Intergovernmental negotiating committee
to prepare a global legally binding instrument
on mercury
Seventh session
Dead Sea, Jordan, 10–15 March 2016
Item 4 (b) of the provisional agenda*

Report on the activities of the interim secretariat during
the period prior to the entry into force of the Convention:
cooperative activities with other relevant actors

Information provided by the Basel and Stockholm convention
regional and subregional centres undertaking activities on
mercury-related issues under the conventions

Note by the secretariat

1. The Conference of the Parties to the Basel Convention on the Control of Transboundary
Movements of Hazardous Wastes and Their Disposal at its twelfth meeting and the Conference of the
Parties to the Stockholm Convention on Persistent Organic Pollutants at its seventh meeting, in their
decisions BC-12/10, on Basel Convention regional and coordinating centres for training and
technology transfer, and SC-7/17, on Stockholm Convention regional and subregional centres for
capacity-building and the transfer of technology, respectively, invited all regional centres undertaking
activities on mercury-related issues under the two conventions, including projects and activities about
the dissemination of information, capacity-building and technology transfer, to provide the relevant
information, which would be taken into account by the secretariat of the Basel Convention, the
Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and
Pesticides in International Trade and the Stockholm Convention in the evaluation of the regional
centres, in accordance with the applicable synergy criterion.

2. In the same decisions, the conferences of the parties requested the secretariat of the Basel,
Rotterdam and Stockholm conventions to forward that information to the interim secretariat of the
Minamata Convention on Mercury for possible consideration by the intergovernmental negotiating
committee to prepare a global legally binding instrument on mercury at its seventh session.

3. On 22 December 2015, the secretariat of the Basel, Rotterdam and Stockholm conventions
sent a letter to the regional and subregional centres inviting them to provide the above-mentioned
information. Ten regional and subregional centres provided information in response to that request
(see annex). The information is presented as received, without formal editing.

* UNEP(DTIE)/Hg/INC.7/1.
Annex

Information provided by the Basel and Stockholm convention regional centres undertaking activities on mercury-related issues under the conventions, including projects and activities about the dissemination of information, capacity-building and technology transfer

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1. **Basel Convention Regional Centre for South America in Argentina (BCRC Argentina)**

**Mercury Issues and Projects**

Our Centre had experience in mercury issue from 2004 we organize a regional workshop for Latin America and Caribbean.

Projects and Actions have been implemented in connection with mercury and mercury waste, namely the project on “Minimization and Environmentally Sound Management of Mercury Containing Waste in Chlor-alkali Plants in Argentina”, which was developed as part of an agreement between the Executive Secretary of the Basel Convention (ESBC) and the US Environmental Protection Agency (EPA); and project “Environmentally Sound Storage and Disposal of Elementary Mercury and Elementary Mercury Waste in Argentina” which is part of a Funding Agreement signed between the BCRC and UNEP’s DTIE.

Development of a Technology for Final Disposal of Mercury Wastes in the frame of the Minamata Convention. Our Centre presented this technology in several workshops (Regional Workshop in Brasilia 2 to 5 September 2015).

Significant actions have been undertaken in the context of the above-mentioned projects in the sphere of mercury and mercury waste inventories and national action plans. As well, national tasks forces have been created with the involvement of both governmental and nongovernmental players, including the industry, NGOs, business chambers and the relevant governmental sectors. This effort will be the groundwork for the successful implementation of both national and international mercury regulations, the development of which is currently in progress, as well, it has set in motion a number of exciting synergies, as is the case of the recent trading of mercury surpluses between members of the industry, which has served to prevent additional imports and exports.

A joint effort made in 2008/2010 with the AMMA, which brought forth Project SAICM QPS on Mercury in Domestic Products, and which involved a regional campaign on the “Minimization of Domestic Sources of mercury through Community Interventions Aimed at Protecting the Health of Women and Children in Argentina, Chile, Paraguay, Uruguay, Bolivia and Perú.

Actually, we are working in two projects: National Inventory Mercury and Promotion ratification of Minamata Convention. We had done several national workshops, a web site named (mercury in Argentina).
2. **Stockholm Convention Regional Centre in Brazil (SCRC Brazil)**

In response to the request sent by the Executive Secretariat of the Basel Convention, Rotterdam and Stockholm, CETESB, as Regional Centre of Stockholm Convention, elaborated this report on the activities developed by CETESB on mercury issues.

**GENERAL INFORMATION**

CETESB - Environmental Company of Sao Paulo State - was created in 1968. It is part of the State Environmental Secretariat and its activities are funded by the state government. Sao Paulo has a population of 44 million inhabitants and an area of 248,000 sq. km and it is a very important state economically in Brazil. It concentrates a large number of agricultural and industrial activities that use a variety of chemical products.

Related to Mercury, CETESB has been developing many activities, as shown below.

**ENVIRONMENTAL LABORATORIES**

Set up with modern facilities, equipped with analytical instruments based on leading-edge technology, the laboratories at CETESB perform more than 350,000 analyses per year, encompassing a wide variety of physical-chemical, biological and toxicological tests on the most different matrices. The labs operate in an integrated way for controlling the pollution and monitoring the environmental quality, aiming to protect human and environmental health.

**Table 1 - Laboratory Tests.** (CETESB, 2008-2015)

<table>
<thead>
<tr>
<th>Physical chemical</th>
<th>Aggregate organics: - BOD, COD, TOC, oil &amp; grease, phenols, surfactants</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Inorganic compounds: - metals, nutrients, volatile and fixed solids, sulfates, sulfides, fluorides, cyanides, etc.</td>
</tr>
<tr>
<td></td>
<td>Organic compounds: organ chlorinated organochlorine and organophosphorus pesticides, chlorinated phenoxiadic herbicides, triazine herbicides, PCBs, halogenated phenols, PAHs, VOCs, volatile organic compounds, SVOCs, dioxins, furans, dl-PCBs, etc.</td>
</tr>
<tr>
<td>Ecotoxicological</td>
<td>Acute and chronic toxicity tests (Bacteria, algae, microcrustaceans and fishes)</td>
</tr>
<tr>
<td></td>
<td>Mutagenicity/Genotoxicity tests (Salmonella assay, micronuclei, single cell gel assay in fishes or mammalian cells in culture)</td>
</tr>
<tr>
<td></td>
<td>Studies on bioaccumulation in aquatic organisms</td>
</tr>
<tr>
<td>Hydrobiological</td>
<td>Aquatic communities (benthic macroinvertebrates, phyto and zooplankton, fishes) and transition communities (coastal rocks)</td>
</tr>
<tr>
<td></td>
<td>Mangroves – structure and function</td>
</tr>
<tr>
<td></td>
<td>Toxic algae/Cyanobacteria</td>
</tr>
<tr>
<td></td>
<td>Chlorophyll</td>
</tr>
<tr>
<td>Toxicological Analyses Laboratory</td>
<td>Fluoride in plants.</td>
</tr>
<tr>
<td></td>
<td>Metals in benthic organisms.</td>
</tr>
<tr>
<td></td>
<td>Metals in samples such as human blood, fish blood, plants, fish and other animal tissues.</td>
</tr>
<tr>
<td></td>
<td>Mercury in human hair.</td>
</tr>
<tr>
<td></td>
<td>Estrogenic Activity (BLYES test) for EDCs (Endocrine Disrupting Chemicals) in fresh and groundwaters.</td>
</tr>
<tr>
<td></td>
<td>Tributyltin (TBT) using Calux® bioassay (Chemical Activated Luciferase Expression) in sediments and dredged material.</td>
</tr>
<tr>
<td></td>
<td>Glucorticoid Activity using Calux® bioassay (Chemical Activated Luciferase Expression) in fresh and groundwaters.</td>
</tr>
<tr>
<td></td>
<td>Dioxin using bioassay Calux® bioassay (Chemical Activated Luciferase Expression) in sediments and biological samples.</td>
</tr>
<tr>
<td></td>
<td>Acute Toxicity bioassay using Vibrio fischeri (Microtox® System) in waters, sediments, soils and solid waste.</td>
</tr>
<tr>
<td></td>
<td>PCBs (PolyChlorinated Biphenyl) in in samples such as human blood, breast milk, fish and other animal tissues.</td>
</tr>
</tbody>
</table>
Matrices
Water: drinking water, surface water (fresh and sea water), groundwater, bathing water, wastewater.
Sediments and Soil
Solid waste (hazardous waste, sludge, industrial waste, landfill)
Aquatic organisms (fish, bivalves)
Air (particulate material, vehicle emission, chimney emission, indoor)
Breast milk, human blood, hair and other animal tissues

