

UNITED NATIONS  
ENVIRONMENT PROGRAMME  
DTIE/CHEMICALS

**Review of scientific  
information on cadmium**

**APPENDIX**

**Overview of existing and future  
national actions, including legislation,  
relevant to cadmium**

Revised draft of 18 August 2006

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## **SECTION 1**

### **Overview of existing and future national actions, including legislation, relevant to cadmium**

1. This appendix contains a compilation of information with regards to ongoing and future national actions on cadmium, submitted to UNEP as part of the process to develop the review of scientific information on cadmium called for in GC decision 23/9 III, to be made available to the Governing Council at its 24<sup>th</sup> regular session in early 2007.

2. It has been assembled after a review of the submitted information, as received by July 2006, in order to identify and compile specific information for each reporting country relating to ongoing or future national actions, including legislation. In addition, national information has been supplemented by input from the respective national members of the Working Group on lead and cadmium. The tables might provide an overview, by region, of how cadmium use and emissions are controlled in various countries of the world.

3. In the table, national actions, including legislation, are reported according to the following grouping:

**A.** Environmental quality standards, specifying a maximum acceptable cadmium concentration for different media, such as:

- a) Drinking water;
- b) Surface water;
- c) Ground water;
- d) Irrigation water;
- e) Air (urban air, background, etc);
- f) Soil;
- g) Food standards, specifying a maximum acceptable cadmium concentration for different food categories, such as fish and seafood, milk, meat; cereals, etc.

**B.** Environmental source actions and regulations that control cadmium releases into the environment;

- a) Air and water point sources, such as:
  - Smelters;
  - Energy production;
  - Metal ore mining;
  - Iron and steel manufacturing processes;
  - Cement, lime, plaster and concrete manufacturing processes.
- b) Waste disposal restrictions, such as:
  - Waste from outdated products;
  - Specific waste from different industrial activities;
  - Treated wastewater;
  - Sewage sludge.

**C.** Product control actions and regulations for cadmium-containing products, including marketing and use;

- a) General use of cadmium.

- b) Specific products containing cadmium, such as:
    - Ni-Cd batteries;
    - Pigments;
    - Stabilisers in polymers;
    - Plating;
    - Alloys.
  - c) Import/export.
- D. Other actions, standards and programs relevant to cadmium;**
- a) Regulations on occupational exposures to cadmium in the workplace (occupational safety and health);
  - b) Classification, other marketing and use regulation, packaging and labelling regulations;
  - c) Information and reporting requirements;
  - d) Monitoring programmes;
  - e) Voluntary reduction programmes;
  - f) Implementation of international conventions and programs.
4. It should be noted that absence of information in a specific cell means that no information was submitted - it cannot necessarily be interpreted as no national action taken or legislation applicable for the listed country.

Table - Overview of existing and future national actions, including legislation, relevant to cadmium.

I. AFRICAN STATES - Standards for environmental media, Actions and regulations that control releases from environmental sources that contain cadmium, Actions and regulations on products that contain cadmium and Other standards, actions and programmes relevant to cadmium.

COUNTRY	SUB-MISSION	STANDARDS FOR ENVIRONMENTAL MEDIA maximum acceptable cadmium concentration for different media	ACTIONS AND REGULATIONS THAT CONTROL RELEASES FROM ENVIRONMENTAL SOURCES that contain cadmium	ACTIONS AND REGULATIONS ON PRODUCTS that contain cadmium	OTHER STANDARDS, ACTIONS AND PROGRAMMES relevant to cadmium
Algeria					
Angola					
Benin					
Botswana					
Burkina Faso	Yes	-	-	-	<p><b>Waste Management:</b></p> <p>The country has 2 technical centres of dumping grounds for the management of municipal solid waste, but there is no selective collection at the basis.</p> <p><b>Measures and strategies in force and future plans on national, sub-regional and regional levels, aiming to prevent or control the rejections, to avoid the exposure to these substances and their use, including the practices concerning waste management:</b></p> <p>In the national context, following Rio, Burkina Faso is engaged with the support of the World Bank, in the development of a National Action plan for the Environment (BREADS) adopted in 1991 and revised in 1994 and which constitutes the national Agenda 21. Since this date, the Government has engaged a dialogue with its partners especially the UNDP, which ended in the development of the Letter of Intent of Policy of Sustainable Human Development (LIPDHD) in 1995. Also, the adoption by Burkina Faso of its first Strategic Framework of Fight against Poverty (CSLP) in 2000 constitutes the completion of the device having to make it possible to make operational the concept of sustainable development through the poverty reduction. During the same year, Burkina Faso engaged with the support of OECD, a dialogue process</p>

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					<p>with various actors of the national life which led to the definition of strategies for the implementation of a National Strategy of Sustainable Development (SNDD).</p> <p>In addition, the Government clearly expressed its will to have a prospective framework tracing the possible ways for an economic and social and sustainable development on which the various strategies and policies of development to short and medium term are based. It is from this point of view, which it decided with the support of the partners, for the realization since 1999 of an exploratory study "Burkina 2025". This study has as a principal objective to create a social dialogue on the major problems of development in order to define a consensual vision of the future of the country. The process must make it possible to have a prospective framework of reference and follow-up for the various strategic agendas of development for the whole of the actors and the partners.</p> <p>It is from this point of view that Burkina Faso worked out the Environmental Plan for Sustainable Development (PEDD).</p> <p>There are also a certain number of conventional obligations such as:</p> <ul style="list-style-type: none"> <li>• The convention against desertification.</li> <li>• The convention on biodiversity.</li> <li>• The convention on climate change.</li> <li>• The convention on the persistent organic pollutants.</li> <li>• Conventions on dangerous waste (Bale et Bamako).</li> <li>• International Convention on desertification.</li> <li>• The convention on climate change.</li> <li>• Framework convention on climate change.</li> <li>• Stockholm convention persistent organic pollutants.</li> </ul>

COUNTRY	SUB-MISSION	STANDARDS FOR ENVIRONMENTAL MEDIA maximum acceptable cadmium concentration for different media	ACTIONS AND REGULATIONS THAT CONTROL RELEASES FROM ENVIRONMENTAL SOURCES that contain cadmium	ACTIONS AND REGULATIONS ON PRODUCTS that contain cadmium	OTHER STANDARDS, ACTIONS AND PROGRAMMES relevant to cadmium
					<ul style="list-style-type: none"> <li>• Bamako convention on dangerous waste.</li> <li>• Bale convention on the transboundary movement on dangerous wastes and their management.</li> <li>• Rotterdam convention on the on the procedure of preliminary agreement with full knowledge of the applicable facts on certain chemicals and dangerous pesticides and their elimination.</li> </ul> <p>Legislative and regulatory provisions such as:</p> <ul style="list-style-type: none"> <li>• Law 14/96/ADP of 23 May 1996 bearing Agrarian and Land Ownership (RAF) in Burkina Faso.</li> <li>• The Law n°006/97/ADP of January 31, 1997 bearing Forest Code in Burkina Faso.</li> <li>• Law n°023/97/III/AN of December 4, 1997 bearing mining Code in Burkina Faso.</li> <li>• The Law n°005/97/ADP of May 19, 1994 bearing Code of public health in Burkina Faso.</li> <li>• The Law n°023/94/AN of June 21, 2005 bearing Code of the public health in Burkina Faso.</li> <li>• The Law n°022/2002/ADP of January 30, 1997 bearing Code of the environment in Burkina Faso.</li> </ul> <p>At the regional level the New Partnership for Africa Development (NEPAD) retained the environment like one of the great priorities. It will be a question in this case of preventing that the fast degradation of the natural resources continues (soils, animals' movements, forests, water) including the shared or transboundary resources.</p> <p>This entire politico-judiciary arsenal set up by Burkina Faso is the pledge which it makes of the safeguarding of the environment, one of the priority axes of the sustainable development. However, the management of the</p>

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					products containing lead and cadmium, as well as their waste is not the specific regulation object.
Burundi					
Cameroon	No			CREPD (Centre de Recherches et d'Education pour le Développement) has taken initiative to collect and recycle used batteries in the main cities of Cameroon.	
Cape Verde					
Central African Republic					
Chad	Yes	-	-	-	-
Comoros					
Congo					
Côte d'Ivoire	Yes	-	-	-	-
Democratic Republic of the Congo					
Djibouti					
Egypt					
Equatorial Guinea					
Eritrea					
Ethiopia					
Gabon					
Gambia					
Ghana	Yes	<b>Effluent Quality Guidelines for discharge into natural water bodies</b> - For the below mentioned sectors, there exist a sector specific effluent quality guideline of 0.1 mg/L for discharges into natural water	-	-	Regularly samples of specific imported raw materials (including plastic granules; clinker; fertilizers; meat products) are analysed for levels of heavy metals.

