

E-PARCC COLLABORATIVE GOVERNANCE INITIATIVE

Program for the Advancement of Research on Conflict and Collaboration

SILVER WORLD: THE ROLE OF SCIENCE IN INTERNATIONAL POLICY MAKING



Silver World is a role-playing simulation of intergovernmental negotiations. The simulation was developed to help participants learn about the importance of science and the influence of politics on environmental policy making. It is a teaching tool that provides an enhanced and guided experience on interest-based negotiations and collaborative decision making under scientific uncertainty and divergence of political ideologies. The simulation is modeled after the ongoing United Nations Environmental Program Intergovernmental Negotiations on Mercury. Participating parties are challenged to draft an international treaty that will protect human health and environment from future mercury contamination while taking into consideration regional and/or national technological limitations, political will, and stage of economic development. The simulation can be conducted as a continuous 5-day immersive experience or over multiple weeks. It has the built-in flexibility to accommodate multiple parties, engage a number of participants with diverse backgrounds and educational levels, and to include an in-depth research component.

This simulation was written by Svetoslava Todorova, Professor of Practice at the College of Engineering and Computer Science at Syracuse University, and was awarded Honorable Mention in E-PARCC's 2015-2016 Competition for Collaborative Public Management, Governance, and Problem-Solving Teaching Materials. The simulation is intended for classroom discussion and not to suggest either effective or ineffective responses to the situation depicted. It may be copied as many times as needed, provided that the authors and E-PARCC are given full credit. E-PARCC is a project of the Collaborative Governance Initiative, Program for the Advancement of Research on Conflict and Collaboration- a research, teaching and practice center within Syracuse University's Maxwell School of Citizenship and Public Affairs. https://www.maxwell.syr.edu/parcc_eparcc.aspx.

SIMULATION OVERVIEW AND BACKGROUND INFORMATION

Silver World is a simulated experience that evokes and replicates important aspects of international policy making. It is designed to help participants understand the important balance between scientific, social, and economic views in the context of environmental decision making. The simulation is modeled after the ongoing United Nations Environmental Program (UNEP) Intergovernmental Negotiations on Mercury.

Mercury is naturally present in the Earth's crust and can be emitted or released by volcanic eruptions, geothermal activities, or natural weathering of mercury-containing minerals.

These natural sources account for 10% of global mercury sources. Anthropogenic industrial activities such as coal-burning fire plants, mining and smelting industries, chlor-alkali facilities, cement production, artisanal and small-scale gold mining, dental amalgam usage, and other consumer processes contribute to the global pool of mercury present in air, water, and land. Mercury contamination is a critical environmental issue worldwide because mercury persists in the natural environment and can potentially impact ecosystem and human health. While all forms of mercury can result in toxic effects, the organic form, methyl mercury, has been found to be the primary exposure pathway for humans and wildlife.

Global support for development of a binding agreement on mercury emissions began in 2003. This was the first international effort focused on the development of voluntary measures to control mercury emissions. However, in 2009, at the 25th session of the UNEP Governing Council in Nairobi, Kenya, 140 countries agreed to begin negotiations on a legally binding instrument to reduce global mercury pollution. The document, known as *Decision 25/5*², sets forth a comprehensive agenda for minimization and feasible elimination of global anthropogenic mercury sources. The decision is based on a Global Mercury Assessment undertaken by UNEP Chemicals Branch. Assessments are grounded on scientific information which conveys that (1) long-range mercury transport contributes to global mercury pollution, and (2) mercury persists in the environment due to its chemical properties and tends to bioaccumulate in the food chain, which ultimately leads to exposure to humans and wildlife.

This simulation is designed as an international convention and can accommodate participants from different backgrounds and educational levels. The optimal group size is ten to eleven

¹ United Nations Environmental Program (UNEP). 2013. Global Mercury Assessment: Sources, Emissions, Releases and Environmental Transport. UNEP Chemicals Branch, Geneva, Switzerland.

http://www.unep.org/hazardoussubstances/Mercury/Informationmaterials/ReportsandPublications/tabid/3593/Default.aspx

² United Nations Environmental Program (UNEP). 2009. Decision 25/5: Chemicals management, including mercury.

http://www.unep.org/chemicalsandwaste/Portals/9/Mercury/Documents/GC25Report_English_25_5.pdf

participants: eight participants representing different parties in the convention (countries or groups of countries), two participants representing non-governmental organizations, and a chair. For larger groups of participants, each party can be represented by two delegates and a chair (up to 21) or several simulation groups can work concurrently.

