lead in small-sized and medium-sized enterprises, in particular in developing countries;
- (xxxv) Exchanging information to promote general public awareness of the hazards of lead paint;
- (xxxvi) Exchanging information on safe disposal of lead paint waste;
- (xxxvii) Developing approaches to manage and store waste containing lead paints.

10. Activities will be developed and implemented following the lead sponsor approach. The lead sponsor(s) for each activity in collaboration with interested partners will prepare a workplan, timeline, budget and fund-raising plan.

11. The global partnership will develop and implement a monitoring mechanism for tracking progress on activities undertaken through and by the partnership.

Method of work

12. The global partnership will undertake its work primarily through electronic communication mechanisms. Opportunities in conjunction with regional meetings of Strategic Approach stakeholders and international, regional and national meetings on chemical management will be used.

13. The global partnership will be supported by the [secretariat of the Strategic Approach to International Chemicals Management] [Chemicals Branch of the Division of Technology, Industry and Economics of the United Nations Environment Programme]. Subject to the availability of resources, the [secretariat of the Strategic Approach to International Chemicals Management] [Chemicals Branch of the Division of Technology, Industry and Economics of the United Nations Environment Programme] will:

- (a) Provide administrative and secretariat support;
 - (b) Facilitate information exchange;
 - (c) Help to bring new partners to participate in the global partnership, as appropriate; and facilitate reporting on progress of the global partnership to the International Conference on Chemicals Management.
14. A chair will be designated from among the members to facilitate the overall coordination of the global partnership.

Resources

15. Each entity or individual, upon becoming a member of the global partnership, will commit to contribute resources (financial or in-kind) or expertise to the development and implementation of partnership activities. Members will work to identify potential relevant donors and resources including, Government donors or other institutional donors with an interest in providing resources to for the partnership activities.
16. A budget and fund-raising plan will be prepared for each activity by the lead sponsor(s) and interested partners. Countries and organizations in a position to do so are encouraged to provide the identified resources needs. Submission of project activity proposals to the Quick Start Programme of the Strategic Approach will be pursued.
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Annex II. Submission by the Intergovernmental Forum on Chemical Safety in relation to phasing out the use of lead in paint (SAICM/ICCM.2/INF/29)

**International Conference on Chemicals Management
Second session**

Geneva, 11–15 May 2009

Item 4 (f) of the provisional agenda*

**Implementation of the Strategic Approach to International
Chemicals Management: emerging policy issues**

**Submission by the Intergovernmental Forum on Chemical Safety
in relation to phasing out the use of lead in paint**

Note by the secretariat

6. 1. The secretariat has the honour to circulate, for the consideration of participants, a submission by the Intergovernmental Forum on Chemical Safety on a proposed global partnership to promote the implementation of measures contained in paragraph 57 of the Johannesburg Plan of Implementation of the World Summit on Sustainable Development in relation to phasing out the use of lead in paint.
7. 2. The proposal was prepared by an ad hoc working group of the Forum Standing Committee after it was decided at the sixth session of the Forum, held in Dakar from 15 to 19 September 2008, that a global partnership to support the phasing out of lead in paint was essential, particularly for developing countries and countries with economies in transition. The Forum requested the terms of reference for the proposed global partnership be submitted to the Conference at its current session so that it could consider taking a decision to support concerted action to promote the implementation of the measures contained in paragraph 57 of the Johannesburg Plan of Implementation.
8. 3. The Conference may wish to note that the submission deals with an issue that is also one of the four emerging policy issues scheduled for detailed consideration under the present agenda item.
9. 4. The submission is contained in the annex to the present note. It is being circulated as submitted and has not been formally edited.

* SAICM/ICCM.2/1



Intergovernmental Forum on Chemical Safety
Global Partnerships for Chemical Safety

Proposal
Submitted to the
International Conference on Chemicals Management
at its second session

Global Partnership to promote the implementation of the
measures contained in paragraph 57 of the Johannesburg
Plan of Implementation of the
World Summit on Sustainable Development:
Phasing Out Use of Lead in Paints

Lead sponsors: Toxic Link on behalf of IPEN, Nigeria,
International Society of Doctors for the Environment,
Canadian Environmental Law Association, LEAD Group Incorporated, Germany,
National Center for Healthy Housing (U.S.A.), Trust For Lead Poisoning Prevention

Prepared by: Forum Standing Committee *ad hoc* Working Group

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Annex 1 Dakar Resolution for Eliminating Lead in Paints

Annex 2 Global Partnership to promote the implementation of the measures contained in paragraph 57 of the Johannesburg Plan of Implementation of the World Summit on Sustainable Development: Phasing Out of Use of Lead in Paints
 Draft resolution for consideration and adoption by the International Conference on Chemicals Management at its second session

Annex Terms of Reference for a Global Partnership to promote the implementation of the measures contained in paragraph 57 of the Johannesburg Plan of Implementation of the World Summit on Sustainable Development: Phasing Out of Use of Lead in Paints

Global Partnership to promote the implementation of the measures contained in paragraph 57 of the Johannesburg Plan of Implementation of the World Summit on Sustainable Development: Phasing Out of Use of Lead in Paints

Introduction

The sixth session of the Intergovernmental Forum on Chemical Safety (Forum VI), adopted unanimously the Dakar Resolution for Eliminating Lead in Paints (Annex 1).²¹ The Resolution recognizes that the Johannesburg Plan of Implementation of the World Summit on Sustainable Development in paragraph 57 calls for the phasing out of lead in paints and in other sources of human exposure, and calls for work to prevent, in particular, children's exposure to lead and to strengthen monitoring and surveillance efforts and the treatment of lead poisoning. Forum VI decided that a global partnership to promote the implementation of the measures contained in paragraph 57 of the Johannesburg Plan of Implementation of the World Summit on Sustainable Development is essential, especially for developing countries and countries with economies in transition. Forum VI further decided that such a partnership should be to support the phasing out of use of lead in paints. It requested the Forum Standing Committee to establish an ad hoc Working Group following the lead sponsor approach to prepare draft Terms of Reference for a global partnership to be submitted to the second session of the International Conference on Chemicals Management (ICCM-2) for it to consider taking a decision to support concerted action to promote the implementation of the measures contained in the Johannesburg Plan of Implementation of the World Summit on Sustainable Development paragraph 57.

This document presents background information and a draft resolution, including draft terms of Reference for the Global Partnership, for consideration and adoption by the International Conference on Chemicals Management at its second session (Annex 2).

²¹ See: Sixth session of the Intergovernmental Forum (Forum VI) Final Report and meeting and room documents for plenary sessions on International Transport of Lead and Cadmium via trade: an international concern? and Substitution and Alternatives. (<http://www.who.int/ifcs/forums/six/en/index.html>)

WSSD Support for International Action on Lead

In 2002, the World Summit on Sustainable Development (WSSD) took two decisions to protect children's health from exposure to lead. Paragraph 56 (b) of the WSSD Plan of Implementation (POI) called for: *"Supporting the phasing out of lead in gasoline."*

The other decision was paragraph 57. It states:

*"Phase out lead in lead-based paints and in other sources of human exposure, work to prevent, in particular, children's exposure to lead and strengthen monitoring and surveillance efforts and the treatment of lead poisoning."*²²

At WSSD, the *Partnership on Clean Fuels and Vehicles* was established to contribute to the implementation of WSSD POI paragraph 56, and to help developing countries eliminate lead from fuels.²³ At a 2005 Partnership meeting held in Kenya, it was agreed that the partnership was on course to "phase out leaded gasoline by the end of 2008 worldwide."²⁴ By 2007, there remained 17 countries (with a total population of 258 million) thought still to sell leaded gasoline for road use,²⁵ and in some of these countries, the phase-out of leaded gasoline is underway. In 2006 high lead levels were found in three Asian countries with a population of about 2.5 billion. Since that time high levels of lead have been found in another nine countries where samples have been analyzed, with an additional population of over 600 million. These include countries in three continents, Africa, Asia and South America. The global campaign to eliminate lead from gasoline appears to be approaching success. This will make an important contribution in substantially reducing childhood lead exposure in many developing countries.

On the other hand, there has been less concerted international action aimed at helping to implement WSSD POI paragraph 57. Paints containing lead are still widely manufactured and sold for use in many countries of the developing world. It is thus very likely that most of the world's population lives in countries where domestic paints with high lead levels are readily available. It has long been known that paints containing lead can be a significant source of childhood lead exposure, especially when they are used to paint the interiors and exteriors of homes or schools, and when they are used to paint toys, furniture, playground equipment and other articles with which children come in contact. Moreover, paints containing lead are used in a variety of infrastructure (e. g., bridges), industrial (e. g., automobile parts), and marine (e. g., ships) applications. Other well-documented sources of human exposure to lead in addition to leaded gasoline and paints containing lead include food contamination, improper manufacturing and recycling of lead batteries, lead water pipes, lead-glazed ceramics,²⁶ and some cosmetics and "folk remedies".²⁷ There is also the problem of workplace contamination brought home on clothing and in cottage industries where the lead-using workplace is actually in or close to the home.