COUNTRY	SUB-MISSION	STANDARDS FOR ENVIRONMENTAL MEDIA maximum acceptable cadmium concentration for different media	ACTIONS AND REGULATIONS THAT CONTROL RELEASES FROM ENVIRONMENTAL SOURCES that contain cadmium	ACTIONS AND REGULATIONS ON PRODUCTS that contain cadmium	OTHER STANDARDS, ACTIONS AND PROGRAMMES relevant to cadmium
		bodies: Cement, ceramics & tiles industry; Oil & gas exploration, production & refining; Mining & minerals processing; Metals industry.  <b>Wastewater Quality Guidelines for discharge into water bodies or water courses</b> - maximum permissible level is <0.1 mg/L.			
Guinea					
Guinea-Bissau					
Kenya					
Lesotho					
Liberia					
Libyan Arab Jamahiriya					
Madagascar	Yes	-	-	-	<p><b>International Conventions:</b></p> <p>Madagascar has ratified a number of international conventions, the chemicals related ones include:</p> <ul style="list-style-type: none"> <li>• Convention on Climate Change,</li> <li>• Convention on Biological Diversity,</li> <li>• Cartagena Protocol on Biosafety,</li> <li>• Vienna Convention for Protection of the Ozone Layer, Montreal Protocol,</li> <li>• Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal,</li> <li>• Rotterdam Convention</li> </ul> <p>- Basel Convention - Close cooperation with the pertinent organs of the Agreement of Basel on the control of the transboundary movements of the dangerous remainders and its elimination.</p>

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					<p><b>National legislation:</b></p> <ul style="list-style-type: none"> <li>- Setting up of the Interdepartmental committee (to be in charge to manage the heavy metals)</li> <li>- Decree of application MECI, Law N°99-954 of 15/12/99. (Accountability of investments towards the environment).</li> </ul>
Malawi					
Mali	Yes	-	-	-	-
Mauritania					
Mauritius					
Morocco	Yes	<p><b>Water</b> - limit value of emissions (Moroccan Mediterranean Coast) 500 µg/L.</p> <p><b>Drinking water</b> - the Moroccan standard NM-03-7001 concerning the quality of drinking water fixes the maximal values acceptable to 0.005 mg/L.</p>	<p>The law 03-03 on the prevention of air pollution.</p> <p>The decree concerning the traffic that defines arrangement for the prevention of the pollution due to the transport.</p>	-	<p>The law 11-03 - Pertaining to the protection and improvement of the environment.</p> <p>The law 12-03 - Pertaining to environment impact studies.</p>
Mozambique					
Namibia					
Niger					
Nigeria		<p><b>Food/beverages</b> - Maximum Contaminant Level (MCL) is 0.005 mg/L (set by US EPA)</p>			
Rwanda	Yes	-	-	-	<p><b>Measures and strategies in force and future plans at the national, sub regional and regional levels aiming at the prevention or the control of discharges in order to avoid exposure to those substances as well as their uses, including practices in terms of waste management:</b></p> <p>Rwanda has recently voted a law relating to the protection of environment. This law came</p>

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					<p>into force on May 1st 2005. The application of this law will mainly be supervised by the MINISTRY through the Rwandese environmental management bureau which has been created in order to offer the framework for the management of all environmental problems, including problems inherent to the emissions of lead and cadmium (and mercury).</p> <p>Rwanda has regularly participated in all the sensitisation conferences and workshops on the gradual elimination of leaded fuel both at sub regional and regional levels. A sensitisation programme is now being implemented at the national level with the financial support of the United Nations Environmental Programme (PNU/UNEP). The permanent elimination of leaded fuel remains largely tributary to the capacities of the refineries of Kenya to have sufficient stocks of unleaded fuel.</p> <p>Relative measures aiming at the control of discharges of cadmium are directly connected to the process of rational management of wastes, including used batteries.</p>
Sao Tome & Principe					
Senegal					
Seychelles					
Sierra Leone					
Somalia					
South Africa					
Sudan		**Sudan has informed UNEP that response will be submitted later**			
Swaziland					
Togo	Yes	-	-	-	<b>International agreements relating to the environment:</b>

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					<p>The Republic of Togo has ratified most of the agreements relating to environmental protection. In this regard, it has always benefited from the necessary technical and financial assistances necessary for the implementation of its national policy for environmental protection. One of the components of this policy is the fight against the various forms of pollution among which we have pollution from chemical source. Within this framework, the country is currently implementing a programme on the management and the elimination of persistent organic pollutants (POP) in line with the Stockholm convention.</p> <p><b>National actions:</b></p> <p>Laws and regulations in matters of impact assessment on environment have been updated in Togo. That will help envisage henceforth mitigation measures and minimize as much as possible the damages to the environment during the installation of industrial projects that are likely to be a prejudice to human health and to environment.</p> <p>Education campaigns of the populations and the industrials constitute one of the current priorities of the Minister of Environment and Forestry Resources. Campaigns aim to raise the environmental awareness of the population in the management of wastes, either industrial or household produced, and the effect on health and environment from trace elements in the waste.</p>
Tunisia		According to Moroccan submission, Tunisian emission parameter standards is 5 µg/L.			
Uganda					
United Republic of Tanzania					

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Zambia					
Zimbabwe					

Table - Overview of existing and future national actions, including legislation, relevant to cadmium

II. ASIAN STATES - Standards for environmental media, Actions and regulations that control releases from environmental sources that contain cadmium, Actions and regulations on product sources that contain cadmium and Other standards, regulations and programmes relevant to cadmium

COUNTRY	SUB-MISSION	STANDARDS FOR ENVIRONMENTAL MEDIA maximum acceptable cadmium concentration for different media	ACTIONS AND REGULATIONS THAT CONTROL RELEASES FROM ENVIRONMENTAL SOURCES that contain cadmium	ACTIONS AND REGULATIONS ON PRODUCTS that contain cadmium	OTHER STANDARDS, ACTIONS AND PROGRAMMES relevant to cadmium
Afghanistan					
Bahrain					
Bangladesh					
Bhutan					
Brunei Darussalam					
Cambodia					
China					
Cook Islands					
Cyprus					
Fiji					
India					
Indonesia					
Iran	Yes	<p><b>Water quality standard, natural water</b> - maximum 0.01 ppm.</p> <p><b>Maximum level of cadmium discharged to;</b></p> <ul style="list-style-type: none"> <li>- Surface water - 0.2 mg/L.</li> <li>- Absorbent well (ground water) - 0.2 mg/L.</li> <li>- Agriculture and irrigation - 0.05 mg/L.</li> </ul>		<p><b>Current actions, strategies and future plans at national level for preventing and controlling releases and limiting exposure, including waste management practises:</b></p> <ul style="list-style-type: none"> <li>- Actions to replace nickel-cadmium batteries with other appropriate batteries.</li> </ul>	<p><b>Current actions, strategies and future plans at national level for preventing and controlling releases and limiting exposure, including waste management practises:</b></p> <ul style="list-style-type: none"> <li>- According to The Basel Convention, the government has tried to control, reduce or eliminate the toxicity of effluents before disposal, and has also implemented suitable measures for the collection, transportation, storage, handling, treatment and disposal of hazardous wastes including lead and cadmium and their compounds.</li> <li>- Ongoing implementation of waste water collection plan in Tehran, Ahvaz and other</li> </ul>

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					<p>big cities in the country.</p> <ul style="list-style-type: none"> <li>- Preparation of emission guidelines and standards for "Hospital, medical/infection wastes".</li> <li>- Preparation of comprehensive national plan regarding "Pollution reduction for major rivers of Iran".</li> <li>- Preparation of the guideline for the "Waste studies" in provinces.</li> <li>- Establishment of criteria for selection of landfill zones for hazardous wastes.</li> <li>- Establishment of landfills for urban waste province center (new cities and cities with a population above 20,000).</li> </ul>
Iraq					
Japan	Yes	<p><b>Environmental Quality Standard (for cadmium and its compounds):</b></p> <p>Water quality (drinking water) - <math>\leq 0.01</math> mg/L.</p> <p>Groundwater quality - <math>\leq 0.01</math> mg/L.</p> <p>Soil - <math>\leq 0.01</math> mg/L in leachate and <math>\leq 1</math> mg/kg of rice on agricultural land (if the contaminated soil is not adjacent to groundwater and concentration of cadmium and its compounds in the groundwater is <math>\leq 0.01</math> mg/L, <math>\leq 0.03</math> mg/L in leachate).</p> <p><b>Countermeasures for contamination of soil:</b></p> <p>Standards under Soil Contamination Countermeasures Law for cadmium and its compounds:</p> <p>a) Solubility standard <math>\leq 0.1</math> mg Cd/L in leachate.</p> <p>b) Content standard <math>\leq 150</math> mg Cd/kg</p>	-	<p><b>Import/export control:</b></p> <p>Waste with harmful characteristics, e.g. including cadmium concentration of 0.01 mg Cd/L and higher:</p> <p><i>Export -</i></p> <p>a) Approval by the Minister of economy, trade and industry is required.</p> <p>b) "A movement document of export" should be carried and the statement therein should be followed at transport.</p> <p><i>Import -</i></p> <p>a) Approval by the Minister of economy, trade and industry is required. The Minister of economy, trade and industry gives the approval to the import and checks whether the movement document submitted by the applicant meets the notification concerning regulations in Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, then provides "a movement document of import".</p>	<p>Regulation of cadmium release into environment:</p> <p><b>Restriction of emission into atmosphere:</b></p> <p><i>Reduction of cadmium emission in gas from factories</i> - Emission standard is set for specific ceramic products, glass products, refining industry of copper, zinc and cadmium, cadmium secondary refining industry, cadmium pigment industry, and cadmium carbonate industry based on the size of the facility.</p> <p><b>Restriction for waste water:</b></p> <p><i>Reduction of cadmium in waste water discharged from factories into public water area</i> - Cadmium and its compounds should be below 0.1mg/L.</p> <p><i>Reduction of cadmium in waste water discharged from factories into sewerage</i> - Cadmium and its compounds should be below 0.1mg/L.</p>

COUNTRY	SUB-MISSION	STANDARDS FOR ENVIRONMENTAL MEDIA maximum acceptable cadmium concentration for different media	ACTIONS AND REGULATIONS THAT CONTROL RELEASES FROM ENVIRONMENTAL SOURCES that contain cadmium	ACTIONS AND REGULATIONS ON PRODUCTS that contain cadmium	OTHER STANDARDS, ACTIONS AND PROGRAMMES relevant to cadmium
		<p>of soil.</p> <p>Specification of polluted agricultural land and measures: In June 1971, requirement for specification of cadmium-contaminated agricultural land is determined in conformity with the standard value for cadmium concentration (1ppm for brown rice) established under the Food Sanitation Law: "land where cadmium concentration in rice is recognized as being 1mg/kg (1ppm) or more, or which may produce ditto-rice".</p> <p><b>Countermeasures for contamination of groundwater:</b></p> <p><i>Quality standard for groundwater under Water Pollution Control Law</i> - In the case where cadmium-contaminated water deriving from factories, for example, would penetrate the underground and affects or may affect human health, prefectural governors are allowed to order the factory's installation personnel(s) to take measures to prevent the damage and to purify groundwater, when cadmium concentration is over 0.01mg Cd/L.</p>		<p>b) "Movement document of import" should be carried and the statement therein should be followed at transport.</p> <p>c) The statement of the movement document of import should be followed at disposal.</p>	<p><b>Restriction of cadmium emission as disposal:</b></p> <p><i>Judgment of industrial waste as to whether special treatment is required</i> - Content standard are set in waste acid, waste alkalis and disposal thereof, and solution standard in residue, sludge, tailing, dust and disposal thereof.</p> <p><i>Judgment of industrial waste as to whether landfill (onshore and offshore) is possible</i> - Standard is set in residue, sludge, sewerage sludge, tailing, dust and disposal thereof.</p> <p><i>Judgment of industrial waste as to whether ocean injection is possible</i> - Standards for rate of content in organic sludge, soluble inorganic sludge, waste acid and waste alkalis are set, and solubility standard for non-soluble inorganic sludge is set.</p> <p><i>Judgment of dredge soil as to whether ocean injection is possible</i> - Solubility standard for dredge soil is set.</p> <p><b>Promotion of voluntary effort for emission reduction by industries:</b></p> <p><i>Publication of emission/transport amount of cadmium by respective industries after PRTR</i> - Cadmium and its compounds are put subject to PRTR. Industries are required to measure their own emission into atmosphere and transport as waste and report to the local administration. The local administration compiles and publicizes the assumed emission/transport.</p> <p><b>Appropriate working environment:</b></p> <p><i>Assessment of working environment</i> - Concentration standard for assessment of cadmium and its compounds is set 0.05 mg Cd/m<sup>3</sup>. The standard for estimation is also</p>

