International Mercury Treaty Enabling Activities Program (IMEAP)

Following the signing of the Minamata Convention on Mercury (the 'mercury treaty') in 2013 and the release of the IPEN Minamata Declaration on Toxic Metals, IPEN expanded its Mercury-Free Campaign and developed a broad program of treaty-enabling activities to be implemented in conjunction with IPEN Participating Organizations (POs). The International Mercury Treaty Enabling Activities Program (IMEAP) is geared toward raising awareness about the mercury treaty while generating data on key thematic elements of mercury pollution to help enable countries to implement the Minamata Convention.

IPEN launched IMEAP in early 2014 and continues to mobilise resources for IPEN POs to conduct activities that support implementation of the mercury treaty[1].

The key objectives of the IPEN IMEAP are:

1. *Preparing for Treaty Ratification & Implementation:* Creating synergies between NGOs in developing countries with ongoing UN agency or government-led mercury activities and NGO priority-setting.

2. *Enabling Activities to Prepare Countries for Treaty Ratification & Implementation:* Support to NGOs to carry out national and thematic mercury treaty activities.

3. *Communication of Issues Related to Mercury and Treaty Ratification & Implementation:* Global dissemination of project results & south-south collaboration.

The following project forms part of the overall IMEAP activities and contributes to the greater global understanding of mercury pollution issues while providing information that may contribute to Minamata Initial Assessments (MIA) and raise public awareness in preparation for early ratification of the Minamata Convention on Mercury.

[1] IPEN would like to acknowledge the financial contributions from the governments of Germany, Sweden and Switzerland, and the Swedish public development co-operation aid through the Swedish Society for Nature Conservation (SSNC) and other donors. The views herein shall not necessarily be taken to reflect the official opinion of any of these donors, including SSNC or its donors.

IPEN Mercury Treaty Enabling project: Armenia

Name of the NGO: Armenian Women for Health and Healthy Environment (AWHHE)
Date: 5 May 2015 (IMEAP: 2014 Phase)
Title of project: "Mercury Country Situation Report by Armenian Civil Society Sector"

Summary

Armenian based NGO, Armenian Women for Health and Healthy Environment (AWHHE), undertook a project to produce a Mercury Country Status Report for Armenia. Their investigation into mercury pollution has contributed important information to the national efforts to develop an inventory of mercury pollution sources and contaminated sites which they have been able to share with key stakeholders and the public. AWHHE has been able to present the findings of this project to the Armenian national committee that is preparing for ratification of the Mercury Treaty (AWHHE represents civil society NGOs on the committee) including data on mercury contamination from industrial operations, waste dumps and obsolete pesticide dumps. Preliminary information suggests mercury contamination of the airshed in some population centers in proximity to mining and metal production facilities. Mercury contamination of some fresh food products was also reported. Positive findings include an absence of the use of mercury amalgam in dentistry in Armenia (even though no ban is in place), a ban on mercury based pesticides and complete replacement of mercury based blood-pressure monitoring devices (*sphygmomanometers)* with mercury-free devices. This IMEAP project has relevance to Articles 4, 8, 9, 11, 12, 16-18 and 20 of the Mercury Treaty.

Mercury based products in the Market
Identify the most common forms of mercury available to the public, including in products sold:

The most common **mercury containing products** available to the public in Armenia include:

- **Lighting devices**:
  - ✓ Mercury lamps In Soviet times, Armenia produced mercury containing lamps in Yerevan Lamp Factory (state owned). Today, such lamps are no longer produced; however, AWHHE witnessed old broken lamps on the territory of the factory (now it is a privately owned "Grand Sun" factory).

  - ✓ Fluorescent lamps: In recent years, fluorescent or energy saving lamps have become increasingly popular. They are designed for installation in a standard incandescent socket. However, the main problem with these lamps is that they contain rather considerable amount of mercury (from 2 mg to 5 mg) which is not safe for health. The mercury containing lamps are imported to Armenia. According to the inquiries that we made visiting some shops, sales of energy-saving lamps in retail outlets has increased considerably. AWHHE estimation is that up to 700,000 lamps enter Armenian market annually; it is estimated that annually up to 3,5 kilograms of mercury enter the Armenian market with the mercury containing lamps.

- **Medical uses**:

  Glass medical thermometers: the mercury-free alternatives are considered less accurate and are more expensive (mostly, this is the view of household

consumers, which was confirmed by the interviewed medical professionals). That is the reason why the mercury thermometers are used everywhere. On average, one pharmacy sells 200 thermometers annually, there are about 600 registered pharmacies in the country which means about 120,000 mercury thermometers are imported (there is no local production) per year. Each thermometer contains 1 gram of mercury. Thus, an estimated 120 kg of mercury is entering the Armenian market with thermometers. However, note should be taken that this estimate may only cover public purchases rather than medical professionals as medical institutions may source their equipment from wholesalers rather than pharmacies.