²² See: WSSD POI at: http://www.un.org/esa/sustdev/documents/WSSD_POI_PD/English/POIChapter6.htm

²³ See: <http://www.unep.org/pcfv/pdf/InfSheet.pdf>

²⁴ See: <http://www.unep.org/pcfv/PDF/4GPM-report-final.pdf>

²⁵ See: <http://www.lead.org.au/fs/fst27.html>

²⁶ See: the *Background Document* for the WHO Europe's *Fourth Ministerial Conference on Environment and Health* at: <http://www.euro.who.int/document/eehc/ebakdoc07.pdf>

²⁷ See: <http://www.cdc.gov/mmwr/preview/mmwrhtml/00021165.htm>

SAICM: safer alternative products and partnerships

In the Dubai Declaration on International Chemicals Management, the ministers, heads of delegation and representatives of civil society and the private sector, assembled at the International Conference on Chemicals Management in Dubai from 4 to 6 February 2006, declare(d):

17. We will work towards closing the gaps and addressing the discrepancies in the capacity to achieve sustainable chemicals management between developed countries on the one hand and developing countries and countries with economies in transition on the other by addressing the special needs of the latter and strengthening their capacities for the sound management of chemicals and the development of safer alternative products and processes, including non-chemical alternatives, through partnerships, technical support and financial assistance.²⁸

The Overarching Policy Strategy of the Strategic Approach to International Chemical Management adopted by ICCM includes the following objective:

I. IV. Objectives

A. Risk reduction

10. The objectives of the Strategic Approach with regard to risk reduction are:

11.

- (j) To promote and support the development and implementation of, and further innovation in, environmentally sound and safer alternatives, including cleaner production, informed substitution of chemicals of particular concern and non-chemical alternatives.

The establishment of a global partnership to promote the implementation of WSSD POI paragraph 57, focusing on the elimination of lead in paint, will support directly the implementation of SAICM and achievement of its objectives.

Background on Lead Exposure and Lead in Paint

Lead exposure is a well-known source of injury to human health, and particularly to the health of children and to workers in lead industries. Lead's poisonous properties have been recognized since ancient times. In the first century B.C., for example, the Roman architect, Vitruvius, spoke out against the use of lead pipes for conveying water saying that water "conveyed in lead must be injurious, because from it white lead is obtained, and this is said to be injurious to the human system." He also noted that "workers in lead, are of a pallid color for in casting lead, the fumes from it fixing on the different members, and daily burning them, destroy the vigor of the blood."²⁹

Unfortunately, the health injuries caused by exposure to lead have continued into modern times and have, in many places, intensified with increases in the use of lead.

Leaded Gasoline and Lead-Based Paints In the 20th century, the major public health campaigns to protect children and workers from lead exposure have focused on tetra-ethyl lead additives in gasoline (petrol) and interior and exterior house paints containing lead. Concerns over worker exposure increased in the early part of the 20th century and focussed on industrial processes involving lead such as foundries, smelters and mining.³⁰ The 1921 General Conference of the International Labor Organization (ILO) adopted a Convention

28 See: SAICM text at <http://www.saicm.org/index.php?menuid=3&pageid=187&submenuheader=>

29 See: Lead Poisoning and Rome, from the Encyclopedia Romana, on the web at: http://penelope.uchicago.edu/~grout/encyclopaedia_romana/wine/leadpoisoning.html

30 See: Exploring the Dangerous Trades: The Autobiography of Alice Hamilton, M.D. Northeastern University Press, 1985

to restrict the use of white lead paints for interior use and gave countries six years to comply.³¹ By 1940, twenty-four governments had formally agreed. However, the convention only addresses lead carbonate and sulfate paint formulations with a content above 2%, and exempts important sources of exposure including applications on building exteriors and pottery glazes.

Unfortunately, paints containing lead continued to be manufactured; in addition, starting in 1924, American gasoline distributors began adding lead to gasoline, despite resistance from public health advocates.³² Global production and use of these products grew very rapidly in the quarter century following World War II.³³ Alternatives to lead paint including zinc oxide and lithopone were commercially available from the early 1900s and captured ever-larger shares of the market for interior paints.³⁴ In the 1930s, falling costs of manufacturing titanium dioxide pushed this superior pigment to the top rank. Paint manufacturers continued to offer a mix of zinc, lead, and titanium products in response to commodities prices and customer demands, but by the mid 1940s economic factors dictated that far less lead and more titanium dioxide was used in paints sold in the United States. In the U.S. the percentage of lead in paints began to decrease years before the government began regulating the use of lead in paints in the early 1970s.³⁵ New US standards for lead in paint and consumer products, effective 14 August 2009, include any product designed or intended primarily for children 12 years of age or younger will be banned if it contains more than 300 parts per million total lead content by weight for any part of the product and the lead content standard for surface paint in furniture, toys and other children's products will be reduced from a maximum of 0.06 percent (600 ppm) lead by weight to a maximum of 0.009 percent (90 ppm) lead by weight.³⁶ A similar pattern took place in European countries, too, before the general sale of leaded paint was prohibited in the European Union in 1989.³⁷ In Australia, restrictions on the use of lead in paints for domestic application were initiated in the early part of the 20th century. The limit is now 600 ppm. In 2008 Australia enacted a regulation banning the use of fourteen (14) lead compounds in paints that were manufactured or imported for industrial use.³⁸ South Africa passed legislation in 2008 restricting the use of lead in household paints to less than 600 ppm, effective in March 2009. Containers of paint for industrial use, where lead was still permitted, are required to have a label stating: "WARNING Contains Lead. Dried film of this paint may be harmful if eaten or chewed. •Do not apply on toys and other children's articles or interior or exterior surfaces of dwellings. •Keep out of reach of children." Although in Thailand action to phase out paint containing lead was taken almost two decades ago in essentially a voluntary initiative by the paint industry, five of seven brands of paint recently sampled in Thailand contained lead levels as high as 30,000 ppm.^{39,40}

While many highly industrialised countries phased out the use of leaded gasoline and interior and exterior paints containing lead, paints with added lead are still commonly available in the developing world. In Russia interior paints containing lead are restricted by the legislation adopted in the USSR in 1929 and 1984 and later by the Russian Federation in 1991 and 1992.⁴¹ In 1991 Russia ratified the ILO White Lead (Painting) Convention, 1921 (No. 13)⁴². Independent research has shown that paints containing lead, mainly

31 ILO continues seeking ratifications of this Convention, see: <http://www.ilo.org/ilolex/cgi-lex/convde.pl?C013>

32 David Rosner and Gerald Markowitz, "A Gift of God" *Am J Public Health*. 1985 April; 75(4): 344–352.

33 U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook 1935-1989*

34 Christian Warren, *Brush With Death: A Social History of Lead Poisoning*. Johns Hopkins University Press, 2000, pp. 44-83.

35 U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook 1935-1989*

36 Consumer Product Safety Improvement Act (H.R. 4040) <http://thomas.loc.gov/cgi-bin/bdquery/z?d110:h.r.04040>:

37 See: European Council Directive 89/677/EEC

38 Surface Coatings Australia, APMF Notes, November 2008 page 5

39 J. Rochow personal communication "highlighted at 1994 Global Dimensions of Lead Poisoning conference, convened by the Alliance to End Childhood Lead Poisoning"

40 S. Clark "Levels of Lead in Decorative Paints", presented at The 12th Asian Paint Industry Council Meeting, Kuala Lumpur, Malaysia 6-7 November 2008, pp 98-112 of meeting document.

41 See: http://webknow.ru/ekologija_00167_6.html

42 See: <http://www.ilo.org/ilolex/cgi-lex/ratific.pl?C013>

exterior paints, can easily be found on the Russian market.⁴³ A recent study in China showed that 50% of new paint samples tested contain lead at levels equal to or exceeding 600 ppm. Despite a wide range in retail prices, there was no correlation between price and lead content among the 58 paint samples collected.⁴⁴ A similar study of new residential paints being sold in India indicates that 84% of enamel paints have lead levels that exceed 600 ppm.⁴⁵ However, one nationally distributed major brand that is available within the same price range as their competitors appears to have eliminated the use of lead pigment and other lead additives. This suggests that price should not be a deterrent for paint companies to shift to lead-free alternatives and still remain competitive.