Sampling
CETESB count with specialized teams very well equipped for sampling:
Surface water, sediment, and aquatic communities (fish and bivalves, phytoplankton, zooplankton, benthos)
Industrial effluents
Solid waste, soil, contaminated sites
Groundwater
Air (particulate material and emissions)

Analytical Methods
The analytical methodologies applied at the laboratories are in compliance with the methods established by ABNT (Brazilian Association for Technical Standardization) and international institutions, such as Standard Methods for Water and Wastewater (USA), US Environmental Protection Agency, ISO (International Standardization Organization EU) and DIN (German Institute for Standardization-EU).

Quality Assurance / Quality Control
CETESB labs carry out the analysis within the strictest QA/QC patterns. All of CETESB’s laboratories received ISO/IEC 17025:2005 accreditation, a quality management system that recognizes the technical competence. The accreditation scopes cover around 900 environmental assays: inorganic and organic, microbiological, parasitological, ecotoxicological, mutagenicity, and vehicular emission testing and sampling procedures.

Latest Toxicology Projects
- 2010-2011: Mercury in blood of fish from Rio Grande da Serra (Metropolitan River of Sao Paulo) to establish the extent of exposure.
  CETESB used this new tool as biomarker of exposure. Results were excellent and currently our laboratory uses this technology to establish recent exposure to different levels of mercury in fish.
- 2014-2016: Evaluation of Metals Contamination (including Hg) in water, sediments, macrophytes and fishes from 2 reservoirs of Greater Sao Paulo: Billings and Guarapiranga. Currently, sampling campaigns have started. Whole project is running successfully.
- 2010-2011: Mercury in blood of fish from Rio Grande da Serra (Metropolitan River of Sao Paulo) to establish the extent of exposure. CETESB used this new tool as biomarker of exposure. Results were excellent and currently our laboratory uses this technology to establish recent exposure to different levels of mercury in fish.
- 2014-2016: Evaluation of Metals Contamination (also Hg) in water, sediments, macrophytes and fishes from 2 reservoirs of Greater Sao Paulo: Billings and Guarapiranga. Funded by FEHIDRO (Water Resources Fund of Sao Paulo State). Currently, sampling campaigns have started. Whole project is running successfully.
WATER AND SEDIMENT QUALITY MONITORING

Two CETESB’s historical series summaries on Hg results on Sediment and Hg in Water are shown in Tables 2 and 3, respectively.

**Table 2 - % of non-conformity Hg results on Sediment** (according to Sediment Quality Criteria)

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Samples</th>
<th>% Acima de PEL</th>
<th>% Acima de PEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>26</td>
<td>4</td>
<td>15.38</td>
</tr>
<tr>
<td>2010</td>
<td>21</td>
<td>3</td>
<td>14.29</td>
</tr>
<tr>
<td>2011</td>
<td>24</td>
<td>3</td>
<td>12.50</td>
</tr>
<tr>
<td>2012</td>
<td>25</td>
<td>4</td>
<td>16.00</td>
</tr>
<tr>
<td>2013</td>
<td>27</td>
<td>4</td>
<td>14.81</td>
</tr>
<tr>
<td>2014</td>
<td>30</td>
<td>1</td>
<td>3.33</td>
</tr>
</tbody>
</table>

PEL (Probable Effect Level) = 0.486 mg/Kg

**Table 3 - % of non-conformity Hg in Water results** (according to CONAMA 357)

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Samples</th>
<th>% Non-conformity</th>
<th>% Non-conformity</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>1080</td>
<td>18</td>
<td>1.67</td>
</tr>
<tr>
<td>2010</td>
<td>1176</td>
<td>62</td>
<td>5.27</td>
</tr>
<tr>
<td>2011</td>
<td>1509</td>
<td>106</td>
<td>7.02</td>
</tr>
<tr>
<td>2012</td>
<td>1578</td>
<td>15</td>
<td>0.95</td>
</tr>
<tr>
<td>2013</td>
<td>1654</td>
<td>27</td>
<td>1.63</td>
</tr>
<tr>
<td>2014</td>
<td>1787</td>
<td>13</td>
<td>0.73</td>
</tr>
</tbody>
</table>

Hg water standard = 0.002 mg/L

In order to exemplify CETESB’s actions on Risk Assessment on Hg in Sediment and biota (fish) and its measures taken related to solve this environmental problem, it is shown in a Case Study in Industrial Area in Sao Paulo State as below.

**Figure 1. Concentration of Mercury in Sediments in the River.**
Figure 2. Concentration of Total and Organic Mercury in Sediments in the River and Reservoir

Total and Organic Hg in sediment samples of Rio Grande Reservoir

- Organic Hg includes all organomercury compounds present in the sample, including methylmercury

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>River 1</td>
<td>Total Hg (mg kg⁻¹)</td>
<td>68.3 ± 0.9</td>
<td>25.9 ± 1.0</td>
<td>43.4 ± 1.5</td>
</tr>
<tr>
<td></td>
<td>Organic Hg (µg kg⁻¹)</td>
<td>39.3 ± 3.8</td>
<td>35.2 ± 2.9</td>
<td>40.1 ± 3.5</td>
</tr>
<tr>
<td></td>
<td>Organic Hg percent</td>
<td>0.059</td>
<td>0.14</td>
<td>0.092</td>
</tr>
<tr>
<td>River 2</td>
<td>Total Hg (mg kg⁻¹)</td>
<td>61.5 ± 0.9</td>
<td>68.1 ± 0.9</td>
<td>57.6 ± 0.9</td>
</tr>
<tr>
<td></td>
<td>Organic Hg (µg kg⁻¹)</td>
<td>46.3 ± 3.2</td>
<td>36.0 ± 2.9</td>
<td>47.2 ± 3.9</td>
</tr>
<tr>
<td></td>
<td>Organic Hg percent</td>
<td>0.075</td>
<td>0.056</td>
<td>0.082</td>
</tr>
<tr>
<td>Reservoir 1</td>
<td>Total Hg (mg kg⁻¹)</td>
<td>4.8 ± 0.2</td>
<td>2.2 ± 0.1</td>
<td>3.7 ± 0.2</td>
</tr>
<tr>
<td></td>
<td>Organic Hg (µg kg⁻¹)</td>
<td>1.6 ± 0.8</td>
<td>1.0 ± 0.1</td>
<td>1.5 ± 0.1</td>
</tr>
<tr>
<td></td>
<td>Organic Hg percent</td>
<td>0.37</td>
<td>0.82</td>
<td>0.52</td>
</tr>
<tr>
<td>Reservoir 2</td>
<td>Total Hg (mg kg⁻¹)</td>
<td>1.02 ± 0.09</td>
<td>1.8 ± 0.1</td>
<td>1.5 ± 0.1</td>
</tr>
<tr>
<td></td>
<td>Organic Hg (µg kg⁻¹)</td>
<td>1.42 ± 2.1</td>
<td>&lt;10.0</td>
<td>13.8 ± 2.3</td>
</tr>
<tr>
<td></td>
<td>Organic Hg percent</td>
<td>1.39</td>
<td>0.92</td>
<td>0.92</td>
</tr>
</tbody>
</table>

