MINISTRY OF EXTERNAL RELATIONS
Brasília, D.F.

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To: Brazillian Representative at the Mercury Negotiations
From: Ministry of External Relations
Subject: UNEP Working Group on Mercury

You are currently attending the United Nations Environment Programme (UNEP) Governing Council meeting. As part of the negotiations, you will participate in the Working Group to Review and Assess Measures to Address the Global Issue of Mercury. Brazil is also representing the Latin American and Caribbean Group (GRULAC) at this meeting and thus, your role is doubly significant.

This working group consists of government representatives and nongovernmental organizations (NGOs). It was created in response to growing international concern about the impacts of mercury on the global population and environment.

This is the first meeting since UNEP released the *International Mercury Assessment*. The mandate of this working group is to decide whether the scientific information in this new report provides sufficient evidence for international action on mercury. Today's discussions include the form and scope for international action on mercury. The negotiation's outcome will likely affect which parties are willing to go forward with formal global negotiations to regulate mercury.

Attached is a position paper cleared through the Brazilian Government Working Group on Mercury and the GRULAC countries.[1] Brazil has a strong incentive to encourage a mercury treaty at this meeting, with some qualifications. Brazil and GRULAC recognize that mercury pollution is a high-risk, global problem, as shown in the recent *International Mercury Assessment*. The developed world should reduce their atmospheric emissions, just as we should begin the difficult task of reducing mercury use in artisanal and small-scale gold mining (ASGM). However, you will need to firmly express that these common responsibilities for mercury reduction should be differentiated between developed and developing countries: we want to reduce Brazil's mercury pollution and consumption, but the developed world will need to provide help—financially and technically—so that we can.

As a representative of Brazil as well as GRULAC, you have a duty to garner support for financial and technical assistance for ASGM reductions, as well as other issues, without committing to impossible reduction goals in this sector. We urge you to argue based on the evidence in the *International Mercury Assessment*, which legitimizes many of our positions. We have faith that you will successfully balance the tension between receiving financial assistance and committing to ASGM reductions.

[1] Note: Portions of this document were adapted verbatim from actual Brazillian and GRULAC reports and information sources, including GRULAC's reports to the UNEP mercury negotiations. However, this is a fictionalized document and does not represent the actual views of Brazil or GRULAC.

Brazilian Position Paper
UNEP Governing Council Working Group on Mercury

This position paper outlines the key Brazilian and GRULAC positions on the four issues the working group discussions will address: the form of global mercury action, transboundary atmospheric mercury emissions, mercury demand, and mercury use in artisanal and small-scale gold mining. On these issues, GRULAC and Brazil's views are in complete accordance.

Issue 1: Form of future action

Issue 1: Mandate and Institutional Form of Action

Mercury pollution is, in part, a global problem with the potential for a global response. This conclusion is supported by the information in the *International Mercury Assessment*. Scientific support for this position is as follows:

- **Toxicology research suggests there are health impacts from mercury exposure.** It is clear that acute exposure, as seen in Japan and Iraq has severe health impacts. However, Brazil is uncertain about mercury's health effects through chronic, low level exposure. On the one hand, research has found some Amazon communities with average hair levels above 15μg/g (1); however, this is still well below the WHO exposure level of 50 μg/g (2).

- **Chronic mercury exposure amongst artisanal and small-scale gold mining (ASGM) workers and nearby communities may pose health and environmental risks.** Brazil's Amazon region has experienced significant ASGM activity, as have many other Latin American countries, including Bolivia, Columbia, Peru and Venezuela (3). Miners and their families may have higher risks due to mercury exposure. Risks may be transported to other regions through emissions, bioaccumulation and fish consumption. Observations of mercury in human hair are as high as 300 μg/g in Brazil and 500 μg/g in French Guiana; some studies have even found that fish eating communities are at higher risk than miners (1).

- **Atmospheric releases from artisanal mining are highly uncertain.** While it is clear that mercury pollution is a global problem due to Hg transport mechanisms, there is uncertainty about the specific levels of atmospheric mercury emissions from ASGM. There is not a strong global consensus about how much ASGM contributes to the global mercury burden. **For this reason, ASGM should be excluded from atmospheric emissions limits until further data is gathered.**

- **It is not clear how ecosystems will respond to emissions reductions, particularly in the tropics.** Most research to date on mercury in ecosystems has been conducted in temperate zones. One study in Brazil, Bolivia and Paraguay

research indicates that, in the tropics, only 2-8% of mercury releases are stored in sediments (4).