Lead Exposure Reduces a Child's Intelligence While the initial public health concerns about paints containing lead and leaded gasoline were mainly focused on occupational exposures, starting in the early 1900s, health experts began to suspect that childhood lead exposure was a serious problem. By the mid-1900s, thousands of children developed lead encephalopathy, or brain swelling, each year; one in three of these children died. Some began to suspect that a proportion of children who survived overt lead poisoning experienced residual brain damage. This conjecture was controversial at first. Then, in 1979, a well-designed study by pediatrician and psychiatrist Herbert Needleman resolved the dispute by establishing a direct correlation between the lead content of a child's teeth and bad classroom behavior.⁴⁶ Follow-up studies on these same children 12 years later found that those who had the highest lead levels in their teeth as children continued to have school problems through their last year of high school including more school failures and reading disabilities, and lower class standing.⁴⁷

More recently, a 2000 study by Bruce Lanphear found that children's maths and reading scores showed reductions correlating to blood lead levels at concentrations as low as 2.5 µg/dl (micrograms per decilitre), or 25 µg/l (micrograms per litre).⁴⁸ A fact sheet published by the World Health Organization (WHO) European Region identifies lead as the single most important chemical toxicant for children. It notes that the effects are particularly severe during the child's first 2-3 years, and that these include: learning disabilities; attention deficits; disorders in a child's coordination, visual, spatial and language skills; and anemia.⁴⁹

In 2002, WHO *World Health Report* identified lead exposure as one of twenty leading selected risk factors contributing to the global burden of disease and stated that worldwide, 40% of children have blood lead levels above 5 µg/dl, and that 97% of the affected children live in developing regions.⁵⁰ This is an alarming and unacceptable level of exposure. To put it into context, since 1991, it has been policy in the United States that a public health intervention is needed when a child is found to have a blood-lead level above 10 µg/dl.⁵¹ The US Centers for Disease Control and Prevention (CDC) which established this policy, clearly stated that 10 µg /dl should not be seen as defining a threshold level for harmful effects.⁵² The World Health

<http://www.ilo.org/ilolex/cgi-lex/ratifice.pl?C013>

⁴³ See: <http://www.baugid.ru/2008/02/01/masljanye-materialy.html> and <http://prilog.ru/materialy/kraski.html>

⁴⁴ Lin, G.Z., et al., Lead in housing paints: An exposure source still not taken seriously for children lead poisoning in China. *Environ. Res.* (2008), doi:10.1016/j.envres.2008.09.003

⁴⁵ Kumar, A., Gottesfeld, P. Lead Contents in Household Paints in India, *Science of the Total Environment*; (2008) 407:333 – 337

⁴⁶ *Lead Poisoning*, by Herbert Needleman, *Annual Review of Medicine* 2004, on the web at: http://www.rachel.org/files/document/Lead_Poisoning.pdf

⁴⁷ See: Needleman cited above

⁴⁸ Lanphear BP, Dietrich KN, Auinger P, Cox C. Cognitive deficits associated with blood lead levels <10 µg/dl in U.S. children and adolescents. *Public Health Reports* 2000;115:521-529

⁴⁹ See: WHO Euro Region, *Study on environmental burden of disease in children: key findings*: <http://www.euro.who.int/document/mediacentre/fs0504e.pdf>

⁵⁰ See: http://www.who.int/whr/2002/en/whr02_en.pdf

⁵¹ See: *Interpreting and Managing Blood Lead Levels <10 µg/dL in Children and Reducing Childhood Exposures to Lead* at: <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5608a1.htm>

⁵² See reference above

Organization (WHO) suggests that IQ loss can be expected from blood lead levels as low as 5 µg/dl;⁵³ and some researchers call for action to be triggered when a child's blood level is above 2 µg/dl.⁵⁴

Lead Regulation and the Socio-Economics of Childhood Lead Exposure In the 1960s, before regulatory action was taken in the United States to control gasoline with lead additives and interior paints containing lead, 10%–20% of inner-city children had blood lead levels of over 40 µg /dl (micrograms per deciliter).⁵⁵ Then, as a result of regulatory action, by 1997 average lead blood level in U.S. children age 5 was reported to be 2.7 µg/dl.⁵⁶ Similar reductions have been reported in many developed countries, underlining that regulatory interventions can greatly reduce exposure. However, current U.S. childhood lead exposure may still be considered unacceptably high.

A 2002 study by Philip Landrigan and others investigated the socio-economic impacts of lead exposure in U. S. children. It estimated the cumulative reduction in childhood intelligence associated with current levels of lead exposure and correlated this to reduction in a child's lifetime earning potential. The study concluded that the economic losses that can be attributed to the current U.S. level of childhood lead exposure amount to \$43.4 billion per year.⁵⁷ To offset this burden, the U.S. maintains programs to reduce lead exposure in children including the removal of paints containing lead from homes painted with these paints 35 or more years ago.

To our knowledge, no similar studies have been conducted to quantify the socio-economic costs of childhood lead exposure in developing countries; however, since childhood lead exposure in many developing countries is generally much higher than in the U.S., it is reasonable to assume that it represents a major socio-economic burden and is an important impediment to achieving national sustainable development objectives. Widespread childhood lead exposure undermines educational achievement and reduces the productivity of the workforce. Therefore, public health interventions that can significantly reduce childhood lead exposure can make an important contribution to achieving sustainable development objectives including the Millennium Development Goals.⁵⁸

Proposal that ICCM Establish a Global Partnership to Implement Paragraph 57 of the WSSD POI, focusing on the phasing out of use of lead in paints

In 2002, the World Summit on Sustainable Development called for action to support the phase-out of lead in gasoline and to phase out lead in paints and in other sources of human exposure (as referenced above). The partnership that was formed during WSSD to promote clean fuels and vehicles has been very effective. On the other hand, no international partnership was created to support the implementation of paragraph 57 whose objectives are to phase out lead in paints and other sources and to strengthen monitoring, and surveillance and treating of lead poisoning.

International trade in lead and in paints containing lead contributes to the widespread availability of paints containing lead in many countries. Furthermore, most highly industrial countries have already mandated the phase out of lead from paints and its substitution with less hazardous pigments. The Global Partnership will promote similar mandates in countries where paints containing lead are still widely used.

⁵³ See: http://www.who.int/quantifying_ehimpacts/publications/en/leadebd2.pdf

⁵⁴ See: <http://www.ncbi.nlm.nih.gov/pubmed/16889836>

⁵⁵ See: Needleman cited above

⁵⁶ See: Philip Landrigan and others, *Environmental Pollutants and Disease in American Children*: <http://www.ehponline.org/members/2002/110p721-728landrigan/EHP110p721PDF.PDF>

⁵⁷ See Landrigan above

⁵⁸ A methodology that can be used for relating lead regulations to the MDG can be found in the United Nations Development Program's *Toolkit for Incorporating the Sound Management of Chemicals in MDG-based Policies and Plans* at: <http://www.undp.org/chemicals/Documents/UNDP%20toolkit%20-%20Mainstreaming%20the%20Sound%20Management%20of%20Chemi%5B1%5D..pdf>

ICCM is invited to consider the establishment under its auspices of a global partnership to promote the implementation of WSSD POI paragraph 57 to support the phasing out of use of lead in paints. The ICCM is requested to consider the draft resolution in Annex 2.

Annex 1

Dakar Resolution for Eliminating Lead in Paints

The sixth session of the Intergovernmental Forum on Chemical Safety (Forum VI),

Having met in Dakar, at the invitation of the Government of Senegal, from 15-19 September 2008,

Recognising that lead in paints poses serious risks to human health and the environment, and especially to the health of children,

Taking into account that most children exposed to lead live in developing countries and countries with economies in transition,

Recognising that household paints sold in developing countries contain lead,

Aware that safer and affordable alternatives already exist for lead in paints,

Affirming that many consumers, especially in developing countries, are unaware of the dangers posed by lead in paints,

Noting that the Johannesburg Plan of Implementation of the World Summit on Sustainable Development paragraph 56 (b) supports the phasing out of lead in gasoline,

Applauding the important work of the Partnership for Clean Fuels and Vehicles (PCFV) in its implementation of paragraph 56 (b) of the Johannesburg Plan of Implementation of the World Summit on Sustainable Development,

Further noting that much progress has been made toward achieving a global phase out of lead in automotive fuels,

Recognising that the Johannesburg Plan of Implementation of the World Summit on Sustainable Development in paragraph 57 also calls for the phasing out of lead in lead-based paints and in other sources of human exposure, and calls for work to prevent, in particular, children's exposure to lead and to strengthen monitoring and surveillance efforts and the treatment of lead poisoning,

1. **Decides** that a global partnership to promote the implementation of the measures contained in paragraph 57 of the Johannesburg Plan of Implementation of the World Summit on Sustainable Development is essential, especially for developing countries and countries with economies in transition;
2. **Further decides** that such a partnership should be to support the phasing out of lead in lead-based paints;
3. **Requests** the Forum Standing Committee to establish an ad hoc Working Group following the lead sponsor approach to prepare draft Terms of Reference for a global partnership to be submitted to the second session of the International Conference on Chemicals Management (ICCM-2) for it to consider taking a decision to support concerted action to promote the implementation of the measures contained in the Johannesburg Plan of Implementation of the World Summit on Sustainable Development paragraph 57;
4. **Invites** the Governing Bodies of relevant intergovernmental organisations including UNEP and WHO to support and participate in such an initiative;
5. **Invites** the UNEP Governing Council at its 25th session to consider providing support for such concerted action.

Annex 2

Draft resolution submitted by an *ad hoc* working group of the Forum Standing Committee of the Intergovernmental Forum on Chemical Safety for possible consideration and adoption by the International Conference on Chemicals Management at its second session

Global Partnership to promote the implementation of the measures contained in paragraph 57 of the Johannesburg Plan of Implementation of the World Summit on Sustainable Development: Phasing Out of Use of Lead in Paints

The Conference,

Considering the World Summit on Sustainable Development (WSSD) decisions to protect children's health from exposure to lead in Paragraph 57 of the WSSD Plan of Implementation (POI) called for: ““Phase out lead in lead-based paints and in other sources of human exposure, work to prevent, in particular, children's exposure to lead and strengthen monitoring and surveillance efforts and the treatment of lead poisoning,”

Acknowledging the Dakar Resolution for Eliminating Lead in Paints adopted by the sixth session of the Intergovernmental Forum on Chemical Safety;

Recognizing the progress being made towards achieving a global phase out of lead in automotive fuels by the Partnership for Clean Fuels and Vehicles;

Recalling our commitment made in Dubai to work towards closing the gaps and addressing the discrepancies in the capacity to achieve sustainable chemicals management between developed countries on the one hand and developing countries and countries with economies in transition on the other by addressing the special needs of the latter and strengthening their capacities for the sound management of chemicals and the development of safer alternative products and processes, including non-chemical alternatives, through partnerships, technical support and financial assistance.