Silver World can be conducted as a continuous 5-day immersive experience or over multiple weeks. The multiple-week option is suitable for semester-long classes. The teaching guide and the participant's information are prepared for a multi-week exercise and can be condensed into several days; each week can be compressed into a day for the immersive experience. In addition, this simulation can be adapted to other international agreements, such as the Stockholm Convention for Persistent Organic Pollutants, or the UN Framework Convention on Climate Change.

The goal of the simulation exercise is to help participants actively engage in and learn about science-policy-politics interactions while practicing conflict resolution skills via interest-based negotiations and collaborative decision making. The simulation can be enhanced with a research component, which engages participants through project-based learning. The research component is a self-guided learning experience during which participants conduct research on global mercury issues as well as the mercury issues in their assigned country or region. Each party issues a report that is available to all the parties involved in the convention. This report helps inform party's interests in the negotiation process. Based on the scientific research, participants write opening statements, which they present during the opening plenary session of the negotiations. The exercise culminates in a two-day negotiation session where participants negotiate and draft a treaty text.

The simulation concludes with a debriefing session. The debriefing session is used to provide the students with an opportunity to reflect on their learning and to integrate their knowledge with the experience they gained during the simulation.

At the completion of the simulation, participants will be able to:

- 1) Understand the role of scientific information and scientific uncertainties in environmental policy-making
- 2) Recognize the importance of cooperative and collaborative decision making
- 3) Enhance their conflict-resolution skills.

GENERAL INFORMATION TO ALL PARTICIPANTS AT THE INTERGOVERNMENTAL NEGOTIATIONS FOR MERCURY

Mercury is a global pollutant due to its persistence in the atmosphere. Once emitted, the elemental gaseous mercury can travel a few days to several months before it is deposited on a land surface. Due to global air circulation, air masses travel from west to east. A mercury molecule that is emitted from a coal-fired power plant in the central U.S. states can be deposited in the Northeastern U.S., for instance, or can travel the globe a few times before it finds its way to the land's surface. In that respect, even relatively pristine areas that are not subject to direct mercury contamination, such as the Arctic, are impaired by mercury. Therefore, neither country "can achieve sufficient reductions of mercury risks to protect the health of its citizens without serious cooperation internationally to reduce global mercury emissions."³

The initiative for the development of an international mercury agreement came from the UNEP Governing Council in 2001. A Global Mercury Assessment in 2003 stipulated that mercury is globally present, persistent, and is being re-circulated constantly. This report gained the global support for development of an international agreement on mercury emissions; the first efforts focused on the development of voluntary measures to control mercury emissions. However, in 2009, at the 25th session of the UNEP Governing Council in Nairobi, Kenya, 140 countries agreed to begin negotiations on a legally binding instrument to reduce global mercury pollution. The document, known as *Decision 25/5*⁴, sets forth a comprehensive agenda for minimization and feasible elimination of global anthropogenic mercury sources.

The *Decision 25/5* mandates the establishment of an Intergovernmental Negotiations Committee (INC) on mercury which is tasked to find "suitable and comprehensive approaches" to reduce the supply and demand for mercury, reduce atmospheric emissions of mercury, and address remediation of contaminated sites.

In response to the mandate given by the UNEP Governing Council, a pre-meeting of the INC on mercury is convened to set the main priorities of the future Global Mercury Treaty and to prepare a draft text for the first official meeting of the INC. Representatives from regionally diverse countries (The Parties) were invited to attend, including Africa, Canada, China, the

³ Statement of Daniel A. Reifsnyder, Deputy Assistant Secretary for Environment and Sustainable Development, U.S. Depart met of State, The 25th UNEP Governing Council, February 2009.

⁴ United Nations Environmental Program (UNEP). 2009. Decision 25/5: Chemicals management, including mercury.

http://www.unep.org/chemicalsandwaste/Portals/9/Mercury/Documents/GC25Report_English_25_5.pdf

European Union, The Group of Latin American and Caribbean Countries (GRULAC), South Asian Countries, Middle Eastern Countries, and the United States. Members of the Inuit Circumpolar Council (ICC) and the International Council for Science (ICS) were invited to participate as observers. The interested parties have agreed that non-governmental organizations can attend as observers and as such may speak and present information at the meeting. However, only The Parties have the authority to vote and to sign the convention.