Figure 3. Risk Assessment of fish consumption existing in the Reservoir and River

RISK ASSESSMENT

Risk assessment of fish consumption

<table>
<thead>
<tr>
<th>Fish species</th>
<th>Hg (µg/kg)</th>
<th>Hazard Quotient</th>
<th>Number of fish meals (meal/month)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Adult population</td>
<td>Children</td>
</tr>
<tr>
<td></td>
<td></td>
<td>General (70 kg)</td>
<td>Sensitive (70 kg)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rhamdia quelon</td>
<td>1820</td>
<td>3.41</td>
<td>6.82</td>
</tr>
<tr>
<td>Hoplias malabaricus</td>
<td>930</td>
<td>1.75</td>
<td>3.50</td>
</tr>
</tbody>
</table>

Note: PTWI = 3.2 µg/kg bw/week (general population)
PTWI = 1.0 µg/kg bw/week (sensitive population and children)
Figure 4. Corrective Measures taken for Industry and communication to population

Hg Contamination: Corrective Measures

- Change in Industrial System.
- Dredging of sediment hotspots.
- Effluent sent to a treatment plant.
- Fish advisory leaflet “Do not consume fish from Rio Grande/SP”

ACTIVITIES OF THE WASTE MANAGEMENT RELATED ON MERCURY LAMPS

CETESB develop procedures with technical requirements for the operation of equipment for crushing discarded mercury lamps such as the workplace, local ventilation system and equipment to control air pollution. In addition there is a requirement for transport and disposal of waste of the mashed lamps and filters duly licensed for the treatment locations to enable the mercury recovery and recycling of metals and glasses. These procedures came to be adopted by CETESB on 10/15/2014.

AIR EMISSION, NOISE AND VIBRATION ASSESSMENT ON MERCURY

Some activities on Air Emission, Noise and Vibration Assessment are shown below.

- Analysis EIA/RIMA, RAP and license, in relation to the gaseous emissions, including Hg, related to treatment of municipal solid waste and hazardous industrial waste.
- Validation and follow-up monitoring of emissions of Hg from sources related to treatment of municipal solid waste and hazardous industrial waste.
- Validation and monitoring of mercury emissions in clinker kilns with and without co-processing.
- Validation and monitoring of mercury emissions in companies receiving lamps for decontamination.

CETESB IN CHEMICAL EMERGENCY RESPONSE

The activities of the emergency responses in Sao Paulo State are shown below and related to Mercury issues is shown in the Table 4.

Table 4 – Emergency Responses related to Mercury in Sao Paulo State.

<table>
<thead>
<tr>
<th>Code</th>
<th>Date</th>
<th>City</th>
<th>Activity</th>
<th>Amount Leaked</th>
<th>Means Affected</th>
</tr>
</thead>
<tbody>
<tr>
<td>367/96</td>
<td>25/11/96</td>
<td>Diadema</td>
<td>Disposal on the public route (cylinder)</td>
<td>No Occurred</td>
<td>No Occurred</td>
</tr>
<tr>
<td>244/97</td>
<td>16/08/97</td>
<td>São Paulo</td>
<td>Disposal on the public route</td>
<td>100.00 mL</td>
<td>Soil, Air</td>
</tr>
<tr>
<td>139/99</td>
<td>05/05/99</td>
<td>São Paulo</td>
<td>Disposal on the public route</td>
<td>2.00 Kg</td>
<td>Soil, Air</td>
</tr>
<tr>
<td>160/01</td>
<td>13/04/01</td>
<td>Mairinque</td>
<td>Train Station</td>
<td>250.00 mL, 100.00 mL</td>
<td>Soil, Air</td>
</tr>
<tr>
<td>161/01</td>
<td>14/04/01</td>
<td>Iperó</td>
<td>Train Station</td>
<td>100.00 mL, 1.00 Kg</td>
<td>Soil, Air</td>
</tr>
<tr>
<td>106/08</td>
<td>01/04/08</td>
<td>São Paulo</td>
<td>Labor IPEN</td>
<td>100.00 mL</td>
<td>Soil, Air</td>
</tr>
<tr>
<td>262/10</td>
<td>15/07/10</td>
<td>Rosana</td>
<td>Disposal in “biota for a”</td>
<td>1.60 Kg</td>
<td>Soil, Air</td>
</tr>
<tr>
<td>267/10</td>
<td>20/07/10</td>
<td>São Paulo</td>
<td>Medical Clinic</td>
<td>15.00 mL</td>
<td>Air</td>
</tr>
<tr>
<td>372/10</td>
<td>18/10/10</td>
<td>São Paulo</td>
<td>Labor USP</td>
<td>No Values</td>
<td>Air</td>
</tr>
<tr>
<td>270/13</td>
<td>20/09/13</td>
<td>São Paulo</td>
<td>Post Office</td>
<td>No Values</td>
<td>Air</td>
</tr>
</tbody>
</table>

Fonte: SIEQ/CETESB
SOIL AND GROUNDWATER

Mercury- Soil and Groundwater Monitoring

The major concentration of mercury was found at Piracicaba, Capivari and Jaguari’s Watershed.

Recently, the section of the Soil and Groundwater has been evaluating the foliar concentration of metallic elements (Cd, Pb, Hg and Ni) from species of interest, present in regions subjected to industrial pollution, such as Cubatão and Paulinia.

Table 5 - Minimum and maximum concentrations of POPs and mercury in soil samples collected for agricultural area at Alto Tietê watershed (n= 48) and Piracicaba/Capivari/Jaguari (PCJ) watershed (n= 94)

<table>
<thead>
<tr>
<th>Substance (μg Kg⁻¹)</th>
<th>Alto Tietê</th>
<th>PCJ</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;LOQ Min – Max</td>
<td>&gt;LOQ Min – Max</td>
<td></td>
</tr>
<tr>
<td>Mercury</td>
<td>2 &lt;10 - 220</td>
<td>26 &lt;10 - 480</td>
</tr>
</tbody>
</table>

The sector of the soil quality has also focused on evaluation of regional soil quality condition. In 2008, it was published the first report on the soil quality condition of the Alto Tietê Watershed, which includes the Metropolitan Region of the city of Sao Paulo. In this study metals, PAHs and POPs Pesticides were determined in superficial soil samples, both in agricultural and small forest areas. In 2015 it was published the second report on the regional soil quality of Capivari, Piracicaba and Jundiaí Rivers Watersheds, which included PCBs, Dioxins, Furans and Mercury.

Table 6 - Minimum and maximum concentrations of POPs and mercury in soil samples collected for forest fragment area at Alto Tietê watershed (n= 60) and Piracicaba/Capivari/Jaguari (PCJ) watershed (n= 46)

<table>
<thead>
<tr>
<th>Substance (μg Kg⁻¹)</th>
<th>Alto Tietê</th>
<th>PCJ</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;LOQ Min – Max</td>
<td>&gt;LOQ Min – Max</td>
<td></td>
</tr>
<tr>
<td>Mercury</td>
<td>2 &lt;10 - 280</td>
<td>19 &lt;20 - 1450</td>
</tr>
</tbody>
</table>

Biomonitoring of air pollution with the use of plants

CETESB has been conducting studies on the effects of air pollution on plants, firstly identifying native species that could be used as bioindicators to assess specific air pollutants effects, and further performing the biomonitoring of pollutants of interest in regions known to have environmental problems. It also aims to help on the identification of potential phytotoxicity that areas near pollution sources can be exposed, as well to help to determine the spatial distribution of a given pollutant in the air. The substances evaluated in these studies are fluoride, ozone and some metals (lead, cadmium, mercury and nickel).