Further recalling the Strategic Approach Overarching Policy Strategy objective “to promote and support the development and implementation of, and further innovation in, environmentally sound and safer alternatives, including cleaner production, informed substitution of chemicals of particular concern and non-chemical alternatives”;

1. **Agrees** that a global partnership to support concerted action to promote the phasing out of use of lead in paints will be an important contribution to the implementation of the World Summit on Sustainable Development paragraph 57 and to the Strategic Approach;
2. **Decides** to establish a Global Partnership to promote Phasing Out of Use of Lead in Paints under the auspices of the International Conference on Chemicals Management and to adopt as a basis for its work the terms of reference as given in the annex;
3. **Encourages** governments, regional economic integration organizations, intergovernmental organizations and other international organizations, industry or business organizations, non-governmental/civil society organizations and academic institutions to participate in the Global Partnership;
4. **Recognizes** that achieving the goals and objectives of the Global Partnership will require sufficient human, financial and in-kind resources, urges all Governments, intergovernmental organizations, and non-governmental organizations, including from the private sector, to provide such resources on a

voluntary basis.

5. **Requests** the Strategic Approach secretariat, within available resources, to service the Global Partnership;
6. **Invites** the Global Partnership to report on progress in its work to future sessions of the Conference.

Annex to Draft resolution submitted by an *ad hoc* working group of the Forum Standing Committee of the Intergovernmental Forum on Chemical Safety for possible consideration and adoption by the International Conference on Chemicals Management at its second session

Terms of Reference

Global Partnership to promote the implementation of the measures contained in paragraph 57 of the Johannesburg Plan of Implementation of the World Summit on Sustainable Development: Phasing Out of Use of Lead in Paints

The Terms of Reference that follow are for a *Global Partnership to Phase-Out Use of Lead in Paints* to support implementation of paragraph 57 of the Johannesburg World Summit on Sustainable Development (WSSD) Plan of Implementation (POI)⁵⁹, which states:

“Phase out lead in lead-based paints and in other sources of human exposure, work to prevent, in particular, children's exposure to lead and strengthen monitoring and surveillance efforts and the treatment of lead poisoning.”

The Global Partnership is established under the auspices of the International Conference on Chemicals Management (ICCM).

1. Overall Goal

The overall Goal of the partnership is to promote the implementation of Paragraph 57 of the WSSD Plan of Implementation through the prevention of children's exposure to lead via paints containing lead.

2. Objectives

The objectives of the Global Partnership are to phase-out the manufacture and sale of paints containing lead and the eventual elimination of risks from paint containing lead which contribute to childhood lead exposure.

Specific objectives are:

- To raise awareness of government authorities and regulators, private industry, manufacturers, consumers, and health care providers on the toxicity of lead in paints and the availability of technically superior and safer alternatives;
- To catalyse the design and implementation of appropriate prevention-based programmes to reduce and eliminate risks from the use of lead in paint;
- To provide assistance to paint manufacturers that still produce and market paints containing lead to enable them to phase-out lead from their paints;
- To promote the establishment of appropriate national regulatory frameworks to restrict the manufacture, import, sale and use of paints containing lead for applications likely to contribute to childhood lead exposure;
- Promote international third-party certification of new paint products to help consumers recognize paint and coatings without added lead; and
- To provide guidance and promote assistance to identify and reduce potential lead exposure in and around housing, childcare facilities and schools in which paint containing lead is present.

⁵⁹

WSSD POI at: http://www.un.org/esa/sustdev/documents/WSSD_POI_PD/English/POIChapter6.htm

Members of Partnership

The Global Partnership is a voluntary and collaborative relationship between various parties, governmental, non-governmental, public and private, in which all participants agree to work together in a systematic way to achieve the overall goal of phasing out the use of lead in paints.

The Global Partnership is open to any government, regional economic integration organization, intergovernmental organization, international, regional or national organization, industry or business organization, non-governmental/civil society organization or academic institution that supports the Partnership goal. It is open also to any other entity or an individual who agrees to work towards the goal of the Partnership.

Participation will be encouraged from the following groups:

- Representatives of national governments including those
 - that have already phased-out the use of lead in paints in their countries and are willing to share experiences and provide help to those who are now prepared to do so;
 - where paints containing lead are still available on the market;
- Representatives of relevant Intergovernmental Organizations (such as WHO, UNEP, UNIDO, UNITAR);
- Representatives of the lead industry and paint industry,
- Representatives of international and/or national companies that manufacture paints; and possibly of their relevant trade organizations;
- International and national medical and public health organizations;
- Academics with expertise in relevant fields;
- Representatives of international and national NGOs that work on environmental health issues and that have experience with public outreach and awareness campaigns and/or with implementation of prevention programmes at the community or national levels.;

Guidance for a working definition of lead paint

The following criteria are used as a working basis for defining “lead paint”:

- the term "lead paint" includes paints, varnishes, lacquers, stains, enamels, glazes, primers or coatings used for any purposes;
- lead is added to the paint, varnish, lacquer, stain, enamel, glaze, primer or coating;
- the total lead concentration is defined on a weight percentage of the total non-volatile portion of the product or in the weight of the dried paint film.

Activities

Partnership activities may include:

- Preparation and dissemination of information materials in national languages to raise awareness about the presence of lead in the paints in a country's market, and about how this can harm public health. Since the ingestion of lead-containing dust is a major source of lead exposure for children, awareness efforts should include the promotion of warnings on all cans of paint stating that lead dust is toxic and that precautions need to be taken in preparing previously painted surfaces for repainting to minimize exposures to lead dust that may be created. Audiences include the general public, the national public

health and medical communities, companies that manufacture, import and/or sell paints, downstream user of the paints, retailers, marketers, and relevant government officials.

- Provide information on substitution and alternatives for lead in paint and support the transfer of technology to do this, working with existing efforts to establish web based portals for information on substitution, alternatives, tools and processes;
- Reviewing the scientific literature and existing national standards as a basis for preparing a guidance document that can be used by governments wishing to establish national regulatory frameworks governing the total lead content of paints;
- Preparation of guidelines for establishing national standards to specify the total lead content of paints, including importation controls; developing a process to establish a recognized, internationally accepted standard that governments may wish to use in the development of national regulatory frameworks governing the total lead content of paints, including contamination levels, that are nationally manufactured, imported, sold or used;
- Providing guidance for the effective enforcement of these national frameworks;
- Providing guidance for the coordinated development and implementation of appropriate prevention programmes for reducing and eliminating risks from paints containing lead with the possibility of translation into UN languages;
- Monitoring continued manufacture, export, import, sale and use of paints containing lead for applications likely to contribute to childhood lead exposure; and
- Publishing a newsletter providing information on work undertaken by members and progress towards achieving the goal and objectives of the partnership with the possibility of translation into UN languages.

Activities will be developed and implemented following the lead sponsor approach. The lead sponsor(s) for each activity in collaboration with interested partners will prepare a work plan, time line, budget and fund raising plan.

The Partnership will develop and implement a monitoring mechanism for tracking progress on activities undertaken through and by the partnership.

Means of Work

The Global Partnership will undertake its work primarily through electronic communication mechanisms. Opportunities in conjunction with SAICM Regional Meetings and international, regional and national meetings on chemical management will be utilized.

The Global Partnership will be supported by the SAICM Secretariat. Subject to the availability of resources, the SAICM Secretariat will:

- provide administrative and secretariat support;
- facilitate information exchange via the SAICM Clearinghouse services;
- help bring new partners to participate in the Global Partnership, as appropriate; and
- facilitate reporting on progress of the Global Partnership to ICCM.

A chairperson will be designated from among members to facilitate the overall coordination of the Global Partnership.

Resources

Each entity or individual, upon becoming a member of the Global Partnership, will commit to contribute resources (financial or in-kind) or expertise to the development and implementation of partnership activities. Members will work to identify potential relevant funders, government donors or other institutional donors with an interest in providing resources to for the partnership activities.

A budget and fund raising plan will be prepared for each activity by the lead sponsor(s) and interested partners. Countries and organizations in a position to do so are encouraged to provide the identified resources needs. Submission of project activity proposals to the SAICM Quick Start Programme Trust Fund will be pursued.

**Annex IV. Background information in relation to the emerging policy issues of
lead in paint (SAICM/ICCM.2/INF/38)**

International Conference on Chemicals Management**Second session**

Geneva, 11–15 May 2009

Item 4 (f) of the provisional agenda*

Implementation of the Strategic Approach to International Chemicals**Management: emerging policy issues**

Background information in relation to the emerging policy issue of lead in paint

Note by the secretariat

12. The secretariat has the honour to circulate, in the annex to the present note, relevant background material on the emerging policy issue of lead in paint as outlined in document SAICM/ICCM.2/10 for the information of participants. The preparation of the material has been facilitated by Ms. Judy Stober, Intergovernmental Forum on Chemical Safety, and Ms. Maria Doa, United States Environmental Protection Agency. The material has been reproduced as received and has not been formally edited

13. The background material has been developed from the original submissions received on this issue from stakeholders ahead of the informal discussions held in Rome on 23 and 24 October 2008. The facilitators have followed the additional guidance developed by the informal Friends of the Secretariat planning group in preparing the document and have provided the opportunity for comment by Strategic Approach to International Chemicals Management stakeholders by making drafts of the material available for comment on the Strategic Approach website. The background material aims to set out how this issue meets the screening criteria for emerging policy issues developed during the informal discussions held in Rome and to provide the rationale for the proposed cooperative actions on this issue contained in document SAICM/ICCM.2/10/Add.1.

