China: Capacity Strengthening for
Implementation of Minamata Convention on Mercury
to be supported by GEF

Environmental and Social Management Framework
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Preface

On October 10, 2013, China became the signatory to Minamata Convention on Mercury (hereinafter referred to as “MCOM”). In April 2016, China ratified the MCOM. As the world’s largest producer, user and emitter of mercury, China is confronted with challenging situations in MCOM implementation, which will have profound impacts on relevant environmental protection policies, industrial development policies and international trade policies in China. In order to accelerate the implementation of MCOM and ensure the achievement of MCOM objectives, it is necessary to formulate national implementation strategies as soon as possible, raise the awareness and capabilities of all sectors of the society, and make overall planning and coordination to create favorable conditions and mobilize sufficient resources domestically and internationally. In this regard, the Foreign Economic Cooperation Office (FECO) of the Ministry of Environmental Protection, jointly with the World Bank, has developed a project of China: Capacity Strengthening for Implementation of Minamata Convention on Mercury” to be financed by the Global Environmental Facility (GEF).

This proposed GEF mercury project will support China to develop a national strategy and provincial and sectoral action plans for MCOM implementation and to further improve its capacity to implement MCOM. In doing so, this project will support China to improve its efforts on ecological and environmental protection. As part of the strategy development on MCOM implementation at the national level, the project will also develop action plans and implement pilot activities at the provincial level to manage environmental risks associated with mercury pollution management.

Given the potential downstream impacts of the national strategies and provincial and sectoral action plans to be developed under the project and potential environmental and social impacts associated with site level activities, this project triggers the safeguard policies of the World Bank, namely OP4.01 Environmental Assessment, OP4.10 Indigenous People, OP4.12 Involuntary Resettlement. As such, it was agreed that project preparation would identify the nature of potential influence and risk of project activities, to determine the category of environmental impacts (Class A, B or C in environmental assessment by the World Bank), and then take appropriate safeguard measures to avoid or mitigate negative impacts.

1. Purpose and Scope of the Environmental and Social Management Framework

1.1 Purpose

The proposed GEF project will develop a national strategy and various provincial and sectoral action plans and enhance China’s capacity to manage environmental pollution risks associated with mercury. As a technical assistance project, this project will not exert direct negative impacts on the environment and the society. However, at the strategic level, the results and outputs of this project may have profound implications on the society and the environment, which would lead to subsequent risks and negative influences (see Chapter 4 for detailed analysis). Although it is impossible to confirm concrete risks during project preparation, an Environmental and Social Management Framework (hereinafter referred to as the Framework) is developed according to the World Bank’s guideline\(^1\) to introduce and highlight the subsequent influences and risks caused by project results, especially the implementation of local pilot subprojects and their consequences. Therefore, the basic objectives of the

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\(^1\) Please refer to The Application of Safeguard Policy in Technical Assistance Activities and Funding Projects Financed and Performed by the World Bank, prepared by the World Bank in January 2014.
Framework are to 1) guide and inform the preparation of various TORs for the development of the national strategy, provincial and sectoral action plans during project implementation to ensure proper environment and social safeguards requirements of the national regulations and the Bank policies are incorporated into such TORs; and 2) provide the process for screening environment and social impacts of specific downstream investments that may be associated with project supported activities and recommend a likely range of specific safeguard instruments to be prepared based upon the results of the screening.

1.2 Scope

This Environmental and Social Management Framework provide guidance on how social and environmental issues should be managed for all activities to be financed the proposed GEF Project. Specifically, it provides a preliminary screening of environmental and social impacts associated with proposed project activities as well as potential downstream activities that may be carried out as a result of project activities but outside of and after the implementation of this project. Based on the results of the preliminary screening, this Environmental and Social Management Framework advises how identified social and environmental issues of project activities shall be addressed during project implementation, provides guidance on information disclosure and public consultation relating to preparation and implementation of these safeguard documents, and sets organizational and institutional arrangements for the implementation. In addition, it provides general guidance on how social and environmental issues shall be managed for downstream activities. It can be outlined as follows:

- It describes applicable safeguard policies of the domestic government and the World Bank;
- It analyzes the essence of the project and identifies the type and scope of each subproject;
- It identifies and analyzes environmental and social impacts, no matter positive or negative, short term or long term of project financed activities and potential environmental and social impacts of downstream activities.
- Based on requirements of relevant safeguard policies put forwarded by the World Bank, it specifies safeguard measures to be adopted during project implementation to address potential negative environmental and social impacts of project activities;
- It provides guidance on how potential social and safeguard impacts of downstream activities shall be managed.
- It offers directions to conduct institutional capacity building for managing environmental and social issues related to project activities.
- It offers direction on information disclosure and public participation in environmental and social assessment;
- It offers direction on the establishment and performance of monitoring and evaluation system, including the regular inspection mechanism to be used during project implementation.

2. Project Description
2.1 Background

China has a long history of mercury use, which can be traced back to the sixth century B.C. China is still one of only few countries with mercury mining activities, with a yearly yield of primary mercury mining being about 780 tons. It is estimated that China consumes about 1000 tons of mercury per year mainly in industrial products and production process with mercury and mercury compounds as raw materials, additive and catalyst. This accounts for fifty percent of the world's total consumption. In addition, China’s consumption of large amounts of mercury-containing coals (0.15-0.20μg/g) in its industrial production sectors has led China become the biggest producer, consumer and emitter of mercury. According to Global Mercury Evaluation Report (2013) prepared by the United Nations Environment Programme (UNEP), China's atmospheric mercury emissions account for approximately 75% of the total mercury emissions in East and South Asia, equivalent to 1/3 of the world's total. Such a large amount of mercury emission in China may exert long-term impacts on regional, national and global ecological environment.

2.2 Objective and content (including expected positive influences and effects)

2.2.1 Objective

Based on requirements in Minamata Convention on Mercury, the proposed GEF project will develop a national strategy for the Convention and improve China’s implementation capacity by conducting a survey on the current mercury production, use and emission, organizing publicity and training in various forms to raise public awareness, developing relevant sectoral and provincial action plans for mercury-related industries and carrying out capacity building demonstration in typical industries and key provinces.

2.2.2 Content

The project consists of two main parts: (1) development of the national strategy and sectoral and provincial action plans; and (2) capacity strengthening for mercury management and risk assessment. With respect to Part 1, the project will support the development of a national strategy. Moreover, the project will make a survey on a supplemental list based on results of ongoing and previous mercury related projects. This will cover a list of sectors, including mainly mercury mining and recycling, production and trade (including import and export) of mercury products, import and export of mercury, cement production, waste incineration, atmospheric mercury emissions from coal-fired boilers, mercury-contained wastes and contaminated sites, etc. Efforts will be made to analyze relevant national policies, laws and regulations and carry out extensive consultations with domestic and international stakeholders.

The national strategy will be developed to determine short-term, mid-term and long-term goals and relevant measures regarding mercury management, and actions plans for key sectors and mercury provinces. According to the result of policy gap analysis, the project will propose a list of policies to be developed or revised for key mercury industries. During project implementation, the completed national strategy will be submitted to the Central Government for review and approval. After the development of the national strategy and sectoral and provincial action plans, the project will organize effective media propaganda activities to help the public and stakeholders better understand China's mercury problems, motivate them to actively participate in and support the implementation of the national strategy of MCOM implementation. Main activities for the development of national strategy include:
1) Identification of priority areas;
2) Present situation of implementation policies and policy gap analysis;
3) Financing demand analysis;
4) Studies on strategies and action plans to reduce mercury uses in key industries;
5) Summary and development of national strategies;
6) Public awareness raising activities.