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					<p>established.</p> <p><b>Prevention of occupational accident caused by chemicals:</b></p> <p><i>MSDS</i> - Obligation of reporting the transfer and provision of cadmium and its compounds (formulation with 1% or more by weight of cadmium and others).</p> <p><i>Prevention of health problems of workers exposed to dust including cadmium</i> - Followings are required for cadmium and its compound (formulation with 1% or more by weight of cadmium and others):</p> <ul style="list-style-type: none"> <li>a) Permission for production.</li> <li>b) Standard for production facility.</li> <li>c) Setting of dust arrestor and treating method for contaminated rags and the like for prevention of contamination and health problem due to release.</li> <li>d) Restricted entrance to workplace and installation site, and non-admittance sign.</li> </ul> <p><b>Protection of workers suffering health problems:</b></p> <p><i>Compensation for occupational diseases caused by exposure to cadmium and its compound</i> - Employers bear the expense of medical treatment caused by disease.</p>
Jordan					
Kazakhstan					
Kiribati					
Korea, Democratic People's Republic of					
Korea, Republic of					
Kuwait					

COUNTRY	SUB-MISSION	STANDARDS FOR ENVIRONMENTAL MEDIA maximum acceptable cadmium concentration for different media	ACTIONS AND REGULATIONS THAT CONTROL RELEASES FROM ENVIRONMENTAL SOURCES that contain cadmium	ACTIONS AND REGULATIONS ON PRODUCTS that contain cadmium	OTHER STANDARDS, ACTIONS AND PROGRAMMES relevant to cadmium
Kyrgyzstan					
Lao People's Democratic Republic					
Lebanon					
Malaysia					
Maldives					
Marshall Islands					
Micronesia (Federated States of)					
Mongolia	Yes	-	-	-	-
Myanmar					
Nauru					
Nepal					
Niue					
Oman	Yes	-	-	-	-
Pakistan					
Palau					
Papua New Guinea					
Philippines	Yes	-	-	-	-
Qatar					
Samoa					
Saudi Arabia					
Singapore					
Solomon Islands					

COUNTRY	SUB-MISSION	STANDARDS FOR ENVIRONMENTAL MEDIA maximum acceptable cadmium concentration for different media	ACTIONS AND REGULATIONS THAT CONTROL RELEASES FROM ENVIRONMENTAL SOURCES that contain cadmium	ACTIONS AND REGULATIONS ON PRODUCTS that contain cadmium	OTHER STANDARDS, ACTIONS AND PROGRAMMES relevant to cadmium
Sri Lanka					
Syrian Arab Republic					
Tajikistan					
Thailand					
Tonga					
Turkey	Yes	-	-	Import of cadmium is regulated by a notification entitled "Chemicals under control for protection of the environment". In addition, a document entitled "Chemical Substances Import" has to be obtained from the Ministry of Environment and Forestry to import cadmium.	-
Turkmenistan					
Tuvalu					
United Arab Emirates					
Uzbekistan		Major Environmental Standards in Uzbekistan: <b>Air</b> - 0.0003 mg Cd <sup>2+</sup> /m <sup>3</sup> . <b>Drink Water</b> - 0.001 mg Cd <sup>2+</sup> /L. <b>Reservoir Water</b> - 0.005 mg Cd <sup>2+</sup> /L. <b>Soil</b> - 0.5 mg Cd <sup>2+</sup> /kg.			
Vanuta					
Vietnam					
Yemen					

Table - Overview of existing and future national actions, including legislation, relevant to cadmium

III. EASTERN EUROPEAN STATES - Standards for environmental media, Actions and regulations that control releases from environmental sources that contain cadmium, Actions and regulations on products that contain cadmium and Other standards, actions and programmes relevant to cadmium

COUNTRY	SUB-MISSION	STANDARDS FOR ENVIRONMENTAL MEDIA maximum acceptable cadmium concentration for different media	ACTIONS AND REGULATIONS THAT CONTROL RELEASES FROM ENVIRONMENTAL SOURCES that contain cadmium	ACTIONS AND REGULATIONS ON PRODUCTS that contain cadmium	OTHER STANDARDS, ACTIONS AND PROGRAMMES relevant to cadmium
Albania					
Armenia					
Azerbaijan					
Belarus					
Bosnia and Herzegovina					
Bulgaria					
Croatia					
Czech Republic	Yes	<p><b>Water</b> - limit value in drinking water: 5 µg/L.</p> <p><b>Air</b> - Limit value in air 0.005 µg/L.</p> <p><b>Exposure limits</b> - 7 µg/kg/week</p> <p><b>Reference dose for chronic oral exposure</b> - 0.5 water, 1.0 diet (US EPA)</p>			<p><b>International conventions</b> - The Czech Republic has ratified a number of international conventions, the chemicals related ones include: UN Framework Convention on Climate Change, Convention on Biological Diversity, Cartagena Protocol on Biosafety, Vienna Convention for Protection of the Ozone Layer, Montreal Protocol on Substances that Deplete the Ozone Layer as amended by: the London Amendment, Copenhagen Amendment, Montreal Amendment and Beijing Amendment, Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, Convention on Long-Range Transboundary Air Pollution (CLRTAP) and its protocols, Convention on the Transboundary Effects of Industrial Accidents, Convention on the International Commission for the Protection of the Elbe River, Convention on the International Commission for the Protection of the Odra River against Pollution, Convention on Cooperation for the Protection and Sustainable Use of the Danube River, Convention on the Protection and Use of Transboundary Watercourses and International Lakes, The Convention on Environmental Impact Assessment in a</p>

COUNTRY	SUB-MISSION	STANDARDS FOR ENVIRONMENTAL MEDIA maximum acceptable cadmium concentration for different media	ACTIONS AND REGULATIONS THAT CONTROL RELEASES FROM ENVIRONMENTAL SOURCES that contain cadmium	ACTIONS AND REGULATIONS ON PRODUCTS that contain cadmium	OTHER STANDARDS, ACTIONS AND PROGRAMMES relevant to cadmium
					Transboundary Context,  <b>International environmental agreements that have already been ratified by CR but have not yet come into force for CR</b> - Kyoto Protocol to the UN Framework Convention on Climate Change (CR has been a Party since 2001), Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (CR has been a Party since 2000), Stockholm Convention on Persistent Organic Pollutants (CR has been a Party since 2002), The Amendment to the Basel Convention (CR has been a Party since 2000), Protocol on Water and Health (CR has been a Party since 2001).
Estonia					
Georgia					
Hungary					
Latvia					
Lithuania	Yes	<b>Soil</b> - Highest allowable concentration in living, recreation and rural soil stated in Lithuanian hygiene standard HN 60:2004 is 3 mg/kg.	-	-	-
Poland	Yes	-	-	-	<b>Implementation of Aarhus Protocol provisions and EU regulations in Poland with regard to cadmium mainly refers to:</b>  - Regulations concerning chemicals, waste management, fuel combustion for energy purposes (including reduction of particulate emission and consequently heavy metal emission), municipal waste incineration and meeting the limit values concerning flue gas pollutant emission  - Reduction of environmental burden by successive implementation of the best available techniques and technologies in the industrial activity.  <b>Reduction of pollutants in raw materials un-</b>

COUNTRY	SUB-MISSION	STANDARDS FOR ENVIRONMENTAL MEDIA maximum acceptable cadmium concentration for different media	ACTIONS AND REGULATIONS THAT CONTROL RELEASES FROM ENVIRONMENTAL SOURCES that contain cadmium	ACTIONS AND REGULATIONS ON PRODUCTS that contain cadmium	OTHER STANDARDS, ACTIONS AND PROGRAMMES relevant to cadmium
					<p><b>dergoing combustion or processing mainly refers to the following processes:</b></p> <ul style="list-style-type: none"> <li>- Segregation of municipal and hospital wastes to reduce their amount, which is particularly important in their further disposal, in that, by incineration.</li> <li>- Use of raw materials which are not contaminated with heavy metals (cadmium contaminated raw materials used for production of phosphorus fertilizers).</li> </ul> <p><b>Monitoring of heavy metal emission:</b></p> <p>A number of actions are being taken, in that:</p> <ul style="list-style-type: none"> <li>- Development of a catalogue of national emission sources which determine heavy metal environmental burden.</li> <li>- Detailed specification of the scope and methods used for heavy metal emission measurements.</li> <li>- Determination of actual emission of heavy metals based not only on emission factors but also on measurement results.</li> </ul> <p>One of the recommendations presented in the above-mentioned strategy is defining guidelines and implementation of national measurements of heavy metal concentration in the air, precipitation and soil with regard to potential control of implementation of the national strategy on heavy metal emission reduction.</p>
Republic of Moldova	Yes	<p><i>Environmental Quality Standards (maximum permissible concentration for cadmium and its compounds):</i></p> <p><b>Air of residential areas and for air of a working zone</b> - 0.0003 mg/m<sup>3</sup>.</p> <p><b>Drinking water</b> - 0.001 mg/L.</p> <p><b>Reservoir water of fish facilities destination</b> - 0.005 mg/L.</p>		<p>Republic of Moldova has ratified a number of international agreements related to chemicals management and actually implements its obligations, such as:</p> <p><b>Basel Convention</b> on the Control of Transboundary Movements of Hazardous Wastes and their Disposal.</p> <p><b>Rotterdam Convention</b> on the Prior Informed Consent Procedure for Cer-</p>	<p><b>Waste disposal restrictions:</b></p> <p>Law on Wastes of Production and Consumption (No. 1347-XIII of 9 October 1997).</p> <p>National Programme on Management of Wastes of Production and Consumption, approved by the Government Decision No. 606 of 28.06.2000.</p> <p>Government Decision No. 637 of 27 May 2003 on the Control of the Transboundary Transport</p>