14. There will be an opportunity for participants in the session to discuss the background material at a technical briefing to be held on Sunday, 10 May 2009, from 9.30 a.m. to 1 p.m.

* SAICM/ICCM.2/1.

Background information in relation to the emerging policy issue of “lead in paint”

Introduction

In 2002, the World Summit on Sustainable Development (WSSD) made two decisions to protect children’s health from exposure to lead. Paragraph 56 (b) of the WSSD Plan of Implementation (POI) called for: “*Supporting the phasing out of lead in gasoline.*”

The other decision was paragraph 57. It states:

“Phase out lead in lead-based paints and in other sources of human exposure, work to prevent, in particular, children’s exposure to lead and strengthen monitoring and surveillance efforts and the treatment of lead poisoning.”ⁱ

At WSSD, the *Partnership on Clean Fuels and Vehicles* was established to contribute to the implementation of WSSD POI paragraph 56, and to help developing countries eliminate lead from fuels.ⁱⁱ At a 2005 Partnership meeting held in Kenya, it was agreed that the partnership was on course to “phase out leaded gasoline by the end of 2008 worldwide.”ⁱⁱⁱ The global campaign to eliminate lead from gasoline appears to be approaching success. This will make an important contribution in substantially reducing childhood lead poisoning in many developing countries.

In contrast, there has been less concerted international action aimed at helping to implement WSSD POI paragraph 57. There are no international or regional organizations that address lead in paint. Paints containing lead are still widely manufactured and sold for use in many countries of the developing world. Therefore, it is very likely that most of the world’s population lives in countries where domestic paints with high lead levels are readily available. It has long been known that paints containing lead can be a significant source of childhood lead exposure and poisoning, especially when they are used to paint the interiors and exteriors of homes or schools, and when they are used to paint toys, furniture, playground equipment and other articles with which children come in contact. Moreover, paints containing lead are used in a variety of infrastructure (e.g., bridges), industrial (e.g., automobile parts), and marine (e.g., ships) applications which can contribute to lead in soils and roadway and sidewalk grit which can be tracked into homes or become airborne and make its way into homes.

In addition to the Toxics Link submission on lead in paint to the International Conference on Chemicals Management (ICCM) at its second session, the Intergovernmental Forum on Chemical Safety (IFCS), in its submission on substitution and alternatives, proposed the consideration of a global partnership addressing lead in paint.^{iv} IFCS notes that the Johannesburg Plan of Implementation of the World Summit on Sustainable Development paragraph 57 calls for the phasing out of lead in lead-based paints and in other sources of human exposure, the prevention of exposure to lead, particularly for children, strengthening monitoring and surveillance efforts, and the treatment of lead poisoning. In response to the request of Forum VI, IFCS has developed terms of reference for a global partnership for consideration by ICCM2^v. At Forum VI, IFCS also endorsed overall efforts by governments and others to reduce risks to human health and the environment of lead throughout the life cycle of this substance. At Forum V, the IFCS considered the topic of toys and chemical safety and recommended actions towards the elimination of use in toys of substances such as lead that are likely to result in adverse toxic effects.^{vi} The United States also proposed cooperative action on lead, including areas related to lead in paint, such as encourage efforts by

governments and others to reduce risk to human health and the environment from lead throughout the whole life cycle of the substance, encourage efforts by governments and other to reliably eliminate the use of lead in products intended for children, and calls for research in the area of alternatives for lead-based products. Submissions by the European Union and Japan regarding an information system related to the chemicals in products could be relevant to lead in paints as well.

The purpose of this paper is to provide background information on how the nominated emerging policy issue meets a number of screening criteria and to provide the rationale for the proposed action requested by the Conference. Attachment 1 contains a list of those who have contributed to the preparation of this document by providing comments during its development.

Consistent with the guidance provided by the informal Friends of the Secretariat planning group, this document is specific to lead in paint. Several contributors suggested that the scope of this information document and the proposed actions be broadened to include other sources of human exposure to lead. While lead paint is a significant source of exposure, there are other sources such as lead in batteries and lead in toys that may also be significant sources of exposure. The ICCM2 may wish to consider modifying the scope of the proposed actions in its deliberations.

Magnitude of the problem: health impacts and significant sources of lead-paint exposure

Lead Poisoning in Children

Lead exposure is a well-known source of injury to human health, and particularly to the health of children and to workers in lead industries. No level of exposure to lead is considered safe.^{vii}
^{viii ix} There is clear evidence of neurocognitive decrements being associated in young children with blood lead concentrations in the range of 5 to 10 micrograms per deciliter ($\mu\text{g}/\text{dL}$) and possibly lower. Recent analyses appear to show lead effects on the intellectual attainment of preschool and school age children at population mean concurrent blood lead levels as low as 2 $\mu\text{g}/\text{dL}$.^x The rate of decline in intellectual impairment is greater at blood lead levels less than 10 $\mu\text{g}/\text{dL}$ than at concentrations greater than 10 $\mu\text{g}/\text{dL}$.^{xi}

Functional manifestations of lead neurotoxicity during childhood include sensory, motor, cognitive and behavioral impacts, including learning disabilities; attention deficits; disorders in a child's coordination, visual, spatial and language skills, and anemia.^{xiiixiii xiv} Some studies indicate linkages between lower-level lead toxicity and behavioral problems (e.g., aggression, attentional problems, and hyperactivity) in children^{xv}. Effects of lead on neurobehavior have been reported with remarkable consistency across numerous studies of various designs, populations studied and developmental assessment protocols. Negative lead impacts on neurocognitive ability and other neurobehavioral outcomes are robust in most recent studies even after adjustment for numerous potentially confounding factors (including quality of care giving, parental intelligence, and socioeconomic status). Lead toxicity is irreversible and its effects generally appear to persist into adolescence and adulthood.^{xvi}

Children's exposure to lead from paint

Exposure to lead in paint has long been one of the most common causes of clinical lead toxicity. House dust is the most common exposure pathway through which children are exposed to lead paint hazards. Dust created during normal wear of lead paint (especially around windows and doors) can create an invisible film over surfaces in a house. Children, particularly younger children, may also ingest lead paint chips from flaking walls, windows, and doors. Lead from exterior house paint can flake off or leach into the soil and dust around the outside of a home, contaminating children's play areas. Renovation activities actually increase the threat of lead paint exposure by dispersing lead dust particles in the air and over

accessible household surfaces. Dust can be resuspended through household activities, including through cleaning, thereby posing an inhalation risk as well. Lead exposure is often due to ingestion from hand-to-mouth activities and pica, which are common in children. For children, dust ingested via hand-to-mouth activity is often a more important source of lead exposure than inhalation. However, inhalation lead exposure to children can also be increased markedly during renovation, repair or demolition projects.^{xvii}

Lead paint used on interiors and exteriors of homes, schools, public and commercial buildings and structures such as bridges can be a source of exposure to children. Normal weathering as well as repair, renovation, and painting activities which disturb lead paint can contribute to lead loadings in soil and dust. Soil and dust containing lead from lead paint can be tracked into homes and other buildings where it can be a significant source of exposure. The percentage of indoor dust that is from soil and other exterior sources is estimated to be typically greater than 70%.^{xviii}

Adults' exposure to lead in paint

Lead can cause neurological effects in adults at levels encountered in occupational settings. Effects on adults of low-level lead exposures include some renal effects and cardiovascular effects, including increased blood pressure and incidence of hypertension.^{xix}

In addition to exposures from living in homes with lead paint, adults can be exposed occupationally to lead from lead paint. Workers can be exposed during the manufacture and processing of lead paint, and its use (such as in painting activities). Residential renovation and paint removal can also be major sources of lead exposure for workers as well as residents. Dry sanding, abrasive blasting, and burning, welding, or heating surfaces covered with lead paint typically generate highly dangerous airborne lead levels.^{xx xxi} Lead paints have been used as coatings on highway bridges for many years. Paint removal during bridge renovation projects has also been cited as a major source of lead exposure for workers. As with residential renovation, lead concentrations during industrial paint removal depend largely on the technology used. Generally, abrasive blasting techniques are used, which breaks lead coatings into small particles that can be inhaled or ingested if hands are not washed prior to eating or smoking.^{xxii}