The UNEP Governing Council has requested the INC on mercury to focus the discussion on three main topics:

- 1) Determine the focus of the future mercury treaty, exploring the possibilities to regulate only air emissions, regulate only releases to land and water, or both.
- 2) Determine which major products, processes, and/or industries to be regulated.
- 3) Propose target goals and limits for mercury emissions and/or releases and propose implementation timeline.

This exercise is based largely on facts and reality, but some of it, by necessity, will be fictitious. During the negotiations, participants should base their arguments and proposals on credible information that they read and can document. The participants are not expounding their personal opinion but the one of the country or organization they are representing. It is expected that the participants will approach the negotiation process with creativity and flexibility. Negotiations are not about compromise or win, but about a balanced decision based on interests.

LIST OF INC PARTICIPANTS

I. GOVERNMENTAL REPRESENTATIVES

African Group

Countries: Algeria, Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, Central African Republic, Chad, Comoros, Republic of the Congo, Côte d'Ivoire, Democratic Republic of the Congo, Djibouti, Egypt, Equatorial Guinea, Eritrea, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Libya, Madagascar, Malawi, Mali, Mauritania, Mauritius, Morocco, Mozambique, Namibia, Niger, Nigeria, Rwanda, São Tomé and Príncipe, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, Sudan, Swaziland, Togo, Tunisia, Uganda, Tanzania, Zambia, Zimbabwe Representatives: {provide the name of the participants in the simulation}

Canada

Representatives: {provide the name of the participants in the simulation}

China

Representatives: {provide the name of the participants in the simulation}

European Union

<u>Countries:</u> Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, United Kingdom

Representatives: {provide the name of the participants in the simulation}

Group of Latin American and Caribbean Countries (GRULAC)

<u>Countries</u>: Antigua and Barbuda, Argentina, Bahamas, Barbados, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago, Uruguay, Venezuela

Representatives: {provide the name of the participants in the simulation}

Southeast Asian Countries and India

<u>Countries</u>: Burma, Cambodia, India, Indonesia, Laos, Malaysia, Philippines, Sri Lanka, Thailand, and Vietnam

Representatives: {provide the name of the participants in the simulation}

Middle Eastern Countries

Countries: Bahrain, Iran, Iraq, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Syria, United

Arab Emirates, Yemen

<u>Representatives:</u> {provide the name of the participants in the simulation}

United States of America

Representatives: {provide the name of the participants in the simulation}

II. NON-GOVERNMENTAL ORGANIZATIONS

Inuit Circumpolar Council (ICC)

Representatives: {provide the name of the participants in the simulation}

International Council for Science

Representatives: {provide the name of the participants in the simulation}

PRIVATE INFORMATION TO THE AFRICAN GROUP

You came to this convention as a representative of the Ministry of the Environment of an African Country and also serve as a representative of all African countries.

African countries contribute roughly 16 percent of global mercury emissions, primarily via artisanal and small-scale gold mining (ASGM). African countries now see the need to reduce the amount of mercury they are emitting into the environment. However, they are concerned about the potential ban on the use of mercury for ASGM, especially because the developed countries are pushing for regulation of mercury trade and the use of mercury in different processes. ASGM is an important sector for many countries in Africa and a major source of income for their citizens. African countries have a firm position that they will not sign any future treaty if a ban on the use of mercury in ASGM is included in the text. They are willing to work on a proposal for decreasing the use of mercury in gold extraction and for development and implementation of technologies that control mercury emissions from ASGM. African countries can agree on the implementation of mercury-free technologies only if (1) technology transfer, (2) capacity-building, and (3) sufficient funding are provided. African countries cannot fund these technological changes themselves. African Countries support the proposal for the establishment of an independent fund, similar to the Montreal Protocol Multilateral Fund.