COUNTRY	SUB-MISSION	STANDARDS FOR ENVIRONMENTAL MEDIA maximum acceptable cadmium concentration for different media	ACTIONS AND REGULATIONS THAT CONTROL RELEASES FROM ENVIRONMENTAL SOURCES that contain cadmium	ACTIONS AND REGULATIONS ON PRODUCTS that contain cadmium	OTHER STANDARDS, ACTIONS AND PROGRAMMES relevant to cadmium
		<p><b>Soil</b> - 0.5 mg/kg.</p> <p><b>Soil</b> (mobile forms) - 6 mg/kg.</p> <p><i>Food quality standards (maximum permissible concentration for cadmium and its compounds):</i></p> <p><b>Meat, sausage products, meat conserves</b> - 0.05 mg/kg.</p> <p><b>Eggs and its liquid products</b> - 0.01 mg/kg.</p> <p><b>Egg dry products (egg powder)</b> - 0.1 mg/kg.</p> <p><b>Fish and its conserves</b> - 0.2 mg/kg.</p> <p><b>Milk and its products</b> - 0.03 mg/kg, mg/l.</p> <p><b>Milk conserves</b> - 0.1 mg/kg</p> <p><b>Cheese, processed cheese</b> - 0.2 mg/kg.</p> <p><b>Sugar</b> - 0.05 mg/kg.</p> <p><b>Sugary confectionery products</b> - 0.1 mg/kg.</p> <p><b>Cocoa beans, chocolate</b> - 0.5 mg/kg.</p> <p><b>Honey</b> - 0.05 mg/kg.</p> <p><b>Cereals, grain, groats, flour, macaroni</b> - 0.1 mg/kg.</p> <p><b>Bread and bakery products</b> - 0.07 mg/kg.</p> <p><b>Fresh, dry vegetables, its conserves</b> - 0.03 mg/kg</p> <p><b>Fresh, dry fruits, berries, its conserves</b> - 0.03 mg/kg</p> <p><b>Mushrooms conserves</b> - 0.1 mg/kg</p> <p><b>Vegetable juices</b> - 0.03 mg/kg</p> <p><b>Fruit and berry juices</b> - 0.03 mg/kg.</p>		<p>tain Hazardous Chemicals and Pesticides in International Trade.</p> <p><b>Aarhus Protocol</b> on Heavy Metals under the UN ECE 1979 Convention on Long-range Transboundary Air Pollution.</p> <p><b>Convention on Cooperation for the Protection and Sustainable Use of the River Danube.</b></p> <p><b>Regulation on Storage and Wholesale Trade</b> (Through the Automated System) of the Identified Oil Products, approved by the Government Decision No. 1116 of 22 August 2002. In conformity with this Regulation, <i>import, storage and trade of leaded fuel</i>, absorbing and halogenated additives for fuel and oils products at territory of the Republic Moldova <i>are banned</i>.</p> <p><b>Law on the Payment for Environmental Pollution</b> (No. 1540-XIII din 25 February 1998). Article 11 of this Law establishes requirements on payment for import of products, including Hg, Pb, Cd - containing products, such as:</p> <ul style="list-style-type: none"> <li>- batteries and elements.</li> <li>- accumulators, separators, lamps and others products.</li> </ul> <p>The draft Law on Modification and Amendment of the Law on the Payment for Environmental Pollution now is developed, in which the list of Pb, Cd - containing products and articles, subject to a payment for import of these products, is extended.</p>	<p>of Hazardous Wastes and its Disposal. The following documents were approved by this Government Decision:</p> <p>Regulation on the Control of the Transboundary Transport of Hazardous Wastes and its Disposal</p> <p>Categories of Hazardous Wastes, among which, also, there are: Hg, Pb, Cd metallic wastes and rests and Hg, Pb, Cd - containing wastes and rests etc.</p> <p>Law on the Payment for Environmental Pollution (No. 1540-XIII din 25 February 1998). Article 10 of this Law establishes requirements on payment for Hg, Pb, Cd – containing waste disposal..</p> <p><b>Other national activities:</b></p> <ul style="list-style-type: none"> <li>- Implemented annual calculation of Mercury and other HMs emissions into atmospheric air and reporting of its values to the bodies created under LRTAP Convention.</li> <li>- Established statistical registration of emissions of Hg, Pb, Cd and other HMs into atmospheric air.</li> <li>- Elaborated and approved the Regulation on the control of the transboundary transport of dangerous wastes and its disposal.</li> <li>- Elaborated and approved the instructions on completing of notifications and forms related to transboundary transport of dangerous wastes and its disposal.</li> <li>- Established National Network for observations and laboratory control on environment pollution by radioactive, poisonous, toxic chemicals and bacteriological preparations at territory of the Republic of Moldova.</li> <li>- Established National System for selection and exchange of information in the protection of public and territory in emergency situations.</li> </ul>

COUNTRY	SUB-MISSION	STANDARDS FOR ENVIRONMENTAL MEDIA maximum acceptable cadmium concentration for different media	ACTIONS AND REGULATIONS THAT CONTROL RELEASES FROM ENVIRONMENTAL SOURCES that contain cadmium	ACTIONS AND REGULATIONS ON PRODUCTS that contain cadmium	OTHER STANDARDS, ACTIONS AND PROGRAMMES relevant to cadmium
		<p><b>Butter</b> - 0.03 mg/kg</p> <p><b>Oil</b> - 0.05 mg/kg</p>			<p>- Elaborated and approved the Programme for Emissions Reduction from Mobile Sources. According to this Programme a range of measures for reduction of toxic emissions into air is foreseen:</p> <ul style="list-style-type: none"> <li>- Total exclusion of use of leaded petrol.</li> <li>- Supplying the auto vehicles with neutralizers and catalysts.</li> <li>- Enhance the usage of gaseous fuel for transport etc.</li> </ul> <p>- Elaborated and approved the Programme on Insurance of the Environmental Safety. This Programme contains more provisions on the development of programs, plans, legislative and normative acts in goals of environment protection from chemicals, including HMs, establishment ELVs based on BAT, elaboration of National Register of Potential Toxic Chemicals (NRPTC), establishment of PRTR system and other provisions.</p> <p>- Actually Draft Regulation on waste management is under development etc.</p> <p><b>Economical instruments for emissions to air (Law on the Payment for Environmental Pollution):</b></p> <ul style="list-style-type: none"> <li>- Payment for releases into air of HMs and its compounds, from stationary sources: <ul style="list-style-type: none"> <li>a) Pollutants releases within the established limits.</li> <li>b) Pollutants releases exceeding the established limits</li> </ul> </li> <li>- Payment for releases into air of chemicals from mobile sources using liquefied natural gas and compressed hydrocarbon gas is fixed for natural persons and legal entities with due account for the actual amount of fuel consumed during automobile transport operation expressed in tons or cubic meters.</li> </ul> <p><b>Economical instruments for emissions to</b></p>

COUNTRY	SUB-MISSION	STANDARDS FOR ENVIRONMENTAL MEDIA maximum acceptable cadmium concentration for different media	ACTIONS AND REGULATIONS THAT CONTROL RELEASES FROM ENVIRONMENTAL SOURCES that contain cadmium	ACTIONS AND REGULATIONS ON PRODUCTS that contain cadmium	OTHER STANDARDS, ACTIONS AND PROGRAMMES relevant to cadmium
					<p><b>water, waste water, waste (Law on the Payment for Environmental Pollution):</b></p> <ul style="list-style-type: none"> <li>- Payment for HMs discharge into water bodies and sewerage: <ul style="list-style-type: none"> <li>a) Pollutants discharges within the established limits.</li> <li>b) Pollutants discharges violating the established limits.</li> </ul> </li> <li>- Payment for HMs-containing waste disposal: <ul style="list-style-type: none"> <li>a) waste disposal sites are located within the enterprise area.</li> <li>b) waste disposal at landfills (open dumps) within the established limits.</li> <li>c) waste disposal at landfills (open dumps) at amounts exceeding the established limits.</li> </ul> </li> <li>- Payment for Hg, Pb, Cd - containing products: <ul style="list-style-type: none"> <li>a) batteries and elements.</li> <li>b) accumulators and separators and lamps etc.</li> </ul> </li> </ul>
Romania					
Russian Federation					
Slovakia	Yes	<p><b>Environmental Quality Standards (maximum permissible concentration for cadmium and its compounds):</b></p> <p>Actions for the protection of the water compartment of the environment are incorporated in Act No 364/2004 Coll. on water put into force July 7 2004. The Act includes Cd and its compounds as especially harmful substances.</p> <p>The Act has implemented a number of EU Directives.</p> <p>Drinking water - Quality control limit value for Cd - 0.003 mg/L</p> <p>Flue gas emission to air - 0.1 mg/m3</p>		<p><b>Waste management:</b></p> <p>In accordance with Act No 24/2004 Coll. which amends the Act No 223/2001 Coll. on waste into force on March 1 2004, it is banned to place on the market vehicles containing the materials and components with Pb, Cd, Hg or Cr6+ (except in specific cases).</p> <p>The Act has implemented a number of EU Directives.</p>	<p>According to Annex 7 of Act No. 223/2003 "Coll. Of Wastes" a number of obligations applies for batteries and accumulators, e.g.:</p> <ul style="list-style-type: none"> <li>- Collection of batteries and accumulators put into circulation after 18 September 1992 containing more than: <ul style="list-style-type: none"> <li>a) 25 mg of mercury per cell.</li> <li>b) 0.025% of cadmium by weight.</li> <li>c) 0.4% of lead by weight.</li> </ul> </li> <li>- Spent batteries and accumulators listed in Annex 7 may be collected, recovered and disposed of only separately from other waste types.</li> <li>- It is prohibited to mix spent batteries and accumulators with household waste.</li> <li>- The holder of spent batteries and accumulators listed in Annex 7 shall be obliged to hand them</li> </ul>