Biomonitoring of mercury

In 2012, the leaf concentration of mercury was evaluated in 79 samples of seven different species in the city of Cubatão. The results ranged from 0.010 to 1.718 mg Kg⁻¹. For this substance, it was adopted the potential value of phytotoxicity of 0.5 mg Kg⁻¹ as the Adopted Limit Value (ALV).
3. **Basel Convention Regional Centre for the Caribbean in Trinidad and Tobago (BCRC Caribbean)**

   The BCRC-Caribbean has only just started to engage its Caribbean stakeholders on Mercury related matters. This is because only a few of the countries we serve (Jamaica, Guyana and the Dominican Republic) have signed onto the Convention. Others are only now considering ratifying it as we draw closer to INC7.

   In this regard the following activities have been undertaken:

   1. January 2015 – Hosted a regional workshop in support of the Ratification and Early Implementation of the Minamata Convention on Mercury. This was done in conjunction with the Interim Secretariat of the Minamata Convention/ UNEP Chemicals Branch.

   2. September 2015 – Hosted a regional project workshop for the Norway ODA Mercury Storage and Disposal Project in the Caribbean for three countries (Jamaica, Suriname, Trinidad and Tobago). This was done in conjunction with the Interim Secretariat of the Minamata Convention/ UNEP Chemicals Branch. In 2016 we will be conducting the assessment of mercury and mercury contaminated materials storage and disposal in these three countries.

   3. December 2015 – Prepared a Project Identification Form for GEF funding for the conduct of a Mercury Initial Assessment study for four Caribbean countries (Jamaica, St Lucia, Trinidad and Tobago and Suriname). This was done in conjunction with UNEP Chemicals Branch and UNEP’s ROLAC Office. This is to be expanded to include five other countries (Belize, Antigua and Barbuda, St Vincent and the Grenadines, Barbados and Grenada) through a second PIF in 2016.

4. **Stockholm Convention Regional Centre in Czech Republic (SCRC Czech Republic)**

   **Activities 2011-2015**

   1. Consultation for the Central and Eastern European region in preparation for the 3rd session of the intergovernmental negotiating committee on mercury (INC3), 5. - 6. 11. 2011, RECETOX, Brno, Czech Republic


   2. Mercury Management Workshop – CEE countries, RECETOX premises, Brno, Czech Republic, 7 December 2012

   Workshop held on Friday 7 December 2012 aimed at capacity building, to provide the governments in the CEE region with information on the latest development of the EU Mercury Strategy and measures and principles related to the mercury management and existing EU legislation. The topics covered in the meeting touched on the products and processes using mercury, mercury export ban and related consequences for mercury disposal and mercury waste management. In addition, experience related to the work of Convention on Long-range Transboundary Air Pollution, Heavy Metals Protocol and its Task Force on heavy metals regarding guidance document on best available techniques for controlling emissions of heavy metals from specific source categories was also provided. There was a space for discussing practical measures and share experience with Czech and other experts active in particular fields.

   Workshop held in English only. Capacity of the workshop was 35 persons.

   3. CEE consultations prior 5th meeting of the Intergovernmental Negotiating Committee on legally binding instrument on mercury (INC5), 8-9 December 2012, RECETOX premises

   Workshop for 11 countries from CEE region (Azerbaijan, Bosnia-Herzegovina, Albania, Armenia, Russian Federation, HU, PL, CZ, Serbia, former Yugoslav Republic of Macedonia, Ukraine) on mercury management in preparation to 5th meeting of the Intergovernmental Negotiating Committee on legally binding instrument on mercury (INC5) looked at similarities and differences of countries in the CEE region and highlighted important points – implementation plans, need for assistance, measures to eliminate/reduce atmospheric releases and releases into water and soil.
4. WHO meeting on human biomonitoring, 18-19 September 2013, Bonn, Germany

RECETOX provided its expert to support the meeting finalizing the update of the WHO Guidelines in relation to mercury

5. Supporting ratification process of the Minamata Convention on Mercury in the Czech Republic in 2014

A project supported by the Ministry of Environment of the Czech Republic. The project consists of three parts:

1) Analysis of existing national legislation and relevant procedures that require adaptation in order to enable smooth implementation of the Minamata Convention nationally - establishment of national coordination mechanism and procedures to generate and update national inventory in relation to mercury.

2) Experts of the regional centre participate in 6th meeting of the Intergovernmental Negotiating Committee (3-7 November in Bangkok to support region in negotiations

3) Awareness raising and education materials in relation to the Minamata Convention in Czech - 3 information leaflets.

More information is available in the report (in Czech only) provided to Ministry of the Environment RECETOX report 514, November 2014.

6. Creation of Information Portal (Czech Republic)

Information portal for chemical and waste MEAs in Czech language. This activity enhances understanding of Czech speaking stakeholders in relation to implementation of global chemicals and waste agreements. Its outcome is a website (www.synergie-chemie.cz) in Czech language providing a comprehensive information on four MEAs (Basel, Rotterdam and Stockholm Conventions, Minamata Convention on Mercury) and on SAICM and EU chemical policy. The principal aim of this activity was to explain the objectives, scope and available measures, implementation options and information exchange on activities and events taking place in the Czech Republic. Contributes also to the national coordination and enhances implementation of synergies in the Czech Republic.

2015

Capacity building:

7. Workshop “POPs and Mercury Monitoring as a tool of the effectiveness evaluation of the Stockholm Convention and Minamata Convention” in the Seychelles - 10 – 12 February, 2015, Victoria, Seychelles

- RECETOX provided the whole training

8. POPs and Mercury Monitoring Methods and Minimizing volume of Wastes from Health Sector, Astana, Kazakhstan, 15 July 2015

- RECETOX provided the whole training

Information sharing:

9. CEE and Central Asia Regional Consultations Workshop to support the ratification and early implementation of the Minamata Convention on Mercury, 9-10 April 2015, Bratislava, Slovakia

- RECETOX provided presentation on its activities in relation to mercury


- RECETOX provided presentation on its activities in relation to mercury and chaired part of the meeting


Support:

RECETOX expressed its readiness to be involved in the implementation of the UNEP/WHO project “Development of a Plan for Global Monitoring of Human Exposure to and Environmental Concentrations of Mercury”. In addition, RECETOX centre offered its laboratory and analytical
capacities as well as expertise and tools for environmental data management. Further, our trainers are ready to share their expertise with those who need to strengthen their knowledge in relation to mercury.

In addition, in early 2016 we organize the consultations for the Central and Eastern European and Central Asian region in preparation for the seventh session of the intergovernmental negotiating committee on mercury at RECETOX, Brno, Czech Republic, 3-4 February 2016 and we take steps to prepare a multi country project supporting mercury management in Armenia, Georgia and Moldova (supported by NATO, Science for Peace Programme).

Should you have any questions or need additional information, please contact me (sebkova@recetox.muni.cz, (+420) 244 466 877, (+420) 549 493 063).