- ✓ Vaccines. According to the national vaccination calendar, during vaccinations and revaccinations each child receives from 3 to 200 micrograms of mercury in the form of organic mercury as a preservative (mertiolat) from mercury containing vaccines. These vaccines include: Diphtheria-Pertussis-Tetanus (DPT), Diphtheria-Pertussis (DT) and Hepatitis B. The DPT vaccination is administered three times plus one revaccination with DPT. The DT and Hepatitis B are administered once. Annually from 250,000 to 300,000 doses of vaccines enter the country. Although the total amount of mercury may seem very small (around 100 grams), however taking into consideration the fact that vaccination programme has been going for decades and the disposal of mercury-containing vaccines is not always properly regulated, sometimes mercury ends in a landfill thus contributing to the overall cycle of mercury contamination in the environment where it accumulates, evaporates and deposits again.

- **Mercury containing pesticides**: Although mercury-containing pesticides are banned in Armenia, a matter of special concern is the presence of the mercury containing pesticide (Granozan) in the Nubarashen Burial Site for Banned and Obsolete Pesticides (estimated at 30 tons) as well as small amount (some dozens of kilograms) in the storages of banned and obsolete pesticides (see more on this issue in the report below).

- **Other mercury containing products**
  - ✓ LCD screens of mobile phones and computer/laptop screens: Armenia imports products with LCD screens. Like fluorescent lights, liquid-crystal display- LCD screens electrically energize mercury vapor to generate visible light. That means LCD TVs, laptop screens and other backlit displays have the heavy metal in them, and need to be treated carefully when they break or burn out.
  - ✓ Mercury-containing batteries: It is difficult to estimate the amount of mercury coming with batteries due to absence of any statistical data
  - ✓ Beauty products: It is possible to detect mercury and mercury compounds in cosmetics of some companies - whitening creams, mascara, lipstick and blush. For example, an EEB-supported regional project (2011) showed that some cosmetics (skin-lightening products) which are imported to Armenia contain elevated levels of mercury
  - ✓ Children's toys and products: IPEN supported regional project (2012-2013) showed that some toys and children's cosmetics (lipstick) imported to Armenia contain mercury

Mercury compounds in industry:

- Cement production. Armenia has two cement plants: Mika Cement (in the town of Hrazdan, Kotayk province) and Ararat Cement (town of Ararat, Ararat province). The Mika Cement plant was put into exploitation in 1970, its production was exported to the republics of Transcaucasus and to Russia. In 2001 the plant was privatized. The enterprise is equipped with two technological lines with the rated capacity of 1.2 million tons of cement a year. Ararat Cement was founded in 1927 during the Soviet era, and continued as a state owned company until 2002 when it was privatized and modernized. The factory's production includes: Fast hardening Portland cement without additives, Portland cement with mineral additives, Portland cement without additives and slag Portland cement. The estimates on mercury emissions are based on total cement production will be available upon completion of the on-going national mercury inventory (which is done with the use of the mercury toolkit).

- Mining and ore processing industry. Armenia is rich in mines with copper, molybdenum, gold as well as polymetallic mines, etc. The country's largest copper-molybdenum mining assets are in the southern Syunik province and include the large Kajaran mine and two smaller mines of Agarak and Kapan. The metal is supplied to the following originally state-owned plants in the same region: oldest Kapan ore-dressing plant (established in 1935), and Zangezur and Agarak copper-molybdenum plants. The marz of Lori has three copper mines as well as an enrichment plant that produces copper concentrate containing 23-26 percent copper. Currently the mining and exploration rights of all the above mines in Syunik and Lori are given to foreign companies, all the plants are privatized. Armenian Copper Program (ACP) owns and operates the Alaverdi smelter, the largest smelting facility in the Caucasus region. The ACP is also involved in exploration of mines in Teghut (copper-molybdenum), Alaverdi (copper), Hankadzor (copper) and Tandzut (copper-gold-sulfur).

  In Yerevan, there is Makur Yerkat copper-molybdenum smelter. The smelter is the leading enterprise in Yerevan processing copper-molybdenum ore concentrates extracted from Kajaran and other mines in the South of Armenia. Information on presence of cinnabar in the ore used by the smelter is controversial (there is no available data). Following the purchase of the Makur Yerkat smelter by the German Cronimet Metals Group (75% of the stocks), production levels have significantly increased. However, the plant is not equipped with demercurization technologies.

Armenia has shifted to using mercury-free alternatives for the following products:

- In Armenia, no mercury-containing *sphygmomanometers* are used; all medical institutions have shifted to mercury-free alternatives.
- According to the Ministry of Health, dental amalgam is not used in Armenia, though it is not restricted. AWHHE confirmed this information through interviews with dentists in children's and adult dental clinics. However, there is a concern that given the fact that there is no regulation to restrict amalgam use, there may be some uses of amalgam (mostly provided by some European countries and the USA as humanitarian aid).
- Officially no mercury containing pesticides are present or used in Armenia. Mercury-containing pesticides are banned in Armenia (included in the list of banned pesticides).
- Mercury amalgamation process is not used in gold extraction.

Imports and exports: Describe the quantities of mercury imported/exported and stored in your country and the method of estimation)?

Armenia does not import or export mercury.