COUNTRY	SUB-MISSION	STANDARDS FOR ENVIRONMENTAL MEDIA maximum acceptable cadmium concentration for different media	ACTIONS AND REGULATIONS THAT CONTROL RELEASES FROM ENVIRONMENTAL SOURCES that contain cadmium	ACTIONS AND REGULATIONS ON PRODUCTS that contain cadmium	OTHER STANDARDS, ACTIONS AND PROGRAMMES relevant to cadmium
		<p>(at a weighed flow of &gt; 0.5 g/h).</p> <p>Agricultural soil - 0.4 mg/kg wwt (sanded, clayed-sandy); 0.7 mg/kg wwt (sanded-clayed, clayed); 1 mg/kg wwt (clayed-clay, clayed).</p> <p><b>Qualitative goals for cadmium and its compounds:</b></p> <ul style="list-style-type: none"> <li>- Surface water 5 g/L.</li> <li>- Irrigated water 5 µg/L.</li> <li>- Surface water used as drinking water 1 µg/L (Cat. A+B+C).</li> </ul>			<p>in for recovery or disposal to an authorisation holder only.</p> <p>The manufacturer and importer of batteries and accumulators listed in Annex 8 as well as the manufacturer and importer of equipment with built in batteries and accumulators shall be obliged to pay a contribution to a Recycling Fund.</p> <p><b>Hazardous waste:</b></p> <p>The following general obligations for handling with hazardous waste are in the place in the Slovak Republic:</p> <ul style="list-style-type: none"> <li>- Prohibition to dilute and mix individual types of hazardous wastes or hazardous wastes with non-hazardous, with the aim of decreasing the concentration of the injurants present.</li> <li>- In collection, shipment and warehousing, hazardous waste must be packed in a suitable package and duly indicated under a special regulation.</li> <li>- Hazardous wastes shall be disposed of preferentially to other wastes.</li> </ul> <p><b>Batteries:</b></p> <ul style="list-style-type: none"> <li>- At present time the revision of directive on spent batteries and accumulators (No. 91/157/ES) is in progress. There is a proposal for restriction of use and - if possible - full substitution of mercury, lead and cadmium in batteries and accumulators.</li> </ul> <p><b>Classification of chemicals:</b></p> <p>In accordance with the Decree No 2/2000 Coll. for the execution of the Act No. 163/2001 Coll. on chemical substances and preparations, Cd and its compounds are not classified as dangerous for the environment ("N").</p> <p><b>Waste management:</b></p>

COUNTRY	SUB-MISSION	STANDARDS FOR ENVIRONMENTAL MEDIA maximum acceptable cadmium concentration for different media	ACTIONS AND REGULATIONS THAT CONTROL RELEASES FROM ENVIRONMENTAL SOURCES that contain cadmium	ACTIONS AND REGULATIONS ON PRODUCTS that contain cadmium	OTHER STANDARDS, ACTIONS AND PROGRAMMES relevant to cadmium
					<p>In accordance with the Act No 205/2004 Coll. on the collection, keeping and dissemination of information on the environment, the producers and/or entrepreneurs are obliged to notify if the below mentioned limit values are exceeded:</p> <p>Limit value on emissions of cadmium and its compounds:</p> <p>To air - over 10 kg/year.</p> <p>To water - over 5 kg/year.</p> <p>To soil - over 5 kg/year.</p> <p>Limit value on transfer of cadmium and its compounds - over 5 kg/year.</p>
Slovenia					
Former Yugoslav Republic of Macedonia					
Ukraine					
Yugoslavia					
European Communities		<b>Limit value in drinking water -</b> (Directive EC 98/83) 5 µg/L (EC, 2000).			

Table - Overview of existing and future national actions, including legislation, relevant to cadmium

IV. LATIN AMERICAN AND CARIBBEAN STATES - Standards for environmental media, Actions and regulations that control releases from environmental sources that contain cadmium, Actions and regulations on product sources that contain cadmium and Other standards, regulations and programmes relevant to cadmium

COUNTRY	SUB-MISSION	STANDARDS FOR ENVIRONMENTAL MEDIA maximum acceptable cadmium concentration for different media	ACTIONS AND REGULATIONS THAT CONTROL RELEASES FROM ENVIRONMENTAL SOURCES that contain cadmium	ACTIONS AND REGULATIONS ON PRODUCTS that contain cadmium	OTHER STANDARDS, ACTIONS AND PROGRAMMES relevant to cadmium
Antigua and Barbuda					
Argentina					
Bahamas					
Barbados		**Country response will be submitted late**			
Belize					
Bolivia	Yes	<b>Potable water</b> - 3 ppb, based on recommendations from the Pan American Health Organisation.			
Brazil					
Chile	Yes	-	-	-	-
Colombia	Yes	-	-	-	-
Costa Rica					
Cuba	Yes	Cuba has National Standards to state limits for concentrations of heavy metals in liquid wastes that will be disposed in the sea, rivers or others. It is being developed a National Standard to state limits for concentrations of pollutants in emissions to the atmosphere.	-	-	-
Dominica					
Dominican Republic					
Ecuador	Yes - Ecuador's submitted				

COUNTRY	SUB-MISSION	STANDARDS FOR ENVIRONMENTAL MEDIA maximum acceptable cadmium concentration for different media	ACTIONS AND REGULATIONS THAT CONTROL RELEASES FROM ENVIRONMENTAL SOURCES that contain cadmium	ACTIONS AND REGULATIONS ON PRODUCTS that contain cadmium	OTHER STANDARDS, ACTIONS AND PROGRAMMES relevant to cadmium
	information will be entered				
El Salvador					
Grenada					
Guatemala					
Guyana					
Haiti					
Honduras	Yes	<p><b>Potable water</b> - 0.003 mg/L.</p> <p><b>Discharge of waste water into receiving bodies</b> - 0.05 mg/L.</p> <p><b>Discharge of waste water into sewer system</b> - 0.1 mg/L.</p> <p><i>Proposal of the National Technical Standards for water in its different uses (maximum admissible values):</i></p> <p><b>Supply to populations</b> - 0.003 mg/L.</p> <p><b>Agriculture and Livestock</b> (irrigation of vegetables for consumption; Irrigation for other type of crop; Consumption of larger or smaller livestock) - 0.005 mg/L.</p> <p><b>Aquaculture</b> - 0.003 mg/L.</p> <p><b>Preservation of flora and fauna</b> (basic quality of water) - 0.003 mg/L.</p>			
Jamaica					
Mexico	Yes	-	-	<p><b>Batteries</b> - Initiative for the handling of the batteries of Ni-Cd remainder, consists of a voluntary agreement celebrated between the Motorola company and the environmental authorities of the National Institute of Ecology, Secretariat of Environment and Natural Resources,</p>	<p>Different measures and strategies, at national, sub-regional and regional levels, have been taken to prevent and/or control emissions and uses of lead. This includes different non-regulatory and regulatory measures.</p> <p><b>Cement</b> - In 2001, the SEMARNAT, the Na-</p>

COUNTRY	SUB-MISSION	STANDARDS FOR ENVIRONMENTAL MEDIA maximum acceptable cadmium concentration for different media	ACTIONS AND REGULATIONS THAT CONTROL RELEASES FROM ENVIRONMENTAL SOURCES that contain cadmium	ACTIONS AND REGULATIONS ON PRODUCTS that contain cadmium	OTHER STANDARDS, ACTIONS AND PROGRAMMES relevant to cadmium
				<p>for the recollection of batteries in order to be sent to a company that will be in charge of the recycling process in Pennsylvania, United States. Nevertheless this project is on hold.</p> <p><b>Fuels</b> - Improvement of the fuel quality. The reduction of lead and sulfur content in fuels for motor vehicles has contributed to the reduction of some emissions of movable sources. A regional surcharge to the gasoline with the objective to finance actions to improve the environment on the Metropolitan Zone of the Valley of Mexico (ZMVM).</p> <p><b>Basel Convention</b> - Close cooperation with the pertinent organs of the Agreement of Basel on the control of the transboundary movements of the dangerous remainders and its elimination.</p>	<p>tional Cement Chamber and Cooperative Blue Cross S.C.L., signed an agreement for the use of dangerous remainders as a alternating source where are established the "bases to make joint operations with environmental tendencies to promote the participation of the cement industry in programs of remainders safety handling and co-processing of materials and remainders, preservation and improvement of the atmosphere and national advantage of the natural resources.</p> <p><b>Pesticides</b> - Mexican sub-committee for the attention of the Codex on remainders of pesticides.</p> <p><b>Food</b> - Mexican sub-committee for the attention of Codex on food admixtures and polluting agents of food.</p> <p><b>Air, water and ground</b> - The National Program of the Environment and Natural Resources 2001 – 2006 (PNMARN) deals with the following two issues:</p> <ul style="list-style-type: none"> <li>• To stop and to revert the contamination of the air, water and ground.</li> <li>• To recover and to reuse residual waters of agricultural use.</li> </ul> <p><b>Emissions</b> - Important progresses have been obtained about the beginning of the OECD recommendations about the Registry of Emissions and the Transference of polluting agents.</p> <p><b>Sanitation</b> - National Program of Health (PRONASA) 2001 – 2006, states that the protection against sanitary risks as action line of the strategy to fortify the governing paper of the Secretariat of Health.</p> <p>Program of Action and Protection against Sanitary Risks (PROSA), this program responds to the health needs of the population to protect them against risks caused by the use or consumption of foods and drinks, medi-</p>