5. **Stockholm Convention Regional Centre in India (SCRC India)**

CSIR-National Environmental Engineering Research Institute, SCRC, India

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Activity Details</th>
<th>Date / Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Attended “Training of trainers” for UNEP’s “Toolkit for identification and quantification of mercury releases” held at Pretoria, South Africa</td>
<td>December 9-13, 2013</td>
</tr>
<tr>
<td>2.</td>
<td>Attended sub-regional workshop for Asian countries in support for the ratification and early implementation of the Minamata Convention on Mercury held at New Delhi, India</td>
<td>September 18-20, 2014</td>
</tr>
<tr>
<td>3.</td>
<td>Pilot scale remediation of mercury contaminated site at Hindustan Uniliver Limited, Kodaikanal, Tamil Nadu, India</td>
<td>2009-2013</td>
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<tr>
<td>4.</td>
<td>Technical Services during remediation of mercury contaminated site at Hindustan Uniliver Limited, Kodaikanal, Tamil Nadu, India</td>
<td>2009-2013</td>
</tr>
<tr>
<td>5.</td>
<td>Assessment of mercury levels in soil, sediments and water samples from the offsite area of Hindustan Uniliver Limited, Kodaikanal, Tamil Nadu, India</td>
<td>2012-2014</td>
</tr>
<tr>
<td>6.</td>
<td>“Asia and Pacific regional workshop to support the ratification and effective implementation of the Minamata Convention on Mercury” and regional preparatory meeting for the 2015 meetings of the conference of the parties to the Basal, Rotterdam and Stockholm Conventions” at Jakarta, Indonesia</td>
<td>March 17-20, 2015</td>
</tr>
</tbody>
</table>

Proposed Activity for funding from Ministry of Environment, Forests and Climate Change (MoEF&CC);

| 1.     | Development of mercury emission inventory and estimation of its release from select coal based thermal power and cement plants of India |
| 2.     | Monitoring and control of mercury emissions from coal based thermal power plants |

6. **Stockholm Convention Regional Centre in Panama (SCRC Panama)**

**MERCURY-RELATED ACTIVITIES OF THE CIIMET**

As part of its mandate to promote sound chemical management the SC-CIIMET/RC has developed the following activities related with mercury:

**2013:** Preparation of the “Mercury Storage Project”. The project included the following points:

- Legislative institutional national and international framework
- Inventory update of mercury. Emissions of mercury from products and processes
- Analysis of mercury storage facility.

**2013-2015:** Mercury management in health facilities: a ‘train to trainers' workshop was held with the participation of 9 hospitals from the public and private network. The training was carried out according to the methodology offered by Health Care Without Harm, to assess the situation of hospital waste, evaluate the use of mercury-containing equipment and handling at disposal. Compliance targets were established and followed as agreed in the period 2014-2015.

**2014-2015:** Collaboration with Ministry of Health (MINSA) in the preparation of project start-up activities to implement the Minamata Convention. (MIA Project)
2016: A proposal is being prepared with MINSA to work in a second phase by incorporating other hospitals in the public network. This is a joint project with the Secretariat.

**Activities for 2016**

2016: A proposal is being prepared with MINSA to work in second phase of the Project of hospital waste by incorporating other hospitals in the public network. This is a joint project with the Secretariat.

2016: Coordinate MIA project implementation.

7. **Basel and Stockholm Convention Regional Centre in Senegal (BCRC-SCRC Senegal)**

The regional centre has developed the following activities related with mercury:

**2014:** Organization of two sub-regional workshops in support for the ratification and early implementation of the Minamata Convention on Mercury organized for Francophone African countries in Dakar

- The two workshops scheduled in Dakar, Senegal, are part of this series of workshops and will assist countries from Francophone Africa in their process towards ratification and early implementation of the Minamata Convention. The objectives of the workshops are to further enhance participants knowledge of the Convention and the processes for its signature, ratification and early implementation. They also aim at providing participants with information on the available sources of support and at creating opportunities for exchange and action at the sub-regional level. During the workshop, each participating country will be invited to prepare and present a draft national roadmap for the ratification and early implementation of the Convention.

**First workshop from 9 to 11 July 2014**

Participants countries: Burundi, Cameroun, Cap Vert, Centrafrique, Comores, Congo, Djibouti, Madagascar, Maurice, RDC, Tchad, Sao Tome et Principe.


**Second workshop and from 14 to 16 July 2014**

Participants countries: Algérie, Bénin, Burkina Faso, Côte d’Ivoire, Guinée Conakry, Guinée Bissau, Mali, Niger, Maroc, Mauritanie, Sénégal, Togo, Tunisie.

Participants NGOs and ONU international institutions: OMS, PNUD, PNUE, ONUDI, UNITAR, le Fonds pour l’Environnement Mondial (FEM), ainsi que des ONG: Agence Mondiale pour une Dentisterie Mondiale (AMDM), Alliance for Responsible Mining (ARM), International POPS Elimination Network (IPEN), Jeunes Volontaires pour l’Environnement (JVE-CI)/Zero Mercury Working Group (ZMWG), PAN-AFRICA (Dakar & Maurice).


Having developed the toolkit UNEP wishes to develop the regional expertise necessary to support the many countries that may want use it.

The UNEP toolkit is intended to assist countries in developing a national mercury releases inventory. It provides a methodology for countries to develop a national inventory of mercury sources and releases. It provides a standardized approach and accompanying database enabling the development of national and regional mercury inventories that are consistent at the global level.
8. Basel and Stockholm Convention Regional Centre for English Speaking Africa in South Africa (BCRC-SCRC South Africa)

PROJECTS / ACTIVITIES UNDERTAKEN ON MERCURY RELATED ISSUES

This report, to the Secretariat, summarises activities undertaken by the BCRC on the activities relating to mercury that were undertaken in order to report to the INC-7 of the Minamata Convention, as was requested by decisions BC-12/10 and SC-7/17.

Project 1: Early Implementation of the Minamata convention on Mercury Project

The Ministry of Environment of Lesotho and the Africa Institute (AI) for the Environmentally Sound Management of Hazardous and Other Wastes implemented a USD 48,000.00 pilot project in Lesotho on the “Early implementation of the Minamata Convention on Mercury”. This was a United Nations Environment Programme (UNEP) funded project. The project run from January 2015 to December 2015. The project was aimed at helping countries develop and build the necessary institutional capacity and policy instruments to manage chemicals and waste soundly, including the implementation of related provisions in the Minamata convention on Mercury. The project had three components:

1. Legislative assessment

   The overall objective was to review national legislation and recommend changes applicable to mercury in the implementation of the Minamata convention in Lesotho. Specific tasks were to:
   a) Identify of any amendments which were required to the implementation of the Minamata convention to the national legislation related to mercury.
   b) Identify actions required to provide the necessary support and guidance to Lesotho in the implementation of the Minamata convention on mercury.
   c) Produce a report incorporating for the national implementation of the Minamata convention.

2. Develop a national mercury release inventory

   The overall objective was identify mercury release sources and quantifying the releases from those sources. The purpose of this work was to provide national information for prioritizing measures to reduce mercury releases. The specific tasks were to:
   a) Identify national mercury release sources and
   b) Quantify the releases from those sources related to mercury.
   c) Produce a report detailing the mercury release sources that provides:
      a. National information on mercury release sources and identified actions required to provide the necessary support and guidance to Lesotho in the implementation of the Minamata convention on mercury
      b. Recommendations to reduce mercury releases in line with the Minamata convention.

3. Production of IEC materials on the Minamata convention

   The IEC materials were developed with input from the interim secretariat of the Minamata convention on Mercury to ensure that the awareness material were fully reflecting the content of the Minamata convention as adopted by governments. Stakeholders from Lesotho were also considered in the development of the awareness materials specifically looking at the national circumstances.