Human Exposure to Mercury
Describe the most common forms of mercury exposure in the country:

Armenians experience considerable exposure due to human-generated sources largely as a result of activities related to mining industry, disposal of mercury containing equipment, waste dumps and landfills. Significant hazards are due to the uncontrolled geological prospecting in the areas of possible ore deposits of copper, molybdenum, gold and other non-ferrous metals conducted by international and local private mining and ore processing companies. The surrounding urban and rural communities are not involved in the process. As a result of such prospecting, the "disturbed" earth layers may be a source of hazardous penetration of released mercury into the soil and water of neighboring rural and urban communities. Before the collapse of the Soviet Union, geological mapping was conducted, limited sampling and research activities were carried out. The sampling identified elevated levels of mercury in the soil. For example, according to the data of 1990, soil in selected parts of the capital Yerevan contains mercury in concentration of up to 5 times the Maximum Permissable Concentration or MPC (ref. Report of the Institute of Geographical Sciences of the National Academy of Sciences of Armenia, 1990) Since then the geological maps have not been revised, all prospecting is carried out on an ad hoc basis as per the requirements of private owners of the mines.

Human activities leading to Mercury pollution
Specify the current knowledge about human activities that release mercury into the environment in your country:

Currently, data on mercury pollution in the territory of Armenia in the international literature and reports are scarce and cover only potential sources of contamination. According to published data (AMAP Technical Background Report, 2013), in 2009 the total emission of Hg throughout the Republic of Armenia was more than 222,723 kg, with a high share of copper production (88.057 kg), cement (57.094 kg), gold mining at large mines (46.728 kg), waste dumps (29.995 kg), besides some amount of Hg has formed from amalgam, burning different fuels and garbage (0.849 kg). It should be noted that these statistics do not reflect either the full list of sources of Hg, or a realistic picture of Hg contamination levels of the various components of the environment and its associated risks. The ecological and geochemical studies (2005-2012) performed by the Center for Ecological-Noosphere Studies of the National Academy of Science of Armenia revealed that mercury is a factor of environmental risk in some mining areas and urban territory of Armenia. It was found that migrating in the system "soil - water - plant", mercury continues its way into the upper food chain and is thus a risk factor for health.

- **Mining and ore-processing:** Armenia is rich in mines with copper, molybdenum, gold as well as polymetallic mines, etc. The major pathways for mercury releases during extraction and initial processing for copper and molybdenum include air, water, soil, wastes/residues, and eventually certain products.

- ✓ Armenia's largest copper-molybdenum mining assets are in the southern Syunik marz (administrative region) and include the large Kajaran mine and two smaller mines of Agarak and Kapan. The metal is supplied to the following originally state-owned plants in the same region: oldest Kapan ore-dressing plant (established in 1935), and Zangezur and Agarak copper-molybdenum plants.

- ✓ The marz of Lori has three copper mines as well as an enrichment plant that produces copper concentrate containing 23-26 percent copper. Currently the mining and exploration rights of all the above mines in Syunik and Lori are given to foreign companies, all the plants are privatized. Armenian Copper Program (ACP) owns and operates the Alaverdi smelter, the largest smelting facility in the Caucasus region. The ACP is also involved in exploration of mines in Teghut (copper-molybdenum), Alaverdi (copper), Hankadzor (copper) and Tandzut (copper-gold-sulfur).

- ✓ The marz of Gegharkunik: there are plans for geological prospecting round lake Sevan in the area of river Masrik where there are natural deposits of gold. Mercury demonstrations were detected in the upper reach of the Masrik river basin flowing into Lake Sevan (this was detected in the 1970s). The current activities of the gold mining companies pose a great risk to the ecosystem of lake Sevan as mercury is likely to leak into the lake through the Masrik river.

- ✓ Makur Yerkat copper-molybdenum smelter, Yerevan: The data on presence of cinnabar in the ore used by Makur Yerkat copper-molybdenum smelter is controversial. The smelter is the leading enterprise in Yerevan processing copper-molybdenum ore concentrates extracted from Kajaran and other mines in the South of Armenia. The major pathways for mercury releases during initial processing for copper and molybdenum include air, water, soil, wastes/residues, and eventually certain products. Following the purchase of the Makur Yerkat smelter by the German Cronimet Metals Group (75% of the stocks), production levels have significantly increased. However, the plant is not equipped with demercurization technologies.

- **Electric lamps**

  - ✓ Grand Sun electrical lamps factory, Yerevan: Grand Sun electrical lamps factory is functioning on the premises of an old soviet-time factory that produced lamps based on mercury technologies. Currently, no such types of lamps are produced, however, the site may be contaminated with waste and other related residues of old production.

- **Mercury-containing wastes:** Armenia is underdeveloped in its waste management and recycling capacities. Every year over 700,000 tons of waste is generated in the country. Waste recycling facilities do not exist. The domestic and industrial waste is dumped together. All mercury containing waste (used batteries, broken lamps, etc.) end up in the general waste and eventually in the landfills. No waste sorting, recycling, nor reuse takes place at any of the existing 60 landfills. Instead, garbage is dumped into a working area and then flattened using a bulldozer to create a layer of garbage 300 centimeters

thick which represents a dangerous source of possible mercury pollution. Mercury is among the most dangerous substances present in the landfills and waste dumps. Waste recycling facilities do not exist. Monitoring of the waste sites is not carried out. Hazard of leakage into the air, soil and water is extremely high.