The oil and gas sector is critical to the economy of several countries in Northern Africa, sub-Saharan Africa, and South Africa. If the oil and gas production industry are regulated, African countries will work with Middle Eastern Countries to persuade the U.S.A. and Canada not to support such a proposal. There is no solid scientific evidence that the oil and gas sector contributes substantially to the global mercury emissions. The African countries believe that only the oil and gas sector in South Asia should be regulated because their oil and gas extractions contain high levels of mercury. Therefore, African Group supports reduction of mercury emissions from global sources, particularly regulating large emitters but not sectors or industries that contribute minimally to the global mercury emissions.

PRIVATE INFORMATION TO THE GROUP OF LATIN AMERICAN AND CARIBBEAN COUNTRIES

You came to this convention as a representative of the Ministry of the Environment of a Latin American or Caribbean Country and also serve as a representative of all countries of the Group of Latin American and Caribbean Countries (GRULAC).

The GRULAC's main priority is to include an Article on Releases to Land and Water and to prevent the regulation of the iron and steel industry. GRULAC does not agree with the initial proposal of the UNEP Governing Council (Decision 25/5). Decision 25/5 does not call for reductions of mercury releases to land and water. GRULAC countries are urging for a holistic and balanced approach to emissions and releases. They would like to see separate Articles on Emissions and Releases. GRULAC countries will not sign the treaty if releases of mercury to land and water are not included. This is the only way for them to impose changes in their environmental legislation.

GRULAC countries support the reduction of mercury emissions. The region is not substantially affected by the long-range mercury transport but rather by regional sources. Artisanal and small-scale gold mining (ASGM) is the largest source of emissions and releases of mercury in Latin America and the Caribbean. In 2010, South America alone emitted about 263 tons of mercury, the major contributors being Colombia, Bolivia, Peru, Ecuador, and Venezuela. Mercury re-emission due to deforestation in the Amazon region is also of high concern. GRULAC supports an Article that regulates the large emitters. However, they do not consider iron and steel industries being large emitters.

GRULAC countries are very concerned about a future ban on mercury import and export, as some GRULAC countries will not be able to enforce this rule, e.g. they will not be able to sign the convention. The second concern over a complete mercury ban is the use of mercury in ASGM. ASGM is an important sector for many GRULAC countries and a major source of income for their citizens. GRULAC cannot entertain a treaty text if they are forced to ban the use of mercury in ASGM. GRULAC countries are willing to work on a proposal for reducing the use of mercury in gold extraction and for development and implementation of technologies that control mercury emissions from ASGM if sufficient capacity building resources and funding are provided to them. GRULAC proposes that an independent fund, similar to the Montreal Protocol Multilateral Fund, is established.

PRIVATE INFORMATION TO CANADA

You came to this convention as a representative of Environment Canada.

Canada's territory is greatly affected by global mercury pollution caused by the emissions generated outside its territory. Canada strongly believes that the main objective of the current negotiations is regulation of global and regional mercury emissions. Scientific studies show that Asia is a major contributor to global mercury emissions, because the U.S.A., Canada, and E.U. have made substantial progress in decreasing mercury emissions. Moreover, Canada is just "downwind" of Asia and receives the contamination emitted by the Asian countries. Now is the time for Asia to act!

Initially, Canada supports regulation of emissions and potential releases of mercury from the oil and gas sector and facilities where mercury-added products are manufactured. Canada can entertain a proposal to exclude the above sectors if strong scientific basis exist. However, Canada fully supports the regulation of the emissions of the coal-fired plants and boilers, non-ferrous metal mining activities, waste incineration, and cement production.

Canada does not fully support the inclusion of mercury release to land and water into the treaty text. If a proposal is put forward to include releases of mercury to land and water into the treaty, Canada will oppose it. Other international regulations, such as The Stockholm Convention for Persistent Organic Pollutants, do not consider direct releases. Releases are a local issue and can become a costly investment for the developed countries. Canada could support a common Article on Emissions and Releases. Ultimately, Canada would settle for a separate Article on releases if the Article specifies that the financial responsibilities for releases of mercury to land and water will be borne by the respective countries. Some funding will be provided, especially for the artisanal and small-scale gold mining sector, but not for cleaning up contaminated sites.

Canada is willing to work with developing countries and provide funds for implementing measures to reduce mercury emissions, as long they are reasonable. Capacity building and technology transfer are among the options Canada can offer. Canada supports a proposal for regulating the major contributors of mercury emissions.

Canada has long-term relationships with Inuit Circumpolar Council and International Council for Science, supports their work, and values their input.