Project 2: Early Implementation of the Minamata convention on Mercury Project – Africa MIA Project

The Minamata Convention on Mercury identifies and describes in its Article 13 the financial mechanism to support Parties from developing countries and countries with economies in transition to implement the Convention. It identifies two entities that will function as the Financial Mechanism:
   a) The Global Environment Facility Trust Fund; and
   b) A specific international Programme to support capacity-building and technical assistance.
The GEF Programming for its replenishment V highlights the strong commitment of the GEF to support the ratification and further implementation of the Minamata Convention on Mercury. Additionally, at its 44th Meeting in June 2013, the GEF Council considered document GEF/C.44/04, *Preparing the GEF to serve as the Financial Mechanism of the Minamata Convention on Mercury upon entry into force* and its decision, inter alia: “Authorized the use of up to 10 million for the funding of an early action pre-ratification programme for the Minamata Convention on Mercury to be programmed during the remainder of GEF-5, upon request by eligible signatory countries. It also requested the GEF Secretariat to develop initial guidelines consistent with the final resolutions of the Diplomatic Conference for enabling activities and pre-ratification projects, in consultation with the interim Secretariat of the Minamata Convention on Mercury and presented this as an information document at the 45th Council Meeting”.

This is a **USD 800,000.00** project that is aimed at facilitating the ratification and early implementation of the Minamata Convention by providing key national stakeholders in participating countries with the scientific and technical knowledge and tools needed for that purpose.

Participating countries will benefit from new and updated information about the mercury situation in their country and from increased capacity in managing the risks of mercury. The sharing of experiences and lessons learned throughout the project is also expected to be an important contribution to other similar countries. The BCRC is the executing agency for Botswana, Lesotho, Namibia and Swaziland. UNEP is the implementing agency. This project will run for 2 years effective January 2016.

The goal of the project is to protect human health and the environment from the risks posed by the unsound use, management and release of mercury. The objective is the ratification and early implementation of the Minamata Convention is facilitated by the use of scientific and technical knowledge and tools by national stakeholders in participating countries.

### Specific Tasks for the Partnership

The project has six components, which consists of the activities indicated below. Each component includes information on project activities, outcomes and outputs.

<table>
<thead>
<tr>
<th>Project Component</th>
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<tbody>
<tr>
<td>1. Establishment of Coordination Mechanism and organization of process</td>
<td>Participating countries make full use of enhanced existing structures and information available dealing with mercury management to guide ratification and early implementation of the Minamata Convention</td>
<td>Technical support provided for the establishment of National Coordination Mechanisms and organization of process for the management of mercury</td>
</tr>
<tr>
<td>2. Assessment of the national infrastructure and capacity for the management of mercury, including national legislation</td>
<td>Full understanding of comprehensive information on current infrastructure and regulation for mercury management enables participating countries to develop a sound roadmap for the ratification and early implementation of the Minamata Convention</td>
<td>Assessment prepared of the national infrastructure and capacity for the management of mercury, including national legislation</td>
</tr>
<tr>
<td>3. Development of a mercury inventory using the UNEP mercury tool kit and strategies to identify and assess mercury contaminated sites</td>
<td>Enhanced understanding on mercury sources and releases facilitated the development of national priority actions</td>
<td>Mercury inventory developed using the UNEP mercury tool kit and strategies to identify and assess mercury contaminated sites</td>
</tr>
<tr>
<td>4. Identification of challenges, needs and opportunities to implement the Minamata Convention on Mercury</td>
<td>Improved understanding on national needs and gaps in mercury management and monitoring enabled a better identification of future activities</td>
<td>Technical support provided for identification of challenges, needs and opportunities to implement the Minamata Convention on Mercury</td>
</tr>
<tr>
<td>5. Preparation and validation of National MIA reports and implementation of awareness raising activities and dissemination of results</td>
<td>Participating countries and key stakeholders made full use of the MIA and related assessments leading to the ratification and early implementation of the Minamata Convention on Mercury</td>
<td>Technical support provided for preparation and validation of National MIA reports and implementation of awareness raising activities and dissemination of results</td>
</tr>
<tr>
<td>6. Information exchange, capacity building and knowledge generation</td>
<td>Enhanced communication, support and training facilitate the development of the Minamata Initial Assessment by participating countries and build the basis for future cooperation and regional approaches for mercury management</td>
<td>Information exchange undertaken and capacity building and knowledge generation for mercury management provided</td>
</tr>
</tbody>
</table>
Project Status:
Inception meetings have just been held in Botswana and Swaziland and the other two countries will have theirs before the end of January 2016.

9. **Stockholm Convention Regional Centre in Spain (SCRC Spain)**

As part of its mandate to promote sound chemical management in the Mediterranean countries, the SCP/RAC has developed the following activities related with mercury:

2010: Preparation of the “**Diagnosis of Mercury in the Mediterranean countries**”. The study included the following points:

- Legislative institutional national and international framework
- Production, import, export, trade and use
- Emissions of mercury from products and processes
- Technologies and practices to prevent and control mercury emissions
- Emission limit values and quality objectives
- Focuses of main emissions (hot spots and areas of influence)
- Networks and tools for monitoring and control of mercury
- Conclusions and recommendations

2011: Preparation of the **Report on mercury Emission Limit Values (ELV) and Best Available Techniques (BAT) at the Mediterranean countries**. The main objective of this study was to offer technical information and a comparative analysis on Best Available Techniques (BAT) and Associated Emission Limits (AEL) of mercury for the chemical, battery, metallurgy and waste management sectors. This study served as technical basis for the ELV figures of the Regional Plan on Mercury. The ELV recommended was 5 micrograms per liter for all processes.

2012: Collaboration with UNEP/MAP in the **drafting of the Mediterranean Regional Plan on the reduction of inputs of Mercury**. The Regional Plan was finally adopted by the 22 parties of the Barcelona Convention at COP 17 (Paris).

2012: Organization of the **First Workshop on mercury management and decontamination technologies in the Mediterranean countries**, in the framework of the Mediterranean Regional Plan on Mercury. The workshop was organized by SCP/RAC in Almadén (Spain), a former mercury mine, and counted on the collaboration of the Spanish Ministry of Environment, the Centre for Mercury Decontamination of Almadén (CTNDM). Experts from the Ministries of Environment of the following countries participated in the workshop: Algeria, Spain, Italy, Morocco, Greece, Cyprus, Croatia, Bosnia Herzegovina, Lebanon and Israel. Participants presented the state of the issue of mercury in their countries and the developed actions for proper management. Likewise, different successful decontamination actions carried out, as the performed in the restoration of the Almadén mines itself were presented.

2014: Preparation of the **Guidelines on Best Environmental Practices for the Environmental Sound Management of mercury contaminated soils**.

Under the Mediterranean Regional Plan on Mercury, the parties shall report on the measures envisaged for the mercury contaminated soils by making use of the Guidelines of mercury contaminated soils. The SCP/RAC was commissioned to prepare these guidelines, which were finalized in 2014 and will be adopted at the COP 19 of the Barcelona Convention (February 2016, Athens).

The study includes the following points:

1. Introduction
2. International Legislation
3. Identification of mercury-contaminated sites
4. Identification of environmental impacts
5. Environmental characterization of mercury-contaminated sites
6. Sample preparation and analytical procedures
7. Risk assessment
8. Remediation of mercury-contaminated sites
   case study 1: reconditioning of the “Cerco de san Teodoro” slag heap.
   Minas de Almadén (Ciudad Real, Spain).
   case study 2: decontamination of the Flix dam in the Ebro river (Tarragona, Spain)
   case study 3: environmentally safe decommission of a mercury cell
   chlor-alkali plant
   case study 4: stabilization of soils contaminated with heavy metals using low-grade
   magnesium oxide

2015: Organization of the Second Workshop on mercury management and decontamination
technologies in the Mediterranean countries. The event was organized by SCP/RAC in the
framework of the Horizon 2020 Programme of the European Union, with the collaboration of the
Spanish Ministry of Agriculture, Food and Environment, the CTND (National Technological Center
for Mercury Decontamination) and MAYASA.