Part 2 of the project will be designed mainly to support China to carry out capacity building in key areas, so as to facilitate the development and implementation of its national strategies, including the following main activities:

1) development of a national mercury flow direction reporting system
2) mercury monitoring capacity improvement
3) risk assessment at selected mercury-contained contaminated sites
4) assessment of mercury management and recycling technologies and practices in relevant sectors (excluding waste mercury catalyst)
5) dissemination of experience of capacity strengthening activities

The framework for project activity is shown in Figure 1:
### 2.1 Pilot on the IRMS

- **2.1.1** Recruit a consultant for reporting template development, data review and conclusion report drafting
- **2.1.2** Development and troubleshooting of the IRMS
- **2.1.3** Training on the IRMS
- **2.1.4** Data collection, IRMS running and data review in pilot provinces

### 2.2 Pilot on Strengthening the Mercury Monitoring Capacity

- **2.2.1** Study tour on the cutting edge laboratory techniques for mercury analysis
- **2.2.2** Recruit a consultant to provide technical support for the capacity building in pilot laboratories of atmospheric mercury monitoring
- **2.2.3** Take standard gas samples from the same plant for comparison activity in pilot laboratories
- **2.2.4** Training on the sampling and analysis for the pilot laboratories and distribute the standard samples to the pilot laboratories
- **2.2.5** Procurement of analysis equipment for the pilot laboratories
- **2.2.6** Laboratories retrofit for installation and operation of equipment in pilot laboratories
- **2.2.7** Conduct samples comparison analysis activity in laboratories
- **2.2.8** Development of the criteria for the laboratories establishment based on the experiences in pilot laboratories
- **2.2.9** Workshop on the comparison results of the pilot laboratories
2.3 Project locations

Project activities on the development of the national strategy and sectoral action plans will be carried out in Beijing. In addition, the development of provincial action plans, laboratory monitoring capacity building and risk assessments of contaminated sites will be carried out in three provinces – Guizhou, Shaanxi and Hunan. All three provinces have mercury mining activities and a large arrays of industries using and emitting mercury. Detailed inventories of mercury related industries, their production activities related mercury, their geographic locations and relationship with local communities will be investigated during the development of provincial action plans under Component 1 and under the risk assessment of mercury contaminated sites under Component 2.

3. Applicable laws, regulations and policies

3.1 Chinese laws and regulations on environmental and social management

3.1.1 National laws and regulations.

Based on the nature and downstream impacts of activities to be financed by the project, the following national laws and regulations on environmental protection are applicable. Please see

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2 In 2014, Shaanxi province has a population of 37.75 million, of which 0.18 million (0.49%) are of 42 ethnic minorities living mainly in mixed communities with the Han ethnic group. In 2015, Hunan province has a population of 67.8 million, of which 6.8 million (10%) are of nine ethnic minorities mainly concentrated in mountainous areas of the west and north parts of the province. In 2015, Guizhou province has a population of 35.2 million, of which 13.7 million (39%) are mainly from 17 ethnic minorities. Among the three province, Guizhou is most culturally diverse and has three ethnic minority autonomous prefectures and eleven ethnic minority autonomous counties, covering over 55% of the province’s land area. In comparison, Hunan has only seven ethnic minority autonomous counties and Shaanxi has no ethnic minority autonomous prefecture or counties.
Table 3-1 for details:

**Table 3-1 Applicable Chinese laws and regulations on environment protection**

<table>
<thead>
<tr>
<th>Policy and regulation</th>
<th>Important provisions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Environmental Protection Law of the People's Republic of China (2015)</strong></td>
<td><strong>Article 42</strong> Enterprises, institutions and other production operators discharging pollutants must take appropriate measures to prevent environmental pollution and hazards caused by waste gas, waste water, waste residue, medical waste, dust, malodorous gas, radioactive substance and noise, vibration, optical radiation and electromagnetic radiation.</td>
</tr>
<tr>
<td><strong>Law of the People's Republic of China on Environmental Impact Assessment (2002)</strong></td>
<td><strong>Article 16</strong> The State shall execute classified administration on environment impact assessment of construction projects according to the extent of the project environmental impact; the construction unit shall organize to develop the environmental impact report. <strong>Article 22</strong> Environmental impact assessment documents of the construction project shall be submitted by the construction unit to the competent department of environmental protection administration with approving power for approval. <strong>Article 24</strong> In the event a construction project have experienced major changes after approval of the environmental impact assessment documents of the project, the construction unit shall re-submit environmental impact assessment documents of the project for approval.</td>
</tr>
<tr>
<td><strong>Administrative Regulations on the Environmental Protection of Construction Projects (1998)</strong></td>
<td><strong>Article 16</strong> Simultaneous design, simultaneous construction and simultaneous going into operation with the main body project (that is “Three Simultaneities”) must be realized for matching environmental protection facilities construction which is required for the construction project.</td>
</tr>
<tr>
<td><strong>Interim Measures for Public Participation in Environmental Impact Assessment (2006)</strong></td>
<td><strong>Article 2</strong> The Measures is applicable to the public participation into environment assessment of construction projects, which may have significant influences on environment and required to prepare an environmental impact report or resubmit it from project changes or start-up delays.</td>
</tr>
</tbody>
</table>