PRIVATE INFORMATION TO CHINA

You came to this convention as a representative of the Ministry of the Environment of China.

China is one of the major contributors to global emissions. The mercury use in China exceeds 1000 tons annually, which accounts for about half of the world's total consumption. The majority of the mercury released in China is a byproduct from the coal-fired power plants and manufacturing facilities for PVC, medical devices, batteries, etc. However, China does not believe that there is strong scientific evidence their country's emissions are responsible for the elevated mercury concentrations in the U.S.A. and Canada.

While the country is aware of its environmental issues and would like to protect the health of its people, China will not support an Article on Emissions, which imposes stringent regulations on air emissions (especially concerning power plants). As a representative of the Chinese Ministry of the Environment, you would like to see a general treaty that allows China to choose when, how, and how much to regulate mercury emissions. You know that otherwise it will be difficult to pass a mercury regulation in China and to ratify the future mercury convention.

China is one of the only two countries that still mine primary mercury. The country is willing to sign a ban of mercury trade and to phase-out the large-scale mining operations. China is also a producer of many products that contain mercury. However, China is not willing to change the technology currently in use, unless capacity building and funding are provided, and enough time for implementation is allowed. China believes that the developed countries should provide financial support and a monetary fund should be created. The country would like to see a special provision on implementation that is either not specific or at least defers implementation with 25-30 years. China has no objections for regulating the use of mercury for the artisanal and small-scale gold mining sector and will collaborate in developing such a text.

China does not like to cooperate with the International Council for Science. The country trusts its own scientific information. China would accept the findings of an international study on mercury emissions that includes Chinese scientists.

PRIVATE INFORMATION TO THE EUROPEAN UNION

You came to this convention as a representative of the European Commission on the Environment.

The idea for the development of a global mercury treaty came from the European countries. The European Union members (EU) believe that air emissions, ban of mercury trade, and reducing and/or eliminating the use of mercury in commercial products and processes are the main issues that need to be addressed in the treaty. EU is willing to work with developing countries and provide funds, as long they are reasonable. EU countries can also offer support for capacity building and technology transfer.

The chlor-alkali sector is important for the EU. There are many chlor-alkali plants in operation, which use mercury-cell technology, and the EU is willing to change the technology to the new membrane technology that substantially reduces the use of mercury. The installation is costly but the life cycle cost is lower because the technology is more efficient. The EU will work with countries that are not willing to change their current mercury-cell technology and will help them understand the science and chemistry behind it.

The EU agrees with other developed countries that the main objective of the current negotiations is to regulate global mercury emissions. However, EU countries do not fully support the inclusion of releases of mercury to land and water into the treaty text. Releases are a local issue and can become a costly investment for the developed countries. If a proposal were put forward to include releases of mercury to land and water into the treaty, EU would consider it as a common Article on Emissions and Releases. Ultimately, EU would settle for a separate Article on releases if the Article specifies that the financial responsibilities for releases of mercury to land and water will be borne by the respective countries. The EU urges for cooperation and donor support through financial and technical assistance and by promoting capacity building and technology transfer.

Initially, the EU supports regulation of emissions and potentially releases of mercury from the oil and gas sector. EU can entertain a proposal to exclude mercury releases from the oil and gas sector if strong scientific basis exist. However, EU fully supports the regulation of the emissions of the coal-fired plants and boilers, non-ferrous metal mining activities, waste incineration, and cement production.

The EU works with the Inuit Circumpolar Council and International Council for Science, supports their work, and values their input.

PRIVATE INFORMATION TO THE MIDDLE EASTERN COUNTRIES

You came to this convention as a representative of the Ministry of the Environment of a Middle Eastern Country and also serve as a representative of all Middle Eastern countries. Your main goal is to protect the citizens in the region from future exposure to mercury. The Middle Eastern countries are willing to implement new technology for the chlor-alkali industry, ban the use of mercury, and discontinue mercury trade between countries.