COUNTRY	SUB-MISSION	STANDARDS FOR ENVIRONMENTAL MEDIA maximum acceptable cadmium concentration for different media	ACTIONS AND REGULATIONS THAT CONTROL RELEASES FROM ENVIRONMENTAL SOURCES that contain cadmium	ACTIONS AND REGULATIONS ON PRODUCTS that contain cadmium	OTHER STANDARDS, ACTIONS AND PROGRAMMES relevant to cadmium
					cines, medical equipment and supplies, pesticides, perfumes, cleaning and beauty products, vegetable nutrients and other products or substances to which of involuntary way expose the population as well as the injurious effects of environment for the health.  <b>Contaminated sites</b> - Development of systemic guides for handling remainders and strategies to restore contaminated Sites – SEMARNAT.
Nicaragua					
Panama	Yes	<b>**Received submission information will be included later**</b>			
Paraguay					
Peru					
Saint Kits and Nevis					
Saint Lucia					
Saint Vincent and the Grenadines					
Suriname					
Trinidad and Tobago	Yes	<b>Air</b> - 100 µg/m <sup>3</sup> . <b>Water</b> - 40 µg/L (seawater); 2.0 µg/L (freshwater); 5 µg/L (groundwater). <b>Soil and sediment</b> - 0.7 µg/g. <b>Biota</b> - 1.5 µg/g.			
Uruguay					
Venezuela					

Table - Overview of existing and future national actions, including legislation, relevant to lead  
 V. WESTERN EUROPE AND OTHER STATES Standards for environmental media, Actions and regulations that control releases from environmental sources that contain lead, Actions and regulations on product sources that contain lead and Other standards, regulations and programmes relevant to lead

COUNTRY	SUB-MISSION	STANDARDS FOR ENVIRONMENTAL MEDIA maximum acceptable cadmium concentration for different media	ACTIONS AND REGULATIONS THAT CONTROL RELEASES FROM ENVIRONMENTAL SOURCES that contain cadmium	ACTIONS AND REGULATIONS ON PRODUCTS that contain cadmium	OTHER STANDARDS, ACTIONS AND PROGRAMMES relevant to cadmium
Andorra					
Australia	Yes	<p><b>Environmental and health guidelines and standards for cadmium:</b></p> <p><i>Cadmium in water:</i></p> <p>Trigger values for lead set by the Guidelines:</p> <p>Freshwater - 0.2 µg/L.</p> <p>Marine - 0.7 µg/L.</p> <p>Livestock drinking water - 0.01 mg/L.</p> <p>Recreation water - 5 µg/L.</p> <p>Irrigation water:</p> <ul style="list-style-type: none"> <li>- 0.05 mg/L (short-term trigger value);</li> <li>- 0.01 mg/L (long-term trigger value);</li> <li>- 2 kg/ha (cumulative contaminated load trigger value).</li> </ul> <p>Sediment - 1.5 mg/kg dry weight.</p> <p>Drinking water - The 'Australian Drinking Water Guidelines 1996' stipulate that cadmium in drinking water should be investigated if it exceeds 0.002 mg/L.</p> <p><b>Cadmium in soil:</b></p> <p>The Ecological Investigation Level (EIL) for sites contaminated with cadmium is 3 mg/kg. The Assessment of Site Contamination National Environment Protection Measures is currently being reviewed and these EILs are also being reassessed.</p>	-	-	<p><b>Australian Cadmium Minimisation Strategy:</b></p> <p>In 1997, a Cadmium in Agriculture Task Force was established to consider the issue of cadmium in Australian agricultural soils and produce and to report on future actions. All state governments, the Australian Government, the Commonwealth Scientific and Industrial Research Organisation (CSIRO), the National Farmers' Federation and the Fertiliser Industry Federation of Australia (FIFA) were represented on the Task Force - which developed the Australian Cadmium Minimisation Strategy. The aim of the strategy is to maintain safe levels of cadmium in agricultural soils and produce, to ensure a safe food supply and to retain competitiveness for agricultural exports. Australia's National Cadmium Management Committee was established in 2000 to oversee this strategy. The strategy is addressing the following issues:</p> <ul style="list-style-type: none"> <li>a) Harmonizing state regulations and standards controlling cadmium in manufactured fertilisers.</li> <li>b) Developing best management practices for growers to minimise cadmium accumulation in crops and livestock (note: those developed can be viewed at <a href="http://www.cadmiummanagement.org.au/publications.html">http://www.cadmiummanagement.org.au/publications.html</a>).</li> <li>c) Liaising with the Australasian Soil and Plant Analysis Council (ASPAC) to establish national quality assurance programs for analysis of</li> </ul>

COUNTRY	SUB-MISSION	STANDARDS FOR ENVIRONMENTAL MEDIA maximum acceptable cadmium concentration for different media	ACTIONS AND REGULATIONS THAT CONTROL RELEASES FROM ENVIRONMENTAL SOURCES that contain cadmium	ACTIONS AND REGULATIONS ON PRODUCTS that contain cadmium	OTHER STANDARDS, ACTIONS AND PROGRAMMES relevant to cadmium
					<p>cadmium in crops and foods and to disseminate the details of proficient laboratories.</p> <p>d) Development of a Code of Practice by the fertiliser industry to target low cadmium fertiliser to those areas/industries that have an existing or potential cadmium problem.</p> <p>e) Providing input to international standards for cadmium concentrations in traded food commodities through Codex.</p> <p>Since the strategy was launched in July 2000, a number of tasks have been undertaken, and are planned, by the committee. These are:</p> <p>a) A national review of relevant fertiliser legislation relating to cadmium for both manufactured fertilisers and organic wastes.</p> <p>b) A media campaign to publicise the strategy both in Australia and overseas.</p> <p>c) A national database of cadmium concentrations in agricultural soils and produce to assist and focus management action for cadmium minimisation. This has been combined with GIS systems to enable the generation of maps of cadmium concentrations in various agricultural products. This database and GIS system is not available to the public.</p> <p>d) National and state level mass balances for cadmium (these identify and quantify the input and output pathways for cadmium in agriculture).</p> <p>e) A national quality assurance programme for cadmium analysis of crops and foods.</p> <p>f) Responding to international developments affecting Australia's position with regard to health and trade issues affected by cadmium (eg Codex).</p> <p>g) Developing codes of practice or best management practices (BMPs) for industries to</p>

COUNTRY	SUB-MISSION	STANDARDS FOR ENVIRONMENTAL MEDIA maximum acceptable cadmium concentration for different media	ACTIONS AND REGULATIONS THAT CONTROL RELEASES FROM ENVIRONMENTAL SOURCES that contain cadmium	ACTIONS AND REGULATIONS ON PRODUCTS that contain cadmium	OTHER STANDARDS, ACTIONS AND PROGRAMMES relevant to cadmium
					<p>minimise cadmium contamination of soils, crops and livestock.</p> <p>h) Coordinating research data on cadmium in soils and plants to assist BMPs for cadmium minimisation.</p> <p>The maximum permitted concentration of cadmium, in trace element fertilisers, ranges from 50-80 mg/kg, and in phosphogypsum it ranges from 10-80 mg/kg. Currently, all states are aiming for a Maximum Permitted Concentration (MPC) of cadmium in phosphatic fertilisers of 300 mg/kg phosphorus.</p> <p><b>Voluntary industry phase-out of cadmium stabilisers in PVC:</b></p> <p>In 2003 the PVC industry announced a phase out of the use of cadmium stabilisers in vinyl products. In the 'Product Stewardship programme 2005' published by the Vinyl Council Australia, it was stated that except for two signatories in the industry, full compliance was achieved by 30 June 2004. Their on-going commitment is to maintain the current status for existing signatories and to get new signatories, including technical and commercial constraints and the consequences of replacement will be reviewed.</p> <p><b>Cadmium in re-refined oil:</b></p> <p>The Australian Government regulates against high concentrations of cadmium in re-refined oil under the Product Stewardship for Oil Programme. These regulations stipulate that re-refined oil must contain less than 2 mg of cadmium per one kg of oil.</p> <p><b>Future actions:</b></p> <p>The most significant action to reduce cadmium exposure in Australia was the development of the Australian Cadmium Minimisation Strategy in 2000 to control cadmium levels in agricul-</p>

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					<p>tural soils and produce. Future actions will involve:</p> <p>a) Continuation of actions under the Australian Cadmium Minimisation Strategy to reduce cadmium levels in those agricultural industries that have identified elevated levels of cadmium.</p> <p>b) Continuation of programs monitoring cadmium in food, agricultural commodities and cadmium emissions to the environment.</p> <p>c) Geoscience Australia and the Co-operative Research Centre for Landscape Environments and Mineral Exploration are currently conducting pilot studies in the Riverina region of New South Wales and Victoria, and elsewhere to develop a coordinated approach to geochemically map Australia. If these pilot studies are successfully adopted in other regions, these maps will provide valuable information about cadmium, and other elements of interest, for environmental and mineral exploration purposes.</p> <p>d) Five major research projects in Queensland, New South Wales, Victoria, South Australia and Western Australia have combined to take the first step in a national approach to research into the benefits and risks regarding application of biosolids and other urban wastes on agricultural land. This project is known as the 'National Biosolids Research Program', and is led by CSIRO. This programme is determining the uptake of cadmium into 14 different plant species and examining which soil physicochemical properties control the uptake of cadmium into wheat.</p> <p>e) Future policies to manage cadmium in Australian agriculture are unlikely to differ markedly from the successful current strategy. It is recognised that cadmium can not be effectively controlled by limits on inputs only. A key</p>

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					<p>feature of current policies, that is likely to remain in future policies, is the continued integration of approaches. The next developments are likely to be guidelines. The Australian Government Department of Agriculture, Fisheries and Forestry and the Department of the Environment and Heritage are proposing to develop guidelines to control the presence of inorganic and organic contaminants, including cadmium, in fertilisers. In New South Wales, there are moves to develop guidelines to control the presence of contaminants in composts. The emphasis for both sets of guidelines will be on protecting agricultural systems in order to maintain their sustainability.</p> <p><b>International activities:</b></p> <p><i>CODEX</i> - Australia has been an active participant in efforts by the Codex Alimentarius Commission to establish maximum levels (ML) for food additives and contaminants. In 2001, Codex established a ML for cadmium in cereals, pulses and legumes of 0.1 mg/kg (this ML is applied in Australia). Other Codex MLs for cadmium in vegetables and wheat (comply with MLs in Australia):</p> <ol style="list-style-type: none"> <li>a) Wheat grain - 0.2 mg/kg.</li> <li>b) Potato - 0.1 mg/kg (Peeled).</li> <li>c) Stem and root vegetables - 0.1 mg/kg (Excluding celeriac and potato).</li> <li>d) Leafy vegetables - 0.2 mg/kg.</li> <li>e) Other vegetables - 0.05 mg/kg (Excluding fungi and tomatoes).</li> </ol> <p>The Codex Committee on Food Additives and Contaminants (CCFAC) is undertaking work to develop an agreed ML for cadmium in marine bivalve molluscs (excluding oysters and scallops), cephalopods (without viscera) and in polished rice. This work is currently at step five of the eight step Codex process and the proposed MLs are:</p> <ol style="list-style-type: none"> <li>a) Rice, polished - 0.4 mg/kg.</li> </ol>