Relevance of the issue: continued use of lead in paint

Use of lead in paint

Lead paint was the dominant form of house paint in the developed world for many decades, and a significant percentage of homes still contain lead paint on some surfaces. Many of these countries phased out the use of interior and exterior paints containing lead. Titanium dioxide is now often used as a substitute for lead in paint. In the United States the use of lead in paint decreased markedly after World War II. In 1978, the United States banned the use of paint containing more than 0.06 percent (600 ppm) lead by weight on toys, furniture, and interior and exterior surfaces in housing and other buildings and structures used by consumers.^{xxiii} New standards for lead in paint and consumer products in the United States which will be effective 14 August 2009 require that any product designed or intended primarily for children 12 years of age or younger will be banned if it contains more than 300 ppm total lead content by weight for any part of the product and the lead content standard for surface paint in furniture, toys and other children's products will be reduced from a maximum of 0.06 percent (600 ppm) lead by weight to a maximum of 0.009 percent (90 ppm) lead by weight.^{xxiv} A similar pattern took place in European countries, too, before the general sale of leaded paint was prohibited in the European Union in 1989.^{xxv} In Australia, restrictions on the use of lead in paints for domestic application were initiated in the early part of the 20th century. Appendix I of the Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP), known as the Uniform Paint Standard, provides control of paints sold to consumers.^{xxvi} For such applications, the supply of

paint with a lead concentration greater than 0.1% is prohibited. In 2007, the Australian Paint Manufacturers Federation lobbied the Australian industrial chemicals regulator NICNAS to restrict the importation and use of 14 lead compounds still used in paints. In 2008 and 2009, restrictions were placed on the manufacture and import of 14 lead compounds as components of industrial surface coatings and inks at concentrations greater than 0.1%. South Africa passed legislation in 2008 restricting the use of lead in household paints to less than 600 ppm, effective in March 2009. Although in Thailand action to phase out paint containing lead was taken almost two decades ago in essentially a voluntary initiative by the paint industry, five of seven brands of paint recently sampled in Thailand contained lead levels as high as 30,000 ppm.^{xxvii,xxviii}

Paints with added lead are still commonly available in the developing world. In Russia, interior paints containing lead are restricted by the legislation adopted in the USSR in 1929 and 1984 and later by the Russian Federation in 1991 and 1992.^{xxix} In 1991 Russia ratified the ILO White Lead (Painting) Convention, 1921 (No. 13)^{xxx}. Independent research has shown that paints containing lead, mainly exterior paints, can easily be found on the Russian market.^{xxxi} A recent study in China showed that 50 percent of new paint samples tested contain lead at levels equal to or exceeding 600 ppm. Despite a wide range in retail prices, there was no correlation between price and lead content among the 58 paint samples collected.^{xxxii} A similar study of new residential paints being sold in India indicates that 84 percent of enamel paints have lead levels that exceed 600 ppm.^{xxxiii} However, one nationally distributed major brand that is available within the same price range as their competitors appears to have eliminated the use of lead pigment and other lead additives. This suggests that price should not be a deterrent for paint companies to shift to lead-free alternatives and still remain competitive.

After lead in gasoline, lead in paint is overall one of the largest source of lead exposure. Lead paint can remain a source of lead exposure and poisoning for many years after the paint has been applied to surfaces. For example, even though the use of lead in paint was essentially banned in the United States in 1978, there are still 38 million housing units that have lead paint.^{xxxiv} Furthermore, despite efforts to reduce the exposure to children from lead in paint there are still about 185,000 children aged one to five with blood lead levels greater than 10 µg/dL and approximately 837,000 children with blood lead levels greater than 5 µg/dL.^{xxxv} Low-income children and African-American children are disproportionately affected.

Relevance of the issue: effects at the societal level

Societal impacts of lead poisoning in children

Even low level lead poisoning of children can have significant societal impacts. As Weiss^{xxxvi} and Gilbert and Weiss^{xxxvii} have shown, the societal effects of low-level lead poisoning can be seen when looking at the population-level. Gilbert and Weiss note that while small IQ changes in an individual child may not seem significant, when viewed at a population level the impacts are substantial:

“Assuming a mean IQ of 100 for a large population and a normal distribution, the tails of the curve represent those with superior IQ (greater than 130) and those with lower IQ (less than 70). IQs below 70 require significant societal support such as remedial education. A five-point drop in IQ would significantly change the number of people in the tails of this distribution. For example, in a population of 100 million with a mean IQ of 100 there would be 6 million people with IQs above 130 and an equivalent number with IQs below 70. A shift in the mean of 5 IQ points (5%) would result in only 2.4 million gifted people with IQs above 130 and 9.4 million people with IQs less than 70 who also require remedial assistance. The consequences to society will clearly be enormous. Figure[1]”

These data are not simply of statistical interest but point to the substantial decline in the societal intellectual resources (*i.e.*, those with IQs greater than 130) and the significant resources (*e.g.*, special education) needed to address the large increase in the population with IQ less than 70.^{xxxviii} This impact will be even more significant for disadvantaged populations in which the mean IQ is lower, *e.g.* 85 rather than 100. They will be impacted more significantly and suffer disproportionately by the IQ decrements resulting from lead exposure.

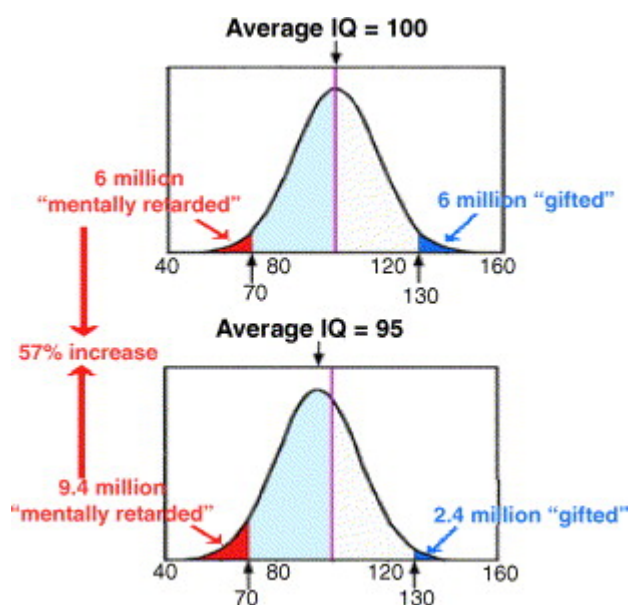


Fig. 1. Losses associated with five-point drop in IQ on a population of 100 million. Based on Weiss (1988) and modified by <http://www.ourstolenfuture.org/NewScience/behavior/iqshift.htm>. [From Gilbert, S.G. and Weiss, B. A rationale for lowering the blood lead action level from 10 to 2 μ g/dL. *NeuroToxicology*. 27(5), September 2006, p. 697]

In 2002, WHO *World Health Report* identified lead exposure as one of twenty leading selected risk factors contributing to the global burden of disease and stated that worldwide, 40 percent of children have blood lead levels greater than 5 μ g/dL, and that 97 percent of the affected children live in developing regions.^{xxxix} In addition, the WHO *World Health Report* looked at Disability Adjusted Life Years for different risk factors and as illustrated below ranked lead as 16th.

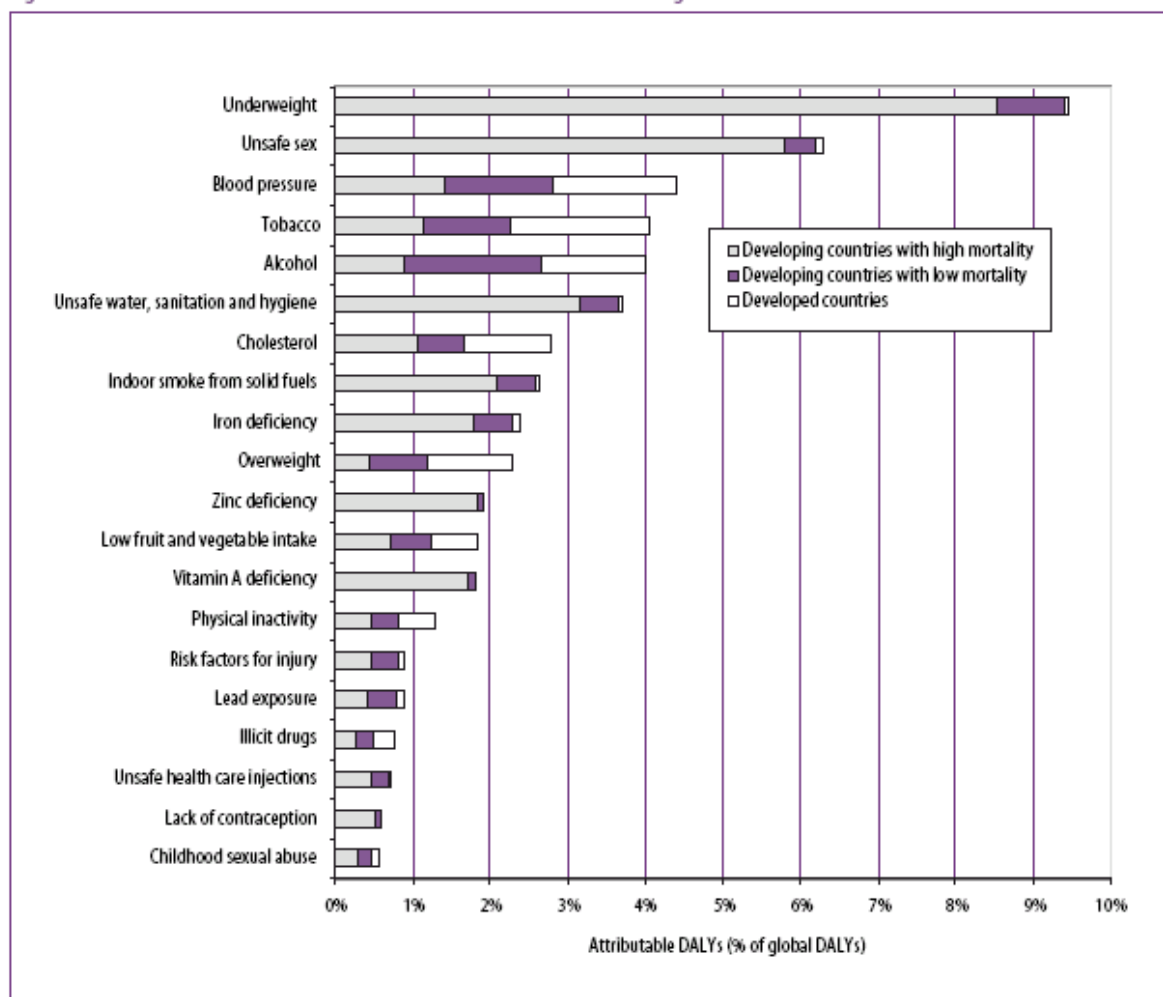
In a 2004 study, Valent and others^{xl} estimated that in European subregion C (most countries of the former USSR) approximately 58% of all children have an IQ loss of more than 0.65 IQ points due to lead exposure. As a consequence the authors expect an incidence of mild mental disease ($50 < \text{IQ} < 70$) in the order of 0.61-1 per 1000 children one year old or younger in this region. IQ loss and incidence rates are lower in the more developed European subregions A and B but still significant.