The biggest concern for the Middle Eastern countries is the proposed regulation of the oil and gas sector. The Middle Eastern countries have retained their own scientists, and they proved that the oil and gas sector in the Middle East is not a major contributor to the global mercury pool in terms of air emissions and releases to water. In fact, a study by The International Petroleum Industry Environmental Conservation Association (IPIECA) shows that mercury is present only in trace levels in crude oil and condensates; the majority of the world's crudes are low in mercury. IPIECA estimates that mercury emissions to air from oil refining are 0.07% while those to water are less than 0.01% of the total global mercury releases. The Middle East has the lowest mercury levels in crude oil, with 79% of crudes from this region showing less than or equal to 2 ppb of mercury. Crude oil extracted in the Pacific and Indian Oceans contains the highest mercury levels, with 30% of the samples above 15 ppb, and 8% above 100 ppb.

The Middle Eastern countries are supporting the regulation of global mercury emissions from coal-fired power plants and boilers, cement industry, gold mining, and non-ferrous metal mining activities. However, if a proposal is put forward to regulate the whole oil and gas sector, they will not sign the treaty. The Middle Eastern countries believe that there is a lack of scientific evidence that the oil and gas sector contribute substantially to the global mercury emissions. The Middle Eastern countries will try to lobby the U.S.A., Canada, and EU for support.

PRIVATE INFORMATION TO SOUTH ASIAN COUNTRIES

You came to this convention as a representative of the Ministry of the Environment of a South Asian Country and also serve as a representative of all South Asian countries.

Countries from South Asia have a firm position on regulating global mercury emissions and releases. India has many coal-fired power plants and is one of the main contributors to the global mercury pollution. However, India is not willing to change their current course like many South Asian countries. Providing electricity to the citizens is one of the main objectives of the South Asian countries and coal-fired power plants are the least expensive option. South Asian countries object to any proposal for applying new technologies on existing power plants, or rules that are imposed only on the large contributors. Minor changes for new plants may be considered. South Asian Countries may agree on a very general treaty that allows them to choose when, how, and how much to regulate mercury emissions. They would like to see a special provision on implementation that is either not specific or at least defers implementation 25-30 years. Anything earlier than 25-30 years is simply not feasible.

The chlor-alkali sector is very important for the region and closing chlor-alkali plants will slow down the economy of the South Asian countries. However, <u>if sufficient funding is provided</u>, the countries will consider changing the current mercury-cell technology with a new membrane technology.

South Asian countries are also concerned about the potential ban on the use of mercury in artisanal and small-scale gold mining (ASGM). ASGM is an important sector and a major source of income for the people in the region. South Asian countries cannot entertain a treaty text that bans the use of mercury in the ASGM sector. They are willing to work on a proposal for decreasing the use of mercury in the gold extraction process. South Asian countries can agree on the implementation of mercury-free technologies, <u>only if</u> (1) technology transfer, (2) capacity-building and (3) sufficient funding are provided.

South Asian countries do not support a proposal to regulate the oil and gas sector. Although these countries are aware mythat the extraction and processing of oil cause contamination, they cannot afford to regulate such an important sector for their economies. According to geological studies, the high mercury levels in oil and gas extracts in the region are a result of natural deposits. Natural mercury-rich belts lie across the surface of the planet and these belts appear to be associated with the boundaries between existing or ancient tectonic plates. The largest mercury deposits in the world are located above areas in which plate subduction has occurred in combination with a degree of volcanic activity. The South Asian region lies above one of the mercury-rich belts on the Earth. There is nothing these countries can do.

PRIVATE INFORMATION TO THE UNITED STATES OF AMERICA

You came to this convention as a representative of the United States Environmental Protection Agency (USEPA).

The United States (U.S.A.) is interested in a meaningful reduction of anthropogenic mercury emissions that will decrease the effect to humans and the environment. The U.S.A. participates in these negotiations to ensure that the provisions of the treaty text are feasible, can be implemented, and do not contradict the economic and political climate in the country. For the U.S.A. to sign the treaty, the text should contain the existing domestic laws and regulations such as the Clean Air Act and the Toxic Substance Control Act. Representatives from the USEPA know from their experience with the Stockholm Convention that the U.S.A. will not be able to ratify the convention with provisions that are not currently in place under the existing national regulations. Therefore, the U.S.A. is very firm on its positions.

The U.S.A. strongly believes that the main objective of the current negotiations is regulation of global mercury emissions. The U.S.A. supports a proposal for regulating the major emitters. Its territory is just "downwind" of Asia and receives the contamination coming from the Asian countries. Scientific studies have shown that Asia is a major contributor to global mercury emissions.