- **Financial resources are required to ensure developing countries participate.** Adequate, new and additional financial resources must be provided to allow developing countries to access relevant technologies; this is a precondition for developing countries to implement mercury control measures.

There is evidence that the mercury poses health threats and that part of the solution could come through global funding. The information contained in the *International Mercury Assessment* could be interpreted as suggesting that mercury pollution is a global problem. Brazil and GRULAC support a legally binding international agreement if other parties show strong interest in providing financial and technical support for ASGM information gathering and risk reduction in developing countries.

Issue 2: Scope of Future Actions

Issue 2: Reducing atmospheric emissions

Atmospheric emissions should be included in the scope, but only for those emissions sources with significant documentation. Historic atmospheric emissions from developed countries should be included in the scope of future negotiations as these continue to circulate through re-emissions. The evidence also suggests that current emissions predominantly come from developed countries coal infrastructure. Atmospheric transport is a global problem due to Hg(0) from coal power plants, and for this reason, this source needs to be reduced, particularly in developed countries.

- **There is evidence that many emissions are historic, re-emissions (33%)** (5, 6)**.** Mercury is a global problem, with many developing countries receiving emissions from historic sources. Historically significant emitters, including the USA, EU and Canada should pay to help current emitters reduce their releases.

- **Many developing countries lack inventories, and therefore, should be excluded from the scope.** Without national inventories, there is insufficient information for developing countries, particularly in Latin America, to adopt timetables and targets for emissions reduction. Financing should be provided to develop inventories.

- **Atmospheric emissions from ASGM largely elevate mercury regionally, and do not contribute significantly to the global mercury pool.** This is confirmed through studies with local populations living downstream of Amazon mining sites (1). It is also confirmed through core sampling in the Amazon (4). For this reason, ASGM emissions, which are highly uncertain, should not be included in the scope of atmospheric emissions.

Brazil and GRULAC assert that there is sufficient evidence that historic and current atmospheric emissions from large emitters with inventories constitute global pollution sources and that they should be included in the scope of this treaty. Therefore, there should be national emission inventories and reduction targets for all major, developed country emitters.

However, there appears to be a large data gap in emissions inventories for many developing countries, and these countries should be excluded until sufficient information is available. Developing countries, Brazil included, should have common but differentiated responsibilities from developed countries for several reasons:

1) Data gaps in emissions inventories are large for most developing nations.
2) Developing nations do not have the same capacity to reduce emissions.
3) Many developing nations -- Brazil included -- emit most of their mercury through ASGM, which is incredibly difficult to manage and regulate and largely creates local rather than global problems.

If necessary, Brazil may be willing to agree to specific atmospheric reductions in future negotiations, but only if significant financial and technical assistance are committed.

Issue 3: Reducing Demand for Mercury in Products and Processes

Scientific evidence in the *International Mercury Assessment*, suggests that mercury use in products and processes significantly contributes to the global mercury problem, and thus this issue should be included in the scope of the treaty. However, Brazil and GRULAC assert that goals or timelines for a reduction in mercury consumption should reflect respective countries' capacities to reduce mercury consumption.

Products: Alternatives exist for most products, except lighting, and have been used experimentally in Brazil. The largest current mercury containing products in Brazil are lighting and dental amalgam. Brazil has already banned the use of mercury in pharmaceuticals, soaps, and pesticides. Cost considerations are an important factor and financing should be provided. For this reason, lighting and dental amalgams may need to continue to be used and should be listed as exempt until economically viable alternatives are available. At today's meeting, Brazil is interested in drafting a potential list of products to phase out and to allow.

Processes: Brazil continues to operate chlor-alkali plants using best management techniques to minimize mercury releases. Although phasing out Hg from chlor-alkali is technically possible, it is economically prohibitive; instead mercury could be recovered from this industry for other uses. If further reductions are required, other countries will need to provide financial support and technical assistance. Developed countries, with experience in this area, should be able to support these initiatives in Brazil and Latin America broadly.