A 2002 study by Philip Landrigan and others investigated the socio-economic impacts of lead exposure in children in the United States. It estimated the cumulative reduction in childhood intelligence associated with current levels of lead exposure and correlated this to reduction in a child's lifetime earning potential. The study concluded that the economic losses that can be attributed to the level of childhood lead exposure at the time of the study amount to US\$43.4 billion per year.^{xli}

There appear to be no similar studies that have been conducted to quantify the socio-economic costs of childhood lead exposure in developing countries; however, since childhood lead

exposure in many developing countries is generally much higher than in the United States, it is reasonable to assume that it represents a major socio-economic burden in developing countries and is an important impediment to achieving national sustainable development objectives. Widespread childhood lead exposure undermines educational achievement and reduces the productivity of the workforce. Therefore, public health interventions that can significantly reduce childhood lead exposure can make an important contribution to achieving sustainable development objectives including the Millennium Development Goals.^{xlii}

Figure 4.9 Global distribution of burden of disease attributable to 20 leading selected risk factors



What is the level of knowledge about lead in paint?

Lead exposure is a well-known source of injury to human health, and particularly to the health of children and to workers in lead industries. Lead's poisonous properties have been recognized since ancient times. In the first century B.C., for example, the Roman architect, Vitruvius, spoke out against the use of lead pipes for conveying water saying that water "conveyed in lead must be injurious, because from it white lead is obtained, and this is said to be injurious to the human system." He also noted that "workers in lead, are of a pallid color for in casting lead, the fumes from it fixing on the different members, and daily burning them, destroy the vigor of the blood."^{xliii}

While lead is clearly recognized to cause toxicity, the extent to which lead in paint is understood to be a source of lead poisoning varies. Despite the fact that legacy uses of lead paint still provide a significant source of lead exposure in the developed world, many believe that because the use of lead in paint above certain levels has been banned for many years, lead

poisoning from lead paint is a problem of the past. Others view this as something that impacts only a small segment of society. In the developing world, the threat of lead poisoning from lead paint has also been significantly underestimated.

For example, in Zambia there is lack of knowledge of the effects of exposure to lead in paint. This is due to the fact that there is no comprehensive national law specifically to deal with lead paint. The traditional leaders and other decision makers have very little knowledge about the effects of lead in paint. Since there is no comprehensive national law to specifically focus on lead in paint, monitoring becomes difficult and this poses a threat on health risks to children's health especially that paint is used to paint the interior school walls and households.

It is also important to consider the toxicological properties of any alternative chemicals. Experience has shown us that while an alternative may not have the same properties of concern, it may have other undesirable properties which could impact the environment in other ways. While most substitutes will not cause toxic effects as serious as lead, an assessment of the toxicity of the lead-alternatives, to ensure that these alternatives do not themselves pose unacceptable health and safety risks, is an important part of the process to enable the safe implementation of substitutes and alternatives.

The extent to which the issue is of a cross-cutting nature

Lead in paint affects a broad range of groups. As discussed above, lead exposure can have impacts on residents (both children and adults) of housing with lead paint. Children can also be exposed in schools and daycare centers. In addition to the potential for exposure in their homes, workers can be exposed during the manufacture, processing and application of lead paint and in activities that disturb lead paint (*e.g.*, by creating lead dust) such as during renovations in homes and other buildings with lead paint. Given the nature of lead toxicity, the effects on human health result in both individual impacts and broad societal impacts.

Lead in paint can also impact the environment from releases from the manufacture, processing, use of lead paint and from disposal (including the improper disposal) of lead paint wastes from manufacturing and from buildings with lead paint. Lead is persistent in the environment and releases of lead into the environment can remain as a potential source of exposure to both humans and terrestrial and aquatic organisms indefinitely.

This issue may also be relevant to industry because manufacturers of lead paint will need to transition to different formulations of paint that do not contain lead. This will also affect workers, and the general public but the extent of the impact will depend upon the chemicals contained in the new formulations.

The extent to which the issue is being addressed by other bodies

While there are a number of national laws and national programs that are specific to lead paint, there are no known international organizations that have ongoing targeted work programmes on lead paint.

It can be noted that the UNEP Governing Council in its session in 2003 adopted a decision in which it:

5. Requests the Executive Director, in cooperation with other members of the Inter-Organization Programme for the Sound Management of Chemicals, in particular with the World Health Organization, as well as with other partners, including the private sector, to assist Governments, through information exchange and capacity-building, in their efforts to phase out lead in gasoline, lead-based paint and other sources of human exposure, to prevent exposure to lead and to strengthen efforts for monitoring and surveillance as well as treatment of lead poisoning.^{xliv}

At its session in 2005, the UNEP Governing Council reaffirmed its decision 22/4 III of 7 February 2003 on lead^{xlv} and at its 25th session in February 2009 adopted a decision requesting the Executive Director to facilitate “efforts by governments and others to reduce risks to human health and the environment of lead and cadmium throughout the whole life cycle of those substances and to take action to promote the use of lead and cadmium-free alternatives, where appropriate, for instance in toys and paint as some products containing lead may cause a risk through normal use”.^{xlvi}

Proposed action and potential cooperative actions

Proposed action

Develop a Global Partnership to Implement Paragraph 57 of the WSSD POI, focusing on the phase-out of lead in paint. The partnership would use as models the partnership that was formed during WSSD to promote clean fuels and vehicles, which has been very effective and the UNEP Global Mercury^{xlvii} which is moving forward effectively. The objectives would be to phase out lead in paints.

Potential cooperative actions

Actions proposed to address lead in paint including the significant exposures that result from previous lead paint applications on buildings:

- Information exchange on the health effects of lead;
- Information exchange on the pathways of exposure to lead paint, for both children and adults;
- Encouraging nations to conduct health monitoring to estimate the prevalence of lead in human blood.
- Providing technical expertise in the design and implementation of studies to estimate the distribution of blood lead levels in the populations of other nations..
- Building capacity and/or sharing information to conduct health monitoring to estimate the prevalence of lead in human blood;
- Building capacity and providing training to develop and maintain high quality laboratory testing for blood lead.
- Encouraging nations to conduct monitoring to estimate the prevalence of lead in the environment (e.g., water, soil, animals);
- Information exchange on lead levels in paints in various countries;
- Information exchange on national, provincial, state, and local regulations and legislations on lead concentrations in paints allowed in various countries;
- Information exchange on labeling and certification systems on the presence and concentrations of lead concentrations in paint;
- Discussing and providing technical assistance on steps that can be taken to phase out lead from paints and surface coatings such as lacquers, veneers and powder coatings throughout the world;
- Encouraging the use of financial incentives to support the use of lead-free paints;
- Developing guidelines for establishing national standards, including those that would allow the use only of lead-free paints;
- Encouraging nations to require that only lead-free paint be used in construction activities or renovations being supported with government funds;
- Providing guidance for and/or information on effective enforcement of national standards, including how to avoid smuggling of lead paint;
- Building capacity on legal enforcement to environmental health officers in various ministries, local authorities and mines;

- Providing international support to developing countries by further elaboration of methods to enact comprehensive laws to completely phase out lead paint;
- Information exchange and international support to strengthen and harmonize existing national laws that focus on protection of public health in relation to the phase-out of lead paint;
- Sharing knowledge on the availability of substitutes to replace lead compounds in paints;
- Assessing the hazards of the substitutes for lead compounds in paint;.
- Assessing the feasibility of the voluntarily phase-out of the production of lead paints in cooperation with business and industry including on a (sub)regional level;
- Encouraging wholesalers and retailers to stop bringing onto the market lead paints;
- Encouraging nations to conduct housing surveys to estimate the prevalence of lead paint in their housing stock;
- Developing of guidelines with descriptions of simple analytical methods and test kits for the identification of lead paints;
- Building capacity and/or providing information and knowledge in human and laboratory equipment in order to facilitate laboratory tests for lead paint;
- Building capacity and/or providing information and knowledge to help various officials across ministries to test for lead paint;
- Information exchange on methods to make housing and other buildings with lead paint safe for occupancy by children and pregnant women;
- Minimizing risks of previously applied lead paint in buildings by using effective containment;
- Enhancing the elimination of lead paint in schools and other buildings where children will be present, given children's susceptibility to lead;
- Information exchange on suggestions for warning labels on new cans of paint alerting users to the health risks that could result if the surfaces being prepared for repainting contained lead paints.
- Information exchange on safe methods to conduct repair or renovation activities on the interior and exterior of homes and other buildings that contain lead paint to minimize exposures to residents and workers and to minimize releases to the environment (including from wastes) which may contribute to future exposures.
- Discussing and capacity building on how to reach health providers, caretakers and parents on how to minimize children's exposure to lead from lead paint hazards as part of efforts to minimize exposures to all sources of lead exposure in the household.
- Discussion on steps to reach renovators, painters and other professionals on how to minimize children's exposure to lead from lead paint.
- Information exchange on steps to reach workers on their vulnerability and exposure to lead in small and medium-sized enterprises, in particular in developing countries;
- Information exchange on promoting general public awareness on the hazards of lead paint;
- Information exchange on safe disposal of lead paint waste;
- Development of approaches to manage/store waste containing lead paints.