33 participants from 13 countries (Syria, Morocco, Lebanon, Palestine, Jordan, Tunisia, Israel, Egypt,
Albania, Bosnia, Italy, Montenegro and Spain) assisted to the event which took place at the old
Hospital of miners of San Rafael in Almadén.

The main objective of the event was the training on the Guidelines on Best Environmental Practices
for the Environmental Sound Management of mercury contaminated sites, a document commissioned
by the SCP/RAC to the CTNDM. The preparation of these Guidelines was a requirement of the
Mediterranean Regional Plan on Mercury (2012), so that the countries can make use of them to
envisage solutions for their mercury polluted sites.

Activities foreseen for 2016 in the MAP Programme of Work 16-17 (pending of financing)

- Awareness raising on dental fillings containing mercury to general population and
capacity building to dental clinics on safe mercury fillings removal and proper waste
management.
- Training on Mercury treatment technologies.
10. Basel and Stockholm Convention Regional Centre in Uruguay (BCRC-SCRC Uruguay)

The Basel Convention Coordinating Centre, Stockholm Convention Regional Centre for Latin America and the Caribbean (BCCC-SCRC), hosted by Uruguay, has been working on Mercury topics since 2009. Following there is a description of the different activities completed or in progress. Information on our projects can be found at the website: http://www.ccbasilea-crestocolmo.org.uy/

1. Minimization and environmentally sound management of mercury containing waste affecting most exposed populations in various economic, industrial and health sectors

Budget (USD): 323,676.
Objective: The overall objectives of the project were to develop the capacity of each participating country to prepare and implement a national programme for the Environmentally Sound Management (ESM) of mercury containing wastes in the health and other sectors, as a first step towards the development of a concerted action at the regional level for the environmentally sound medium and long-term storage of excess mercury supply and mercury wastes.
Status: Completed.
Recipient Parties: Argentina, Costa Rica and Uruguay.
Description of the activities carried out:

A) A Training Manual for the preparation of ESM plans for mercury wastes aimed at policy makers and governmental officials.

B) Three inventories of mercury wastes in the health sector and/or other sector are compiled: one in each country. The inventories contain low cost options for mercury wastes storage. Two inventories were completed in Argentina and Uruguay. Argentina: the inventory was carried out in the industrial sector. Uruguay: Inventory carried out in the health and industrial sectors. Costa Rica: Inventory carried out in the health sector.

C) Five workshops were organized to launch the project and deliver training on the methodology for the development of inventories of mercury emissions: - Argentina: 2 to 4 August 2010 - Costa Rica: 27 to 29 September 2010 - Uruguay: launch of the project, 1 June 2010; inventory training from 28 June to 2 July 2010.

D) Three National plans on the ESM and minimization of mercury waste: one in each country.


F) Dissemination of the project results. Three workshops were organized in Argentina, Costa Rica and Uruguay to disseminate the project results. Uruguay: 16 August 2011, Argentina: 24 August 2011 and Costa Rica from 27 to 28 June 2013. The BCCC Uruguay Disseminated of project materials (brochure and banner) at the 4th GEF Assembly and during the ministerial working lunch on the challenge of financing the chemicals and waste agenda (Punta del Este, May, 2010).

2. Temporary storage and final disposal of mercury and its wastes.

Funds: Norway - UNEP-DTIE, Small-Scale Funding Agreement.
Budget (USD): 31,200/each country.
Objective: Design a national plan for the proper storage and final disposal of surplus mercury (both as commodity or waste).
Status: Completed.
Recipient Parties: Argentina and Uruguay.
Description of the activities carried out:
It was designed a National Plan in both countries for the proper storage and final disposal of surplus mercury (both as commodity or waste). It was raised the need of definitions for the trade of Mercury and its waste at a national, regional and international level. It was identified the need of legal aspects and requirements of locations for the storage of waste with mercury or liquid mercury.

3. **Guidance on Best Industrial Practices in the Chlor-alkali sector.**
   
   Period: April 2011
   
   Objective: Diagnosis of the sector, improvement opportunities, Guidance on Best Environmental Practices.
   
   Status: Completed.
   
   Recipient Parties: Uruguay.

4. **Rational Management of Mercury-containing Products, particularly focusing on fluorescent lamps.**
   
   Funds: SAICM.
   
   
   Objective: Diagnosis of the sector, inventory, improvement opportunities and legislation.
   
   Status: Completed.
   
   Recipient Parties: Uruguay.

5. **The Minamata Convention and its implementation in Latin America and the Caribbean Region.**
   
   Funds: UNEP Panama (ROLAC).
   
   Period: July 2013 - April 2014.
   
   Budget (USD): 13,000.
   
   Objective: Survey on challenges for GRULAC Region on Minamata Convention implications.
   
   Status: Completed.
   
   Recipient Parties: GRULAC Countries.

   Description of the activities carried out:
   
   A) Collection of data and information on the main uses of mercury, import / export of mercury and mercury-containing products, etc. in the GRULAC region.
   
   B) Consultation process with stakeholders in different countries of the region.
   
   C) Collaboration in the dissemination of the products in different media and events.
   

6. **Development of inventories and management plans for mercury in Latin America and the Caribbean.**
   
   Funds: GEF.
   
   Period: 09/05/2014-30/04/2017.
   
   Budget (USD): 916,000.
   
   Objective: To assist project parties to develop inventories, or update them, regarding sources of mercury, and perform mercury management plans, under the framework of Minamata Convention.
   
   Status: In progress.
   
   Recipient Parties: Argentina, Ecuador, Nicaragua, Peru and Uruguay.

   Description of the activities carried out to date:
   
   A) Negotiation with 5 GRULAC countries (Argentina, Ecuador, Peru, Nicaragua and Uruguay) to achieve the project. The activities undertaken during the negotiation process were: identifying focal points and institutions that may be involved in each country (ministries, laboratories, universities, etc.), an invitation letter was sent to participate in this project to GRULAC countries, once confirmations were received (5 total), an approval letter and a letter of co-financing were required to each country.
The whole process was developed linked to UNEP represented by its Division of Technology, Industry and Economics, Chemicals Branch (UNEP Implementing Agency, Centre Executing Agency).

B) Inception Workshop, held in Montevideo, Uruguay, 2 participants from each member country. All issues related to the organization of the workshop were in charge of the Centre, airline tickets, accommodation, meals, workshop logistics, etc. November 18 to 20, 2014.

C) We have signed memorandums of understanding between member countries of the project to its management, cash disbursements, direct hiring experts, mercury training, etc. (December 2014 - June 2015).

D) UNEP Hg Tool Kit Level I and II translated into Spanish.

7. **Minamata Initial Assessment – MIAs, for Latin America and the Caribbean.**

Funds: GEF.


Budget (USD): 730.594.

Objective: To assist project parties to develop inventories, or update them, regarding sources of mercury, and perform mercury management plans, under the framework of Minamata Convention.

Status: In progress.

Recipient Parties: Bolivia, Chile, Dominican Republic and Paraguay.

Description of the activities carried out to date:

A) Negotiation with 4 GRULAC countries (Bolivia, Chile, Dominican Republic and Paraguay) to achieve the project. The activities undertaken during the negotiation process were: identifying focal points and institutions that may be involved in each country (ministries, laboratories, universities, etc.), an invitation letter was sent to participate in this project to GRULAC countries, once confirmations were received (4 total), an approval letter and a letter of co-financing were required to each country. The whole process was developed linked to UNEP represented by its Division of Technology, Industry and Economics, Chemicals Branch (UNEP Implementing Agency, Centre Executing Agency).