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					b) Marine bivalve molluscs - 1.0 mg/kg (Excluding oysters and scallops). c) Cephalopods 1.0 mg/kg (Without viscera).
Austria					
Belgium					
Canada	Yes	<p><b>Canadian Environmental Quality Guidelines:</b></p> <p><i>Water, community</i> - 5 µg/L.</p> <p><i>Water, aquatic life</i> - 0.017 µg/L (freshwater); 0.12 µg/L (marine).</p> <p><i>Water, agriculture</i> - 5.1 (irrigation); 80 (livestock).</p> <p><i>Sediment, freshwater</i> - 600 µg/kg (interim sediment quality guideline); 3500 µg/kg (probable effect level).</p> <p><i>Sediment, marine</i> - 700 µg/kg (interim sediment quality guideline); 4200 µg/kg (probable effect level).</p> <p><i>Soil</i> - 1.4 mg/kg (agricultural land uses); 10 mg/kg (residential/parkland uses); 22 mg/kg (commercial land uses); 22 mg/kg (industrial land uses).</p>	-	-	-
Denmark	Yes	<p><b>Environmental quality standards:</b></p> <p><i>Soil</i> - 0.5 mg/kg.</p> <p><i>Groundwater</i> - 0.5 µg/L.</p>	-	<p><b>Statutory Order No. 1199 of December 23, 1992 on the prohibition of sale, import and manufacture of cadmium containing products:</b></p> <p><i>Scope of the Order</i> -</p> <p>(1) Importation, sale and manufacture of cadmium-containing products are prohibited.</p> <p>(2) For the purpose of this Order cadmium-containing products means products in which cadmium is used either as surface treatment agent (cadmium plating), colour pigment or plastic stabilizer with more than 75 ppm in the homoge-</p>	-

COUNTRY	SUB-MISSION	STANDARDS FOR ENVIRONMENTAL MEDIA maximum acceptable cadmium concentration for different media	ACTIONS AND REGULATIONS THAT CONTROL RELEASES FROM ENVIRONMENTAL SOURCES that contain cadmium	ACTIONS AND REGULATIONS ON PRODUCTS that contain cadmium	OTHER STANDARDS, ACTIONS AND PROGRAMMES relevant to cadmium
				<p>neous components of the product. This Order enters into force on January 1, 1993.</p> <p><i>List of cadmium-containing products which may on certain conditions be manufactured, imported and sold after January 1, 1993 (until further notice) - Lorries and busses (Plastic pigmentation); Engines and machinery primarily for professional applications (Cadmium plating - Notification of the Danish EPA prior to manufacture or importation); Burners and ovens (Notification of the Danish EPA prior to manufacture and importation); Parts of products in which the presence of cadmium is decisive for warning and safety reasons (road and traffic signs, fire extinction equipment etc.) (Notification of the Danish EPA prior to manufacture or importation); Ceramic products, glassware, tooth cement, artists' colours, works of art etc. (Use as colour pigment); Musical instruments (For cadmium plating); Precision instruments (optical, hearing aids etc.) (For cadmium plating); Spare parts etc. for repair and maintenance of products manufactured or imported before January 1, 1989, in which cadmium is not permitted today (Notification of the Danish EPA prior to manufacture or importation).</i></p> <p><i>List of substances and preparations, where finished products or components manufactured on the basis thereof shall not be coloured with cadmium - Polyvinyl chloride (PVC); Polyurethanes (PUR); Low density polyethylene (LDPE), except low density polyethylene used for the production of coloured masterbatch; Cellulose acetate (CA); Cellu-</i></p>	

COUNTRY	SUB-MISSION	STANDARDS FOR ENVIRONMENTAL MEDIA maximum acceptable cadmium concentration for different media	ACTIONS AND REGULATIONS THAT CONTROL RELEASES FROM ENVIRONMENTAL SOURCES that contain cadmium	ACTIONS AND REGULATIONS ON PRODUCTS that contain cadmium	OTHER STANDARDS, ACTIONS AND PROGRAMMES relevant to cadmium
				<p>lose acetate butyrate (CAB); Epoxy resins; Melamine - formaldehyde resins (MF); Urea - formaldehyde resins (UF); Unsaturated polyesters (UP); Polyethylene terephthalate (PET); Polybutylene terephthalate (PBT); General purpose/transparent polystyrene; Acrylonitrile methylmethacrylate (AMMA); Cross-linked polyethylene (VPE); High-impact polystyrene; Polypropylene (PP).</p> <p><i>List of product categories where manufacturing, importation and sale is banned</i> [Code numbers refer to Council Regulation (EEC) No. 2658/87 of July 23, 1987, and are not included] -</p> <p>a) Lorries and busses (Stabilizer applications; Cadmium plating); Equipment and machinery for food production (8210) - (8417 20) - (8419 81) - (8421 11) - (8421 22) - (8422) - (8435, 8437, 8438) - (8476 11); Equipment and machinery for agriculture (8419 31) - (8424 81) - (8432, 8433) - (8434, 8436); Equipment and machinery for cooling and freezing (8418); Equipment and machinery for printing and book binding (8440) - (8442) - (8443); Equipment and machinery for the production of household goods (7321) - (8421 12) - (8450) - (8509) - (8516); - Equipment and machinery for the production of furniture (8465, 8466) - (9401, 9402) - (9403, 9404); Equipment and machinery for the production of sanitary ware (7324); Equipment and machinery for the production of central heating and air conditioning plant (7322) - (8403, 8404) - (8415);</p> <p>b) Equipment and machinery for the production of paper and board (8419 32) - (8439) - (8441); Equipment and machinery for the production of textiles and</p>	

COUNTRY	SUB-MISSION	STANDARDS FOR ENVIRONMENTAL MEDIA maximum acceptable cadmium concentration for different media	ACTIONS AND REGULATIONS THAT CONTROL RELEASES FROM ENVIRONMENTAL SOURCES that contain cadmium	ACTIONS AND REGULATIONS ON PRODUCTS that contain cadmium	OTHER STANDARDS, ACTIONS AND PROGRAMMES relevant to cadmium
				<p>clothing (8444) - (8445, 8447) - (8448, 8449, 8451) - (8452); Equipment and machinery for the production of industrial handling equipment and machinery (8425, 8426, 8427) - (8428) - (8429) - (8430) - (8431); Equipment and machinery for the production of road and agricultural vehicles (chapter 87); Equipment and machinery for the production of rolling stock (chapter 86); Equipment and machinery for the production of vessels (chapter 89)</p> <p>Paragraph b), however, do not apply to:</p> <ul style="list-style-type: none"> <li>- products and components of the products used in aeronautical, aerospace, mining, offshore and nuclear sectors, whose applications require high safety standards and in safety devices in road and agricultural vehicles, rolling stock and vessels, - electrical contacts in any sector of use, on account of the reliability required of the apparatus on which they are installed.</li> </ul>	
European Community <sup>1/</sup>					
Finland	Yes	<b>Phosphorous mineral fertilizers</b> – max content of cadmium 50 mg Cd/kg P.  See Section 2	See Section 2	See Section 2	See Section 2
France					
Germany					
Greece					
Iceland					

<sup>1/</sup> The European Community (EC) legislation reported here applies to all Member States of the EC. Currently, there are 15 Member States: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden and the United Kingdom.

COUNTRY	SUB-MISSION	STANDARDS FOR ENVIRONMENTAL MEDIA maximum acceptable cadmium concentration for different media	ACTIONS AND REGULATIONS THAT CONTROL RELEASES FROM ENVIRONMENTAL SOURCES that contain cadmium	ACTIONS AND REGULATIONS ON PRODUCTS that contain cadmium	OTHER STANDARDS, ACTIONS AND PROGRAMMES relevant to cadmium
Ireland					
Israel					
Italy					
Liechten-stein					
Luxembourg					
Malta					
Monaco					
Netherlands					
New Zealand					
Norway	Yes	<p><b>Environmental quality standards (EQS), specifying a maximum acceptable cadmium concentration for different media such as:</b></p> <p>a) Drinking water: 5µg/l</p> <p>b) Surface water: Existing guidelines for classification of water quality are under revision and will be harmonised with EQSs to be decided under the EU Water framework directive (2000/60(EEC)).</p> <p>c) Ground water -</p> <p>d) Irrigation water.-</p> <p>e) Air (urban air, background, etc.) Target limit value to be decided in 2006.</p> <p>f) Soil : Most sensitive land use: 3 mg/kg</p> <p>g) Food standards specifying a maximum acceptable cadmium concentration for different food categories, such as:</p> <p>Fish: 0,05 – 0,1 mg/ kg wet weight</p>	<p><b>Environmental source actions and regulations that control cadmium releases into the environment:</b></p> <p>a) <i>air and water point sources, such as:</i></p> <ul style="list-style-type: none"> <li><i>Smelters.</i> Each smelter has/ will have got an emission permit in accordance with BAT, which i.a. includes particle emission limit values, thus indirectly regulating the emissions of Cd and Pb.</li> <li><i>Energy production.</i> No coal combustion power plants are operating in Norway. The gas/oil/biomass power plants (&gt; 50 MW) are regulated in accordance with the EU Directive 2001/80/EC and BAT. Medium sized biomass combustion plants has got emission permits which i.a. include particle emission limit values, thus indirectly regulating the emissions of Cd and Pb. Coal is not used for residential combustion, and only certificated wood stoves (stoves with good combustion efficiency) are allowed on the Norwegian market.</li> <li><i>Metal ore mining.</i> In general all mines have got emission permits. In Norway no metal ore mining is in opera-</li> </ul>	<p><b>Product control actions and regulations for cadmium-containing products, including marketing and use:</b></p> <p>a) <i>general use of cadmium.</i> Cadmium is on the Norwegian list of prioritised chemicals, for which emissions shall be substantially reduced by 2010. The ultimate aim is to reduce the level of cadmium in the environment as close to background level as possible by 2020.</p> <p>b) Specific products containing cadmium, such as:</p> <ul style="list-style-type: none"> <li><i>Ni-Cd batteries.</i> Ni/Cd batteries and button cell batteries (consisting of one or more button cell) containing a total of 0,025 % Hg and Cd, as well as batteries containing 0,4 % or more of Pb has to be labelled with information on content of heavy metal. Traders of batteries have the obligation to take such batteries in return when they are scrapped, and they have the obligation to inform the public on their right to return used batteries to the traders. Professional users shall return such batteries to the traders marketing the batteries, producers and importers have the</li> </ul>	<p><b>Other actions, standards and programs relevant to cadmium:</b></p> <p>a) Regulations on occupational exposures to cadmium in the workplace:</p> <ul style="list-style-type: none"> <li><i>occupational safety and health.</i> Legislation on occupational safety and health to avoid unacceptable occupational exposures to hazardous substances in the workplace is established. The employer has the obligation to survey the occurrence of chemicals in the workplace, to evaluate the risk they pose to the employees and to take the actions necessary to reduce the risk to an acceptable level. . OEL (occupational exposure limit values) is established for several cadmium compounds. Cadmium and inorganic cadmium compounds except cadmium oxide have an OEL = 0, 05 mg/m3 in indoor air, calculated as cadmium. Cadmium oxide has an OEL of 0, 02 mg/m3 calculated as cadmium.</li> </ul> <p>b) Classification, other marketing and use regulation, packaging and labelling regulations; The classification, packaging and labelling regulations in Norway are the same as in the EU.</p> <p>c) Information and reporting requirements;</p>