At the request of Forum VI, the IFCS has prepared and submitted for the consideration of ICCM a draft resolution to establish a global partnership to phase out the use of lead in paints under the auspices of the ICCM^v. The draft resolution includes proposed terms of reference for the partnership covering a range of cooperative actions including preparation of guidelines for establishing national standards and providing guidance for the effective enforcement of these national frameworks. This draft resolution was considered by the work group on Lead in

Paint convened by the SAICM Friends of the Secretariat group. Recommendations for ICCM2 are presented in this paper.

These actions would further the SAICM objectives of risk reduction, knowledge and information, governance, capacity building and technical cooperation.

The feasibility of the action proposed

In the Dubai Declaration on International Chemicals Management, the ministers, heads of delegation and representatives of civil society and the private sector, assembled at the International Conference on Chemicals Management in Dubai from 4 to 6 February 2006, declare(d):

17 We will work towards closing the gaps and addressing the discrepancies in the capacity to achieve sustainable chemicals management between developed countries on the one hand and developing countries and countries with economies in transition on the other by addressing the special needs of the latter and strengthening their capacities for the sound management of chemicals and the development of safer alternative products and processes, including non-chemical alternatives, **through partnerships**, technical support and financial assistance.⁶⁰

The establishment of a global partnership to promote the implementation of WSSD POI paragraph 57, focusing on the elimination of lead in paint, will support directly the implementation of SAICM and achievement of its objectives, in particular the following objectives with regard to risk reduction:

B. Risk reduction

The objectives of the Strategic Approach with regard to risk reduction are:

- (a) To minimize risks to human health, including that of workers, and to the environment throughout the life cycle of chemicals;
- (b) To ensure that humans and ecosystems and their constituent parts that are especially vulnerable or especially subject to exposure to chemicals that may pose a risk are taken into account and protected in making decisions on chemicals;
- (d) To ensure, by 2020:
 - (i) That chemicals or chemical uses that pose an unreasonable and otherwise unmanageable risk to human health and the environment⁶¹ based on a science-based risk assessment and taking into account the costs and benefits as well as the availability of safer substitutes and their efficacy, are no longer produced or used for such uses;
 - (ii) That risks from unintended releases of chemicals that pose an unreasonable and otherwise unmanageable risk to human health and the environment³ based on a science-based risk assessment and taking into account the costs and benefits, are minimized;

⁶⁰ See: SAICM text at <http://www.saicm.org/index.php?menuid=3&pageid=187&submenuheader=>

⁶¹ Groups of chemicals that might be prioritized for assessment and related studies include: persistent, bioaccumulative and toxic substances (PBTs); very persistent and very bioaccumulative substances; chemicals that are carcinogens or mutagens or that adversely affect, inter alia, the reproductive, endocrine, immune, or nervous systems; persistent organic pollutants (POPs), mercury and other chemicals of global concern; chemicals produced or used in high volumes; those subject to wide dispersive uses; and other chemicals of concern at the national level.

(j) To promote and support the development and implementation of, and further innovation in, environmentally sound and safer alternatives, including cleaner production, informed substitution of chemicals of particular concern and non-chemical alternatives.

The global partnership will also contribute to meeting the following objectives on knowledge and information, governance, and capacity building and technical cooperation:

C. Knowledge and information

(b) To ensure, for all stakeholders:

- (i) That information on chemicals throughout their life cycle, including, where appropriate, chemicals in products, is available, accessible, user friendly, adequate and appropriate to the needs of all stakeholders. Appropriate types of information include their effects on human health and the environment, their intrinsic properties, their potential uses, their protective measures and regulation;

D. Governance

(a) To achieve the sound management of chemicals throughout their life cycle by means of appropriate national, regional and international mechanisms, as needed, that are multi-sectoral, comprehensive, effective, efficient, transparent, coherent and inclusive and ensure accountability, taking into account the circumstances and needs of countries, especially developing countries and countries with economies in transition;

(l) To provide and support enabling frameworks for businesses to develop and improve products that advance the objectives of the Strategic Approach;

(n) To enhance cooperation on the sound management of chemicals between Governments, the private sector and civil society at the national, regional and global levels.

E. Capacity-building and technical cooperation

The objectives of the Strategic Approach with regard to capacity-building and technical cooperation are:

(a) To increase the capacity for the sound management of chemicals throughout their life cycle in all countries as needed, especially in developing countries and countries with economies in transition;

(b) To narrow the widening gap in capacities between developed countries on the one hand and developing countries and countries with economies in transition on the other hand;

Establishing a global partnership to phase out the use of lead in paints under the auspices of the ICCM falls within the following functions of the Conference (ICCM):

(a) To receive reports from all relevant stakeholders on progress in implementation of the Strategic Approach and to disseminate information as appropriate;

(c) To provide guidance on implementation of the Strategic Approach to stakeholders;

(g) To promote the strengthening of national chemicals management capacities;

- (h) To focus attention and call for appropriate action on emerging policy issues as they arise and to forge consensus on priorities for cooperative action;
- (k) To promote information exchange and scientific and technical cooperation;
- (m) To promote the participation of all stakeholders in the implementation of the Strategic Approach.

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ⁱ See: WSSD POI at: http://www.un.org/esa/sustdev/documents/WSSD_POI_PD/English/POIChapter6.htm

ⁱⁱ See: <http://www.unep.org/pcfv/pdf/InfSheet.pdf>

ⁱⁱⁱ See: <http://www.unep.org/pcfv/PDF/4GPM-report-final.pdf>

^{iv} Dakar Resolution for Eliminating Lead in Paints, Forum VI Sixth Session of the Intergovernmental Forum on Chemical Safety, Final Report, Executive summary (IFCS/FORUM-VI/07w) Available at: <http://www.who.int/ifcs/documents/forums/forum6/report/en/index.html>

^v Submission by the Intergovernmental Forum on Chemical Safety in relation to phasing out the use of lead in paint (SAICM/ICCM.2/INF/29) <http://www.saicm.org/index.php?content=meeting&mid=42&def=3&menuid=9>

^{vi} Toys and Chemical Safety, Forum V Fifth Session of the Intergovernmental Forum on Chemical Safety, Executive Summary (IFCS/FORUM-V/05w) Available at: <http://www.who.int/ifcs/documents/forums/forum5/report/en/index.html>

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http://www.who.int/entity/quantifying_ehimpacts/publications/en/ebd8web.pdf
- ^{xli} Landrigan, P. et al, *Environmental Pollutants and Disease in American Children*:
<http://www.ehponline.org/members/2002/110p721-728landrigan/EHP110p721PDF.PDF>
- ^{xlii} A methodology that can be used for relating lead regulations to the MDG can be found in the United Nations Development Program’s *Toolkit for Incorporating the Sound Management of Chemicals in MDG-based Policies*

and Plans at: <http://www.undp.org/chemicals/Documents/UNDP%20toolkit%20-%20Mainstreaming%20the%20Sound%20Management%20of%20Chemicals%20-%20.pdf>

^{xliii} See: Lead Poisoning and Rome, from the Encyclopedia Romana, on the web at: http://penelope.uchicago.edu/~grout/encyclopaedia_romana/wine/leadpoisoning.html

^{xliv} Decision 22/4 Chemicals III Lead Adopted By The Governing Council At Its Twenty-Second Session/Global Ministerial Environment Forum
http://www.chem.unep.ch/Pb_and_Cd/GC-22-4-III-lead.htm

^{xlv} Decision 23/9 Chemicals Management Adopted By The Governing Council At Its Twenty-Third Session/Global Ministerial Environment Forum
http://www.chem.unep.ch/Pb_and_Cd/GC-23-9-III-lead-and-cadmium.htm

^{xlvi} Decision 25 Chemicals II Lead and cadmium Adopted By The Governing Council At Its Twenty-Fifth Session/Global Ministerial Environment Forum
http://www.chem.unep.ch/Pb_and_Cd/GC25/Draft_decisionapproved.pdf

^{xlvii} See http://www.chem.unep.ch/mercury/partnerships/new_partnership.htm