The United States does not fully support the inclusion of releases of mercury to land and water into the treaty text. If a proposal is put forward to include releases of mercury to land and water into the treaty, the U.S.A. will oppose it. Other international regulations, such as The Stockholm Convention for Persistent Organic Pollutants does not consider releases. Releases are a local issue and can become a costly investment for the developed countries. The U.S.A. representatives will put forward a common article for Emissions and Releases. However, the U.S.A. would settle for a separate Article on releases if the Article specifies that the financial responsibilities for releases of mercury will be borne by the individual countries. Some funding will be provided, especially for releases from the artisanal and small-scale gold mining sector, but not for cleaning up contaminated sites.

Initially, the U.S.A. supports limitations on emissions and potential releases of mercury from the oil and gas sector. The U.S.A. can entertain a proposal to consider exclusion of the oil and gas sector if strong scientific basis exist.

The U.S.A. is willing to work with developing countries and provide funds for implementing measures for reduction of mercury emissions, as long they are reasonable. The U.S.A. urge for cooperation and donor support through financial and technical assistance and by promoting capacity building and technology transfer. The U.S.A. works with the Inuit Circumpolar Council and International Council for Science, supports their work, and values their input.

PRIVATE INFORMATION TO THE INTERNATIONAL COUNCIL FOR SCIENCE

You came to this convention as a representative of the International Council for Science.

As a scientist, you know it all! Anthropogenic sources have superseded geogenic sources as the main cause for emission of mercury into the environment. It has been estimated that there are between 5500 and 8900 tonnes of mercury continually emitted and re-emitted into the atmosphere. Of these estimated amounts, nearly 30% come from anthropogenic sources. The primary anthropogenic sources of mercury include stationary fossil fuel sources, artisanal small-scale gold mining, waste incineration, caustic soda production, the mining and smelting of metal ores, and cement production. The final source of mercury in the global mercury cycle comes from re-emission and re-mobilization, which accounts for nearly 60% of all mercury releases.

Scientists would like to see both air emissions and releases to land and water regulated. Even though the consequences of mercury releases to land and water are observed on a local scale, this does not diminish the devastating impact they have on human health and the environment; and the trans-boundary issues that result of that. A high priority for the scientists is a mercury ban, as well as regulating the emissions and release from mining and smelting industries, chlor-alkali plants, and the oil and gas sector. Scientific models show that the biggest benefits will come from stringent regulations on the air emissions of the major contributors, such as China and India. A recent assessment estimated that China alone contributes 29% of the global mercury emissions, followed by India with 7% of the global mercury emissions.

Scientists may consider organizing scientific sessions to educate government representatives and presenting posters with fact sheets. Your job is to lobby for as stringent regulations and short implementation goals as possible. However, do not forget that as a scientist you cannot participate in drafting the treaty text and do not have a voting power. The scientists' job should be done before the final vote and signatures!

PRIVATE INFORMATION TO THE INUIT CIRCUMPOLAR COUNCIL

You came to this convention to represent over 160,000 people of the Inuit culture, who live in Northern Canada, Alaska, Greenland, and a small portion of Russia. The representatives of the Inuit Circumpolar Council (ICC) of all parties in the convention bear the consequences of the industrialization and the mercury contamination, in particular. The Arctic region is not a contributor to the global emissions or releases of mercury. However, the Inuit people were found to have the highest concentrations of mercury in their blood - as high as 53 μ g/L, while the United States Environmental Protection Agency recommends a concentration of less than 5.8 μ g/L and Health Canada recommend concentrations of less than 20 μ g/L. The main route for Inuits' exposure is through consumption of fish, seabirds, and other marine animals, which constitutes the majority of Inuits' diet.

ICC would like to see a strong mercury treaty that regulates emissions from coal-fired plants and boilers, chlor-alkali industry, non-ferrous metal mining activities, waste incineration, and cement production. These processes have been found to be the main sectors contributing to the global mercury emissions.

ICC works closely with the Scientists and Canada; they can find support in the U.S.A. and the EU countries in terms of putting forward a strong Article on Emissions. The main job of the ICC representative(s) is to lobby each Party in the convention for more stringent treaty text by explaining to them the impact of the long-range mercury emissions on the Arctic ecosystems and Inuit community. Inuits are willing to provide any scientific proof and to participate in scientific studies in the Arctic region.