- ✓ The Nubarashen landfill is Armenia's largest waste disposal site and is located just outside the capital city Yerevan. It receives almost all of the solid waste produced in Yerevan and its suburbs, which is about 340 tons per day, or 102,000 tons per year. The site has accumulated over 7.5 million tons of domestic waste over 50 years.

- ✓ In addition, in the 1990s chaotic dumps of industrial waste appeared on the bank of the river Hrazdan in Yerevan where among other mercury containing old equipment, luminescent lamps containing mercury are being dumped up to now.

- **Medical waste**: Amalgam was used in previous years, often this was an option offered to the socially vulnerable people as a less expensive or free service alternative. Since the disposal of mercury is not regulated, some amounts of mercury enter the environment through landfills. In this connection, it should be also noted that in Armenia there are no crematoria.

- **Storages with obsolete and banned pesticides**: The Nubarashen Burial Site of Banned and Obsolete Pesticides contains up to 30 tons mercury containing pesticide "Granozan". After the damage to the Burial Site in 2010, the substance mixed with the soil and other substances, which significantly increased the volume of polluted soil. This problem will be considered and solved in the frame of the ongoing GEF project. The National Inventory of the storages of banned and obsolete pesticides conducted by the Ministry of Agriculture, FAO and AWHHE identified empty containers and destroyed packs of "Granozan" (dozens of kilograms).

- **Polluted soil and water objects:** Contaminated territories and water bodies appeared mainly as a result of washouts from the fields treated with mercury organic pesticides that were widely used in agriculture in Armenia and are now banned. Another significant source is the copper-molybdenum production (tailings) and prospecting of poly-metallic mines and gold mines.

- **"Unrecorded Mercury**": Changing of ownership of industrial enterprises, mines and former pesticide storages, led to weakness of control over the mercury-containing products, which now could be in landfills and in the hands of uninformed people and even children who may be playing with waste products accidentally.

ASGM

Describe the level of Artisanal and Small Scale Gold Mining in your country including; location, mercury use (if any), source of the mercury (including legal or illegal supplies) and whether the gold trade is formal or informal.

There is no large scale ASGM in Armenia. However, there might be some illegal small sites where individuals might use mercury. Another concern that needs to be investigated is the

considerable number of individual jewelers (private illegal "entrepreneurs") in Armenia who might be using mercury in their small workshops.

Levels of Mercury Release and Exposure:

Provide information on mercury data available at the national level and indicate if this information has been derived using the UNEP Tookit (level 1 or level 2 mercury inventories using UNEP Tool Kits or other inventory methods). Report the inferred quantity of mercury realized based on the recent inventory result if any. Describe the main exposed population groups and provide references for information sources.

Mercury is classified as severely hazardous chemical. Today, Armenia is undertaking the mercury inventory using the UNEP toolkit. Meanwhile, for the purposes of the present project, the current hygienic standardization of the concentrations of mercury (maximum concentration limit (MCL) of contamination of metallic mercury and its vapors) are used as reference. These MCLs have been partially reviewed following Armenia's independence. The MCLs are set in the Ministry of Health Decrees. Still some old Soviet MCLs are used as reference points for those MCLs that have not been reviewed yet. As Armenia joined the Eurasian Union and the Customs Union, the MCL are to be harmonized.

- MCL in settlements (daily average) — 0,0003 mg/m ^{3} (old MCL)
- MCL in residential area (daily average) — 0,0003 mg/m ^{3} (old MCL)
- MCL of water objects of drinking and cultural water use, water reservoirs - 0.0005 mg /l
- MCL of fisheries reservoirs - 0.00001 mg / l
- MCL of soil— 2.1 mg / kg

Currently Armenia is undertaking inventory of mercury releases as part of enabling activities for ratification of the Minamata Convention (as mentioned above). The estimates of mercury emissions from cement, mining or waste will be available upon completion of the inventory.

Possible damage caused by Mercury

Describe current known or reported mercury threats. Provide information on the kinds of mercury problems in the past have caused damage to the public, environment, food and/or workers. Identify the known population sub-groups vulnerable to mercury exposure. Please provide any information or reference sources.

Unfortunately, in Armenia there are no institutionalized assessment and monitoring mechanisms for the levels of mercury so it is not possible to effectively monitor potential pollution sources. The existing monitoring system for air, soil and water pollution does not include data on mercury. There are only occasional focal investigations conducted in Armenia. For example, based on the results of research carried out by the Center for Ecological-Noosphere Studies of the National Academy of Science (Ecocenter, 2006) in the southern town of Kajaran where copper-molybdenum mining and ore processing is the main industry, increased levels of mercury (up to 40 times the norm) were identified in the soil and local spring water as well as in agricultural products.