Issue 4: Artisanal and small-scale gold mining (ASGM)

The use of mercury in ASGM is the most important issue for Brazil and the GRULAC countries. Since ASGM often occurs in the informal sector and in rural areas, it is very difficult to regulate.

- **It is not clear whether ASGM is largely a local pollution problem or a global problem.** For this reason, ASGM should be excluded from atmospheric emissions (see Issue 2 above.)

- **A nonrestrictive, voluntary and gradual reduction of ASGM should be included within a mercury treaty.** ASGM must be addressed in order to reduce the regional mercury burden, and local health and environmental risks. However, given the inherent challenges in addressing ASGM, this should be voluntary.

- **Alternatives to Hg processes are available but not widely used due to economic and social constraints.** In many cases, capture devices such as retorts are not available. Further, significant training is necessary to ensure communities use these devices. For this reason, it is unclear how easy it will be for GRULAC countries to implement policies to reduce mercury use in ASGM without outside support for technology and training.

- **ASGM intersects strongly with issues of poverty and development.** Financing is needed as ASGM affects the most vulnerable populations including impoverished communities, indigenous groups and children. In order for developing countries to effectively address ASGM, there must be an institutional framework to allow for these countries to have the appropriate technologies and adequate financial resources. Further, any actions must recognize the important livelihood role ASGM plays in many communities.

Your most important aim at today's negotiation is securing agreement on international financial and technical support for nonrestrictive ASGM mercury reductions. This is an excellent opportunity for Brazil to simultaneously address environmental, health, and development concerns with the support of the international community, and it is unlikely that such an opportunity will arise again in the near future. Be sure that you persuasively argue for the importance of addressing ASGM and for the need for financial and technical assistance.

Brazil Position Paper: Summary of Positions on Key Issues

Issue 1: Mandate and Institutional Form of Action

Option 1.1: There is sufficient evidence that mercury us a global problem with significant risks. Initiate formal international negotiations for a new legally binding mercury convention. **This is your first choice.**

Option 1.2: There is a need for more evidence that mercury is a global problem with significant risks. Enhance voluntary measures. **This is less preferable.**

Issue 2: Reducing Atmospheric Emissions

Option 2.1: There is sufficient information that atmospheric emissions are a large source of mercury. This issue should be included in the scope. Future negotiations could include requiring national emissions inventories and proposed timetables and targets for all major emitters. **This is your first choice, as long as developed and developing countries have differentiated responsibilities and ASGM is excluded from binding emissions reductions.**

Option 2.2: There is insufficient information that atmospheric emissions are a large source of mercury. This issue should be excluded from the scope. Future negotiations could gather information on emissions inventories to all media before taking action. **This is your second choice.**

Issue 3: Reducing Demand for Mercury: Products and Processes

Option 3.1: There is sufficient evidence that demand for mercury used in products and processes significantly contributes to the global mercury problem. All products and processes should be included in the scope of future negotiations. **A complete ban may be difficult given cost considerations for certain products (lighting) and processes (chlor-alkali); this is not Brazil or GRULAC's first choice.**

Option 3.2: Demand for mercury used in some products and processes contributes significantly to emissions and mercury releases, while other mercury uses do not. The parties should draft a list for inclusion in the scope of future negotiations. **This is Brazil and GRULAC's first choice. Be sure to discuss financial support and technology transfer for the chlor-alkali industry.**

Option 3.3: There is insufficient evidence that demand for mercury used in products and processes significantly contributes to the global mercury problem. All products and processes should be excluded from the scope of future negotiations. **This is acceptable, although not Brazil and GRULAC's first choice given the domestic actions Brazil has already taken.**

Issue 4: Artisanal and Small-Scale Gold Mining (ASGM) – This is the most important issue.

Option 4.1: There is sufficient evidence that mercury use in ASGM is a significant part of the global mercury problem. ASGM should be *included* within the scope of future negotiations, with potential actions including requiring countries to submit national action plans on ASGM with timetables to phase out the usage. **This is acceptable, provided all action is voluntary for developing countries.**

Option 4.2: There is insufficient evidence that mercury use in ASGM is a significant part of the global mercury problem or that ASGM is a tractable problem. ASGM should be *excluded* from the scope of future negotiations while financial and technical support are provided to conduct further assessments on ASGM. **This is not acceptable; ASGM should be included in the scope to ensure adequate financing and technical assistance are provided through a future treaty.**

References

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