Do not forget that as an ICC representative you cannot participate in drafting the treaty text and do not have a voting power. ICC representatives' job should be done before the final vote and signatures!

PRIVATE INFORMATION FOR THE CHAIR OF THE NEGOTIATIONS COMMITTEE

The Chair of the Intergovernmental Negotiations Committee (INC) has the role of facilitator. The Chair opens the negotiation session and sets forth a positive tone. At the opening session, the Chair proposes the agenda for the following two days.

At times when the INC has difficulties in converging on issue or to compromise on a text, the chair of the INC can draft the text based on the discussions and can try to persuade the representatives to accept it or to use it a base of a new, neutral discussion.

TEMPLATE OF THE ANNOTATED AGENDA

UNITED NATIONS



Day, Month, Year



United Nations Environment Program

Intergovernmental Negotiating Committee to prepare a global legally binding instrument on mercury

Annotated agenda

Item 1: Opening of the session

- 1. The session of the Intergovernmental Negotiating Committee to prepare a global legally binding instrument on mercury, to be held on {day, month, year} at the headquarters of the United Nations Environment Program in {city, state} will open at {time}.
- 2. Opening statements will be made first by representatives of groups of countries and then individual countries. Non-governmental organizations will be allowed to make their statements after all countries have had the floor.

Item 2: Organizational matters

(a) Adoption of the agenda

3. Subject to the rules of procedure, the committee may wish to adopt the agenda for the session.

(b) Organization of work

4. The committee may wish to decide that it should meet from {time} to {time} on {day if the week, day, month, year} and from {time} to {time} on {day of the week, day, month, year}, subject to adjustment as necessary.

Item 3: Preparation of a global legally binding instrument on mercury

5. Given the time constraints, the committee may wish to focus the discussions primarily on what major products, processes, and/or industries should be regulated; should both air emissions and releases to water and land be considered or only one of them; how much to change air emissions and/or the releases; if possible, limits should be set up.

6. During the session, the committee may wish to establish contact groups to focus on discussing specific issues and to expedite the process.

Item 4: Adoption of the treaty text

7. The treaty should be adopted if only all parties agree.

Item 6: Closure of the session

8. It is expected that the committee will conclude its work by {time} on {day of the week, day, month, year}, subject to adjustments if necessary.

TEMPLATE OF THE TREATY TEXT

The Parties to this Convention,

Recognizing that {add text describing the main issue to drive the treaty},

Recalling decision 25/5 of 20 February 2009 of the Governing Council of the United Nations Environment Programme to initiate international action to manage mercury in an efficient, effective and coherent manner,

Aware of the {list all of the issues which lead to development of this agreement},

Recognizing that this Convention and other international agreements in the field of the environment and trade are mutually supportive, Emphasizing that nothing in this Convention is intended to affect the rights and obligations of any Party deriving from any existing international agreement,

Understanding that the above recital is not intended to create a hierarchy between this Convention and other international instruments,

Noting that nothing in this Convention prevents a Party from taking additional domestic measures consistent with the provisions of this Convention in an effort to protect human health and the environment from exposure to mercury in accordance with that Party's other obligations under applicable international law,

Have agreed as follows:

Article 1

Objective

The objective of this Convention is to protect the human health and the environment from anthropogenic emissions and releases of mercury and mercury compounds.

Article 2

Mercury trade

- **1.** This article concerns...
- **2.** Each Party shall/should...
 - a.
 - b.
 - c.

Article 3

Mercury in products and processes

- **1.** This article concerns...
- 2. Each Party shall/should...
 - a.
 - b.
 - c.

Participants add as many articles as they agreed on. They may refer to the current text of the Minamata Convention on Mercury but not necessarily follow the articles in the treaty.

United Nations Environmental Program (UNEP). 2013. Minamata Convention on Mercury. UNEP, Division of Technology, Industry and Economics (DTIE), Chemicals Branch, Geneva, Switzerland, January 19, 2013. Available at:

http://www.mercuryconvention.org/Portals/11/documents/conventionText/Minamata%20Convention%20on%20Mercury_e.pdf

COUNTRIES TABS

USA

CANADA

European Union

GRULAC

SOUTH ASIA

CHINA

AFRICA

MIDDLE EAST

SCIENTISTS