Preliminary results of an investigation carried out by Ecocenter in 2010 in Kajaran and Alaverdi show alarming levels of heavy metals including mercury in food (namely, fig fruit, raspberry, etc). Another research by Ecocenter (2009) identified high mercury concentrations in the mulberries in Yerevan (from 2.8 to 43 times exceeding the maximum permissible levels). These results suggest that similar problems may be present in and around other industrial centers

such as Kapan, Vanadzor, etc. In addition, there are other possible sources of mercury pollution due to open waste dumps where sanitary norms are not duly enforced. Although there is no data on mercury-related health problems in Armenia, health professionals voice strong concerns about the increase of diseases such as autism and a number of neurological conditions that may be attributed to environmental pollution, particularly due to heavy metals.

In 2012, AWHHE implemented the 'Monitoring Mercury in the Air in Armenia' project as part of international EEB/ZMWG supported projects with the use of a portable mercury monitoring instrument – Lumex - provided by EEB/ZMWG. The instrument was used to measure mercury vapour concentration in ambient air and in the air of residential quarters in the capital Yerevan and two regions – Kotayk and Gegharkunik. The air measurement results at 9 sites across Yerevan and the regions of Kotayk and Gegharkunik showed that some tests exceeded the threshold that the Ministry of Health considers safe (300 ng/ m^3) and a number of sites had mercury levels close to the threshold considered safe. While generally the testing revealed that the levels of mercury in the air are within the permissible range, it was very particularly disturbing to see the high levels of mercury vapor in the air near the Makur Yerkat Smelter of Yerevan. The measurements were taken just outside the fence line of the smelter with an average reading of 500 ng/m^3, and single measurements going up to 1500 ng/m^3. Another concern is the long-time habit of urban residents to keep the old mercury containing lamps, batteries and other such non-segregated waste in the basements of their apartment buildings: the project registered an alarming level of up to 1400 ng/m^3 in one such basement.

Laws currently Regulating Mercury:

Define any laws limiting or banning the use of mercury in specific practices, processes and/or products in your country (if any):

The following information was provided by the National Focal Point of the Minamata Convention:

In terms of regulations, there are currently no specific requirements pertaining to mercury in Armenia. A specific law on chemicals is lacking. Import/export of chemicals and pesticides is regulated by the Rotterdam Convention on the Prior Informed Consent Procedures for Certain Hazardous Chemicals and Pesticides in International Trade following the adoption of the Decision of the Government of the Republic of Armenia "On approval of the List of chemicals and pesticides regulated by Rotterdam Convention and banned in the Republic of Armenia" (No. 293-N of March 17, 2005) was adopted. The List involves compounds of mercury, including: inorganic mercury compounds, compounds of alkyl mercury, as well as alkyloxyalkyl and arylated compounds of mercury.

Efforts in your country to deal with Mercury

Specify any priority action on mercury that the government taken to reduce mercury exposure:

The following information was provided by the National Focal Point of Minamata Convention:

Environmental strategy programs involving mercury-related actions:

1. Protocol Decision of the Government of the Republic of Armenia "On approval of the second National Action Plan on environmental protection in the Republic of Armenia" (No. 33; dated August 14, 2008) that included the preparation of manuals on sound disposal of hazardous wastes (organochlorine, mercury, lead containing, etc.).

2. Decision of the Government of the Republic of Armenia "On approval of the List of actions on implementation of the Republic of Armenia obligations proceeding from the environmental international conventions" (No. 1594-N; dated November 11, 2011) that involve working out regulations on environmentally sound disposal of hazardous wastes (including mercury).
3. Decision of the Government of the Republic of Armenia "On approval of the main activity directions and the Programme of the Ministry of Nature Protection of the Republic of Armenia for 2008-2012 aimed at ensuring the national security strategy of the Republic of Armenia" (No.387-N dated April 8, 2010).

These programs are focused on working out principles, rules, requirements, methods, manuals on sound management of hazardous waste and contaminated sites (dumpsites/landfills, tailing dams, pesticides burials).

Storage

Report the current capacity for interim or long term storage of mercury and mercury compounds in your country:

Currently, Armenia has no capacity for interim or long term storage of mercury and mercury compounds**.**

Mercury wastes:

Explain how mercury wastes are currently managed in your country including domestic treatment or export. If your country has a threshold value or other means to define mercury waste, provide information on the method used. Describe the technologies currently available in your country to manage mercury waste.

In 2004 the Republic of Armenia approved the Law "On Waste" and more than 20 by-laws were prepared and approved by the Government of the Republic of Armenia. Some of the legislative documents include management of mercury-containing waste, in particular:

- Decision of the Government of the Republic of Armenia "On the approval of the List of the Republic of Armenia hazardous wastes" (No. 874-N of May 20, 2004) was approved.

The List encompasses (i) wastes containing mercury, mercury compounds as a component or pollutant; (ii) scrap (wastes), electrical equipment or electro-technical nodes, involving galvanic elements, batteries, mercury switches, glass of cathode ray tubes, and other types of glass with the active covering or polluted by cadmium, mercury, lead, polychlorinated biphenyls at the concentration level from 50 mg/kg and above; (iii) worked-out mercury lamps and luminescent tubes.