B) Inception Workshop, held in Montevideo, Uruguay, 2 participants from each member country. All issues related to the organization of the workshop were in charge of the Centre, airline tickets, accommodation, meals, workshop logistics, etc. November 18 to 20, 2014.

C) We have signed memorandums of understanding between member countries of the project to its management, cash disbursements, direct hiring experts, mercury training, etc. (December 2014 - June 2015).

8. **Early ratification and implementation of the Minamata Convention in Uruguay.**

Funds: UNITAR.

Period: 12/08/2014-15/06/2015.

Budget (USD): 20.000.

Objective: Development of activities to implement the Minamata Convention in Uruguay.

Status: Completed.

Recipient Parties: Uruguay.

Description of the activities carried out to date:

A) It has been hired a consultant (November 2014) to design a roadmap to address national priorities for the effective implementation of the Minamata Convention (December 2014). The roadmap has already been designed.

B) It was conducted an expert workshop on mercury waste stabilization from 21 to 22 October 2014 in Montevideo, Uruguay.

C) Closing workshop held in Montevideo, July 17th, where the project results were presented as well as the roadmap developed. The Center was in charge of the workshop logistics, invitations, hotel contact, catering and equipment for execution.
9. **Preparation of the GRULAC Regional Preparatory Meeting for COP 2015 and Regional Workshop for the ratification and effective implementation of the Minamata Convention on Mercury.**

Funds: BRS Secretariat/UNEP.


Objective: Organization of the GRULAC Regional Preparatory Meeting for COP 2015 and Regional Workshop for the ratification and effective implementation of the Minamata Convention on Mercury

Status: Completed.

Recipient Parties: GRULAC.

Description:

It was selected and hired: the venue for the Meeting, catering, coffee breaks, audio, translations services, etc.

All the bought of the air tickets for participants was done for the Centre.

Uruguay VISA facilitation services.

10. **Regional workshop on Enhancing parties capacities for the ESM of mercury wastes under the Basel Convention.**

Funds: BRS Secretariat.


Budget (USD): 65,100.

Objective: A 3 (three)-day training Workshop for 30 (thirty) participants on Enhancing parties capacities for the ESM of mercury waste, held in Montevideo, from 17 to 19 November 2015.

Status: Completed.

Recipient Parties: Uruguay.

Description of the activities carried out:

A) Organize, secure and pay for adequate logistical arrangements for the Workshop, including a suitable venue equipped with adequate facilities.

B) Prepare a logistics information note on the country and the venue for the Workshop and transportation options from the airport to the venue and vice-versa.

C) Arrange and pay for air tickets, reserve and pay for accommodation and Daily Subsistence Allowance (DSA) to sponsored participants as agreed by BRS/UNEP and in accordance with the United Nations financial rules and regulations.

D) Assist participants in their requests for visas, making use of the list of confirmed participants, as communicated by BRS/UNEP, and copies of supporting identification documents.

E) Enter into other such administrative and/or contractual arrangements as may be reasonably required for the effective completion of the responsibilities as agreed with BRS/UNEP.

F) Provide other such reasonable input as may be required by SBC/UNEP and within a reasonable time to enable it to carry out its obligations under the Agreement and/or ensure effective operation of the Workshop.

G) Prepare and finalise, subject to the prior approval of BRS/UNEP, the Workshop materials, including banners and other materials.

H) Provide support on the technical issues as well as in preparing, organising and coordinating the necessary presentations at the Workshop, as agreed with BRS/UNEP.

I) Organize the distribution of all working documents in advance of and/or during the Workshop, including by providing 1 (one) memory stick per participant.

J) Ensure the registration of all participants at the opening of the Workshop, including maintaining a roster for sponsored participants and obtaining copies of supporting documentation as requested by BRS/UNEP.
K) Make the necessary arrangements, including financial arrangements, to provide refreshments during the coffee breaks and lunches for all participants attending the Workshop.

L) Make arrangements to provide sufficient staff, including administrative and secretarial staff, to support the Workshop.

M) Provide support, when required, and participate in the online meeting(s) related to the Workshop.

N) Prepare and submit to BRS/UNEP, no later than 1 (one) month after the closing of the Workshop, a summary report of the Workshop, in English, including:
   - Introduction, including background information and purpose of the Workshop.
   - Summary of discussions, including recommendations.
   - Conclusions.
   - Annexes, including list of participants with contact details and agenda of the Workshop.

11. **Organization and conduct in Uruguay of regional consultations for the Latin America and the Caribbean region in preparation for the seventh session of the intergovernmental negotiating committee on mercury.**

   Funds: UNEP.


   Budget (USD): 156,729.

   Objective: organizing and conducting in Montevideo, Uruguay, from 9 to 12 February 2016, of consultations for the Latin America and the Caribbean region in preparation for the seventh session of the intergovernmental negotiating committee on mercury.

   Status: In progress.

   Recipient Parties: GRULAC.

   Description:
   A) Organize, secure and pay for adequate logistical arrangements for the Regional Meeting, including a suitable venue equipped with adequate facilities.

   B) Prepare a logistics information note on the country and the venue for the Regional Meeting and transportation options from the airport to the venue and vice-versa.

   C) Arrange and pay for air tickets, reserve and pay for accommodation and Daily Subsistence Allowance (DSA) to sponsored participants as agreed by UNEP and in accordance with the United Nations financial rules and regulations.

   D) Assist participants in their requests for visas, making use of the list of confirmed participants, as communicated by UNEP, and copies of supporting identification documents.

   E) Enter into other such administrative and/or contractual arrangements as may be reasonably required for the effective completion of the responsibilities as agreed with UNEP.

   F) Provide other such reasonable input as may be required by UNEP and within a reasonable time to enable it to carry out its obligations under the Agreement and/or ensure effective operation of the Regional Meeting.

   G) Prepare and finalise, subject to the prior approval of UNEP, the Regional Meeting materials, including banners and other materials.

   H) Provide support on the technical issues as well as in preparing, organising and coordinating the necessary presentations at the Regional Meeting, as agreed with UNEP.

   I) Organize the distribution of all working documents in advance of and/or during the Regional Meeting.

   J) Ensure the registration of all participants at the opening of the Regional Meeting, including maintaining a roster for sponsored participants and obtaining copies of supporting documentation as requested by UNEP.
K) Make arrangements to provide sufficient staff, including administrative and secretarial staff, to support the Regional Meeting.

L) Provide support, when required, and participate in the online meeting(s) related to the Regional Meeting.

Other relates activities:

- Participation in the training of trainers workshop on UNEP's Mercury Inventory Toolkit, held in Pretoria from 9th-13th December 2013. The goal of the training session was to give assistants an introduction to the Toolkit with the aim of enabling the Centre to assist countries in the development of their national mercury inventories.

- Participation in the INC 4 held in Punta del Este, Uruguay from 27 June to 2 July 2012. We had a Centre stand with information of our activities.

Final Remarks:

It is important to mention that during the execution of activities and projects, several issues on Mercury have been addressed by GRULAC countries:

- Lack of analytical skills to determine mercury in different matrices.
- Lack of Infrastructure for collection, handling, treatment and disposal of Mercury and waste.
- Needs on Improvements in environmental information systems.
- Lack of budget to replace mining practices and industrial processes (there are not banks to finance these kind of issues).
- Lack of technologies to identify and to treat Mercury contaminated sites.
- Capacity building and awareness at all levels on Minamata Convention.
- Lack of implementation of national policies.