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		<p>depending on species</p> <p>Seafood: 0,5 – 1,0 mg/ kg wet weight depending on species</p> <p>Meat: 0,05 mg/ kg wet weight</p> <p>Liver and kidney (of cattle, sheep pig and poultry) 0, 5 and 1,0 mg/ kg wet weight respectively.</p> <p>Cereals excl. bran, germ, wheat and rice: 0,1 mg/ kg wet weight.</p> <p>Bran, germ, wheat and rice: 0,2 mg/ kg wet weight</p> <p>Soybeans: 0,2 mg/ kg wet weight</p> <p>Vegetables and fruits: 0,05 mg/ kg wet weight</p> <p>Leafy vegetables, fresh herbs, celeriac and cultivated fungi: 0, 2 mg/ kg wet weight.</p> <p>Stem vegetables, root vegetables and potatoes: 0,1 mg/ kg wet weight.</p>	<p>tion to day.</p> <ul style="list-style-type: none"> <li><i>Iron and steel manufacturing processes.</i> The plants are given emission permits, including limit values for particle emission to air, thus indirectly regulating the emissions of Cd and Pb. The permits are/ will be updated in accordance with the EU IPPC Directive (EU Directive 96/61/EC) and BAT.</li> <li><i>Cement, lime, plaster and concrete manufacturing processes.</i> Each plant has got an emission permit in accordance with BAT (i.a. EU BREF), which i.a. includes particle emission limit values, thus indirectly regulating the emissions of Cd and Pb. The cement and LECA (clay based Light Weight Aggregate) plants in Norway use waste as additional fuel, therefore their emission limit values are the same as for waste incinerators, i.e. the emission limit values given in accordance with EU Directive 2000/76/EC on incineration of waste.</li> </ul> <p>b) <i>Waste disposal restrictions, such as:</i></p> <ul style="list-style-type: none"> <li><i>Waste from outdated products.</i> Outdated products containing cadmium/cadmium compounds have to be treated as hazardous waste if the concentration exceeds limits given in the regulation on hazardous waste.</li> </ul> <p>An extensive system for taking care of waste from EE-products containing hazardous substances is established, putting obligations on dealers, producers and the local government.</p> <p>An extensive system for collection, recovery and disposal of used batteries (batteries hazardous to the environment) is established, putting obligations on dealers, enterprises using batteries,</p>	<p>obligation to collect the batteries for recovery or environmentally sound disposal.</p> <ul style="list-style-type: none"> <li><i>Pigments.</i> It is not allowed to produce, import, export, sell or use paint and laquer containing cadmium or cadmium compounds. However, paints containing high levels of zinc may have a rest concentration of maximum 0,1 % of cadmium. It is not allowed to use cadmium or cadmium compounds to colour products made of certain polymers listed in the regulation.</li> <li><i>Stabilisers in polymers.</i> It is not allowed to use cadmium or cadmium compounds as stabiliser in certain products made of polymers or copolymers of vinyl chloride. Affected products are listed in the regulation.</li> <li><i>Plating.</i> It is not allowed to use cadmium or cadmium compounds for surface treatment of equipment and machines made of metal as listed in the regulation. It is not allowed to import export or sell products and components with surface treatment of cadmium or cadmium compounds.</li> <li><i>Others:</i> <i>Fertilizer:</i> The content of cadmium in mineral fertilizer must not exceed 100 mg cadmium per kilo phosphor. <i>Packaging:</i> Legislation prescribing maximum allowable content of heavy metals in packaging is established. The accumulated concentration of lead, cadmium, mercury and chromium (VI) must not exceed 100 mg/kg. <i>Components in vehicles:</i> From 1. July 2003 it has been prohibited to import vehicles with components containing Hg, Pb, Cd or Cr VI. Components exempted from the ban are listed in an Annex to</li> </ul>	<p>Industry is obliged in their permits to annually report their emissions and discharges to the Norwegian Pollution Control Authority (registered in the Norwegian PRTR ).</p> <p>Every year a national report on consumption and releases of substances prioritised for action according to the national strategy for work with hazardous substances is worked out.</p> <p>Hazardous chemicals marketed in a quantity of 100 kg or more pr year must be declared to the Norwegian Product Register.</p> <p>National cadmium emissions to air and monitoring data are reported to EMEP (The Cooperative Programme for Monitoring and Evaluation of the Long –range Transmission of Air Pollutants in Europe) every year.</p> <p>National emission data on cadmium and data from the different monitoring programmes under the OSPAR convention are reported to the convention.</p> <p>d) Monitoring programmes;</p> <p>Cadmium is monitored weekly in air and precipitation at a couple of stations at the mainland and Svalbard (air only). Through monitoring programmes in OSPAR cadmium is measured yearly in different marine species along the coast, every 10 year in sediments (OSPAR/JAMP), and monthly in the water column in 10 Norwegian rivers (OSPAR/RID). Every 5 year heavy metals in mosses are monitored. On a less regular basis the concentration of heavy metals in lakes and in sediments is monitored.</p> <p>e) Voluntary reduction programmes;</p> <p>A requirement to apply the substitution principle is included in the chemicals legislation implying that enterprises must evaluate their use of chemicals and replace them with less</p>

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			<p>importers and producers.</p> <ul style="list-style-type: none"> <li><i>Specific waste from different industrial activities.</i> Industrial waste disposal is regulated in the emission permits. Hazardous industrial waste must be delivered to certificated hazardous waste receivers, non hazardous can be deposited in industry deposits which fulfil the requirements in the EU Directiv 1999/31/EC and 2003/33/EC. Some industries are permitted to reuse waste fractions in the process.</li> <li><i>Treated wastewater</i> -</li> <li><i>Sewage sludge.</i> Maximum limit for cadmium concentration in fertiliser products based on sewage sludge is 0,4 – 5 mg/kg dry weight depending on use.</li> </ul>	<p>the regulation. Components allowed to contain heavy metals shall be labelled and they shall be removed from the vehicle when it is scrapped.</p> <p><i>EE-products:</i> From 1. July 2006 it will be prohibited to produce, import, export and sell EE-products containing more than 0,01 % Cd, 0,1 % Pb or 0,1 % Hg (or 0,1 % Cr VI, 0,1 % PBB or 0,1 % PBDE). Certain areas of use given in an annex to the regulation are exempted from the ban. The producer is responsible for providing information on which component in the product that contains hazardous substance(s).</p> <p>c) <i>Import/export:</i> When bans on use of a chemical are introduced normally also bans on import and export are included in Norwegian regulations.</p>	<p>hazardous substances, if available, provided that this does not cause unreasonable cost or inconvenience.</p> <p>Recommended criteria for undesired properties of chemicals are established by the authorities and a list of chemicals meeting the criteria is drawn up. Use of these chemicals should be reduced or substituted by less hazardous chemicals. Cadmium and its compounds are on the list.</p> <p>f) Implementation of international conventions and programs.</p> <p>Norway has ratified the Aarhus Protocol on Heavy Metals under the UN ECE LRTAP convention, the OSPAR convention, the Basel convention, the Rotterdam convention and the Stockholm convention and implemented their obligations.</p>
Portugal	Yes	-	-	-	Concerning activities generating lead and cadmium emissions to air and water and in accordance with the European Pollutant Emission Register (EPER) - European Commission Decision no. 2000/479/EC, of July the 17th 2000, organised by IPPC activities and discriminating the pollutants most probably expected to be released by each one of those activities, were elaborated. Those lists included the "Pb and its compounds" and "Cd and its compounds".
San Marino					
Spain					
Sweden	Yes	-	-	-	-
Switzerland					
United Kingdom					

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United States of America	Yes	See Section 3	See Section 3	See Section 3	See Section 3

## **SECTION 2**

### **Overview of existing and future national actions, including legislation, relevant to lead from Finland**

5. This annex contains submitted data from Finland and refers to Table V (Western Europe and other States) in Section 1 of the Appendix. In the table, national actions, including legislation, are reported.

6. [**\*\*IN THIS DRAFT APPENDIX, THE TEXT CANNOT BE MADE AVAILABLE HERE - KINDLY REFER TO FINLAND'S COMMENTS TO SEE OVERVIEW**]

### **SECTION 3**

#### **Overview of existing and future national actions, including legislation, relevant to lead from the United States of America**

7. This section contains submitted data from the United States of America and refers to Table V (Western Europe and other States) in Section 1 of the Appendix. In the table, national actions, including legislation, are reported.

8. **[\*\*IN THIS DRAFT APPENDIX, THE TEXT CANNOT BE MADE VAILABLE HERE - KINDLY FIND OVERVIEW VIA LINK FROM U.S.A. SUBMISSION]**