- Decision of the Government of the Republic of Armenia "On approval of the List of the Republic of Armenia banned hazardous wastes" (No.1093-N of July 8, 2004). The List embraces wastes containing mercury, mercury compounds as a component or pollutant.

Ratification of the Mercury Treaty:

Describe the forces (economic, environmental, social) that support and oppose ratification. Outline the public participation consultation process (direct or indirect via parliament, senate etc.)leading to ratification. Report whether the level of public awareness about the treaty

process is High, Medium, Low or Very Low. Identify the key barriers to ratification that you have encountered.

Treaty ratification:
Dr. Anahit Aleksandryan, Head of Hazardous Substances and Waste Policy Division, Ministry of Nature Protection of Armenia, and National SAICM Focal Point, was the official representative of Armenia in the negotiation process for the preparation of a global agreement on mercury. Armenia was among the first countries to sign the mercury treaty at the Diplomatic Conference in Kumamoto, Japan, on October 10, 2013. In fact there are no forces that oppose the Treaty ratification in Armenia. The Treaty is likely to be ratified once the inventory and related enabling activities are accomplished.

Public participation consultation process:
In October 2014, AWHHE became member of an important national committee at the Inception Workshop on Minamata Convention in Armenia where AWHHE represents the civil society sector. This is part of Armenia's ratification process. The second meeting of the Committee took place in November 2014. Training on the UNEP inventory toolkit was organized, preliminary discussion on the national inventory was held and agreement was reached on the information collection methods and responsible bodies.

As a result of the advocacy and awareness-raising activities in the frame of a multi-partner project led by AWHHE in 2013, Armenia has issued Government Decree No. 278-N, 2014, Approving Technical Regulation on Safety of Toys in line with the EU Toy Safety Directive (Directive 2009/48/EC). This decree which entered into force on 1 March 2015, approves the country's technical regulation on safety requirements for toys as well as labeling and requirements for conformity certification procedures. AWHHE continues the awareness-raising for the Minamata Convention.

Overall, the level of public awareness is still low in Armenia.

Project Outcome:

Describe the activity conducted:

- A *Mercury Working Group* was established by AWHHE as part of the *ECO Coalition of Armenian NGOs*, a meeting of the WG was organized to plan country situation analysis report (the WG identified main experts on mercury among NGOs, academia, government and industry), consultation meetings were organized with the National Focal Point (Anahit Aleksandryan, Ministry of Nature Protection);

- AWHHE prepared the Country Situation Report, including the study of the consumer markets ; the most common ways of mercury exposure; the situation with mercury waste; industrial sources of mercury in non-ferrous metal production; possible contaminated sites and populations at risk; existing legislation, etc.

- The national Round Table discussion was organized in Yerevan. AWHHE presented the Report to the stakeholders and broad public. Presentations were made by AWHHE experts and the expert of the Center for Ecological-Noosphere Studies of the National Academy of Sciences of Armenia (Dr. Lilit Sahakyan) to explain the findings and to outline the main mercury issues in Armenia. A separate discussion took place with the

Head of Ecolur Information NGO on the plans for geological prospecting around Lake Sevan in the area of river Masrik where there are natural deposits of gold. Elevated mercury concentrations were detected in the upper reach of the Masrik river basin flowing into Lake Sevan (this was detected in the 1970s). The current activities of the gold mining companies pose a great risk to the ecosystem of Lake Sevan as mercury is likely to leak into the lake through the Masrik river. As a result of the discussion, the Appeal to the Minister of Nature Protection included reference to the Masrik problem (Annex A to this report). The participants of the Round Table agreed on the recommendations to the national authorities aimed at reducing the health and environmental impact of mercury (Annex B to this report).

- The following project dissemination and advocacy activities were conducted:
    - Journalists were invited to cover the Round Table Discussion and take interviews from participants
    - AWHHE organized meetings with the media representatives to highlight the necessity to ratify the Convention
    - For advocacy purposes AWHHE sent an appeal to the Ministry of Nature Protection calling to accelerate the process of the ratification of the Minamata Convention and ratification of the Protocol on Heavy Metals (to Transboundary Air Pollution Convention). The issue of the Masrik river raised at the Round Table was also highlighted in the AWHHE appeal to the Ministry of Nature Protection.
    - The results of the project were shared on AWHHE webpage and through IPEN Regional and global network.

- In the course of the project implementation, consultations with the Regional IPEN Hub (Eco-Accord) and other NGOs in the region were organized using platforms such as thematic working groups in IPEN, etc.

Engagement of and impact on Target Groups

Report your engagement with the target groups and the result of the activity on the target groups:

The main target groups included: decision-makers at national level and representatives of the civil society including the academic institutions, NGOs, journalists dealing with the issues of chemical safety. The target groups were engaged in the project at different stages: information collection, development of the report, sharing the results.

The activity resulted in the increased awareness on the need to ratify the Mercury Convention as soon as possible in order to accelerate the efforts aimed at reducing mercury pollution in Armenia. Recommendations on reducing the health and environmental impact of mercury in Armenia were adopted as a result of cooperation among the involved stakeholders.

Impact on target policies

Specify the target policies you sought to impact upon and the result of the activity on the target policies:

In October 2014, AWHHE became member of an important national committee at the Inception Workshop on Minamata Convention in Armenia. The Workshop was organized by UNIDO and

Ministry of Nature Protection. This marked the launch of enabling activities - Initial Assessment in Armenia. AWHHE made a presentation on implemented projects and INC-related activities. A National Committee was created where AWHHE represents the civil society sector. This is part of Armenia's ratification process. On 26-28 November 2014, the Ministry of Nature Protection jointly with UNIDO and GEF organized training on mercury inventory in the frame of the "Minamata Convention Initial Assessment of Armenia" initiative. The participants included representatives of concerned national ministries and agencies. AWHHE is using this important platform to advocate with the Government of Armenia (using the Recommendations developed in the frame of this project among other advocacy tools).

Outreach to Stakeholders

Identify the stakeholders and sectors that were engaged in this activity, and estimate the potential to follow-up and advance the relationships with these stakeholders:

The key stakeholders included:

- The Government:
  - National Focal Point for the Minamata Convention
  - Ministries of Nature Protection (including "Waste research center" State Non-Commercial Organization), Territorial Administration (with its Emergency Situations Division), Economy (its Department of Standardization, Metrology and Technical Regulations)
- Academic institutions:
  - the Center for Ecological-Noosphere Studies and the Institute of Geological Sciences of the National Academy of Sciences,
  - American University of Armenia (AUA)
- Media: "Ecolur" Informational NGO (a network of environmental journalists and mass media experts)
- the Yerevan Aarhus Center
- NGOs: Association for Human Sustainable Development, Khazer, Shogher, Ecological Academy.

All the above stakeholders participated in development of Recommendations on reducing the health and environmental impact of mercury in Armenia, and therefore, are the key actors in ensuring their implementation as an important follow-up of this project.

Deliverables, outputs and/or products

List the types of outputs from the activity, including report or information materials:

- Country Situation Report
- Advocacy letter to the Ministry of Nature Protection (Annex A)
- Recommendations by the Round Table participants (Annex B)
- AWHHE website update

Communication Efforts: Describe efforts to communicate this activity to the media and/or general public:

Media outreach and NGO outreach on work undertaken;

- An interview by AWHHE expert was published in the tri-lingual (Armenian, English and Russian) website of the Ecolur News Agency based in Yerevan which is specializing on ecological news (English version is here: http://www.ecolur.org/en/news/waste/specialists-warning-about-harms-from-fluorescent-lamps/6661/).
- AWHHE shared information on the work of the National Committee on Minamata; the Advocacy letter was developed jointly with NGOs and sent to the Ministry of Nature Protection.
- A project webpage on the AWHHE website was created.

Communication with National or Local Authorities

If you communicated, coordinated or shared the results of your Activity with your National Mercury Treaty Focal Point, or any other national or local authority related to mercury management, please describe how this happened:

The communication related to the project was done both through individual contacts with the National Focal Point and using the platform of the National Committee on the Minamata Convention. Another channel was provided by the national Round Table discussion on the issue.

Mercury Treaty Focal Point

Provide the name and contact details of your National Mercury Treaty Focal Point:

Dr. Anahit Aleksandryan, Head of Hazardous Substances and Waste Policy Division, Ministry of Nature Protection of Armenia
Address: 0010, Republic Of Armenia,Yerevan, Republic Square, Government Building 3
http://www.mnp.am
Tel. (+374 11) 818-519
Email: haz@mnp.am

What, if anything, changed from the original plans and why?

The project was implemented as originally planned.

Resources on mercury: *Please list websites, databases, reports, academic researchers, laboratories, etc. that you are familiar with.*

UNEP	http://www.mercuryconvention.org/ http://www.unep.org/chemicalsandwaste/Mercury/tabid/434/Default.aspx
EC	http://ec.europa.eu/food/food/chemicalsafety/contaminants/cadmium_en.htm
IPEN	http://www.ipen.org/toxic-priorities/mercury
EEB	http://www.eeb.org/index.cfm/activities/industry-health/mercury/ http://www.zeromercury.org/ http://mercurypolicy.org/
HCWH	https://noharm-europe.org/content/europe/safer-chemicals
USA gov.	https://www.osha.gov/SLTC/mercury/index.html http://www.epa.gov/mercury/newsarchive.htm
ICMGP	e.g. http://mercury2015.org/sub/sub01_02.asp
BRI	http://www.briloon.org/global-biotic-mercury-syntheses-gbms-database

Annex A: Advocacy letter to the Ministry of Nature Protection (copy of original)

Հայ կանայք հանուն առողջության և առողջ
շրջակա միջավայրի ՀԿ
ՀՀ, Երևան, 0019, Բաղրամյան պող. 24դ, 609 սենյակ
Հեռ./Ֆաքս՝ (+374 10) 52 36 04
Էլ. փոստ՝ office@awhhe.am
Վեբ կայք՝ http://www.awhhe.am

AWHHE

Armenian Women for Health and Healthy
Environment NGO
24d Baghramyan Ave., room 609
0019, Yerevan, Armenia
Tel./Fax: (+374 10) 52 36 04
E-mail: office@awhhe.am
Website: http://www.awhhe.am

Թիվ 2
30 հունվարի 2015թ.

ՀՀ բնապահպանության նախարար՝
պարոն Արամայիս Գրիգորյանին

Մեծարգո նախարար,

<<Հայ կանայք հանուն առողջության և առողջ շրջակա միջավայրի>> հասարակական կազմակերպությունը երկար տարիներ հետևողականորեն իրականացնում է Հայաստանի և նրա քաղաքացիների շահերի պաշտպանություն բնապահպանական և քիմիական անվտանգության ոլորտում և հայտնում է Հայաստանի բնապահպանական հանրության մտահոգությունը՝ 1998թ.-ի դեկտեմբերի 18-ին հանրապետության կողմից ստորագրված 1979թ.-ի <<Մեծ հեռավորությունների վրա օդի անդրսահմանային աղտոտման մասին>> կոնվենցիայի <<Ծանր մետաղների մասին>> արձանագրության վավերացման վերաբերյալ որոշումների կայացման գործընթացի ուշացման կապակցությամբ:

Ինչպես հայտնի է, վերոհիշյալ արձանագրության նպատակն է կրճատել մարդու գործունեության հետևանքով առաջացող ծանր մետաղների (կադմիում, սնդիկ և կապար) արտանետումները, որոնք ենթարկվում են անդրսահմանային մթնոլորտային տեղափոխումների ավելի երկար հեռավորություններ և կարող են բացասական ազդեցություն ունենալ մարդու առողջության և շրջակա միջավայրի վրա:

2012թ.-ին արձանագրությունում կատարվել են փոփոխություններ՝ ծանր մետաղների արտանետումների նկատմամբ ավելի խիստ վերահսկողություն սահմանելու և նոր կողմերի, հատկապես՝ Արևելյան Եվրոպայի, Կովկասի և Կենտրոնական Ասիայի երկրների համար անդամակցությունն հեշտացնելու նպատակով ճկուն մեխանիզմ ընդունելու համար:

Մենք մտահոգված ենք հիվանդացության աճով՝ կապված Հայաստանում շրջակա միջավայրի աղտոտվածության հետ: Ըստ ՀՀ ազգային վիճակագրական ծառայության, վերջին տարիներին գրանցվել է քաղցկեղածին, հատկապես կրծքի քաղցկեղի, էնդոկրին և նյարդաբանական հիվանդությունների զգալի աճ, նաև՝ ավելացել է բնածին արատներ ունեցող երեխաների թիվը:

Հաշվի առնելով սնդիկով աղտոտման հիմնախնդրի լրջությունը, միջազգային հանրությունը պահանջել է ընդունել սնդիկի մասին առանձին կոնվենցիա: Մենք ողջունում ենք Հայաստանի կողմից 2013թ. հոկտեմբերի 10-ին Սնդիկի մասին Մինամատայի կոնվենցիայի ստորագրումը:

AWHHE

Վերոհիշյալ կոնվենցիայի ուժի մեջ մտնելը թույլ կտա Հայաստանին [illegible] մարդու առողջության վրա սնդիկի ազդեցության հետ կապված հնարավոր վտանգների նվազեցման ուղղությամբ: Այս կապակցությամբ, կցանկանայինք Ձեր ուշադրությունը հրավիրել Սևանա լճի ավազանում իրականացվող նոր երկրաբանահետախուզական աշխատանքների վրա՝ հանածոներում պարունակվող սնդիկի թափանցումը լճի մեջ կանխելու և ջրային էկոհամակարգի համար անդառնալի հետևանքները կանխարգելելու նպատակով:

Խնդրում ենք Ձեզ նախաձեռնել Հայաստանի կողմից <<Ծանր մետաղների վերաբերյալ>> արձանագրության և <<Սնդիկի մասին Մինամատայի կոնվենցիայի>> հնարավորինս սեղմ ժամկետում վավերացման գործընթացը՝ որպես կարևոր և անհրաժեշտ քայլ Հայաստանի բնակչության անվտանգության բարելավման և առողջության պահպանման ուղղությամբ:

Հարգանքով՝

Կազմակերպության նախագահ՝ Ելենա Մանվելյան

www.awhhe.am

ANNEX B

Recommendations, from a public interest, NGO perspective, on reducing and eliminating human sources of mercury:

The participants of the national Round Table discussion agreed on the recommendations to the national authorities aimed at reducing the health and environmental impact of mercury as follows:

- Ratify the Minamata Convention by the Government of Armenia.
- Adopt the Law on Chemicals
- Consider development of a law or a by-law on mercury.
- Maintain control of the mercury content, such as to investigate mercury containing products and availability of mercury-free alternatives; analyze the use of mercury-containing consumer goods and their alternatives: collection and analysis of information on availability of mercury containing products and safe alternatives, their applicability.
- Promote phasing-out mercury-added products
- Get public and state organizations involved at the local and national levels to develop policies aimed at reducing the use of mercury containing products
- Assess the sources of production and release of mercury based on available data.