**Other related laws and regulations**

- Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution (revised in 2000);
- Law of the People's Republic of China on Prevention and Control of Water Pollution (2008);
- Law of the People's Republic of China on Prevention of Environmental Pollution Caused by Solid Waste (revised in 2004);
- Law of the People's Republic of China on Prevention and Control of Pollution From...
The environmental laws, regulations and statutes, as presented in Table 3-1, constitute the national legal framework for the proposed project from the environmental safeguards perspective. This environmental legal framework contains: 1) laws and policies on the principles, rights and liability of protecting and improving environment and the ecological environment, preventing and controlling pollution and other public hazards, safeguarding human health and facilitating the development of socialist modernization, 2) laws and regulations regarding environmental impact assessment, 3) laws and policies regarding pollution prevention from atmospheric, water, solid pollutants and noise, and 4) mercury-related industry guidance and standards. These law and policy framework are relevant to the project, which would provide the basis to cope with the potential environmental impacts from the project outputs and results. The project should incorporate the concern of environmental safeguards into the development process of the national strategy and sectoral and provincial actions plans for the Minamata Convention implementation and into the development and implementation of relevant capacity building activities.

3.1.2 National laws and regulations that are applicable to this project from the social safeguard perspective are summarized as follows:

### Table 3-2 Laws, regulations and policies relating to this project on social development

<table>
<thead>
<tr>
<th>Laws, policies and regulations</th>
<th>Enacted on</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amendment to the Constitution of the People's Republic of China</td>
<td>March 14, 2004</td>
</tr>
<tr>
<td>Law of the People's Republic of China on Regional National Autonomy</td>
<td>May 31, 1984</td>
</tr>
<tr>
<td>Land Administration Law of the People's Republic of China</td>
<td>August 28, 2004</td>
</tr>
<tr>
<td>Regulations for Administrative Work of Ethnic Minority Townships</td>
<td>October 23, 1993</td>
</tr>
<tr>
<td>Regulations for Urban Ethnic Work</td>
<td>August 29, 1993</td>
</tr>
<tr>
<td>Regulation on the Dismantlement of Urban Houses (Decree No. 305 of the State Council)</td>
<td>November 1, 2001</td>
</tr>
<tr>
<td>Circular of the Ministry of Housing and Urban-Rural</td>
<td>June 3, 2011</td>
</tr>
</tbody>
</table>

3 This document classifies environmental assessment requirements of various types of construction projects.
### Table 3-2

<table>
<thead>
<tr>
<th>Law/Regulation</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulation on the Expropriation of Buildings on State-owned Land and Compensation (Decree No. 590 of the State Council of the People's Republic of China)</td>
<td>October 21, 2004</td>
</tr>
<tr>
<td>Decision of the State Council on Deepening the Reform and Rigidly Enforcing Land Administration (Guo Fa [2004] No. 28)</td>
<td>November 3, 2004</td>
</tr>
<tr>
<td>Guidance on Improving Land Expropriation Compensation and Relocation Institution (Guo Tu Zi Fa [2004] No. 238)</td>
<td>August 31, 2006</td>
</tr>
<tr>
<td>Circular of the State Council on Intensifying the Land Control (Guo Fa [2006] No. 31)</td>
<td>July 23, 2005</td>
</tr>
<tr>
<td>Measures for Announcement of Land Expropriation (Decree No. 10 of the Ministry of Land and Resources)</td>
<td>December 19, 2011</td>
</tr>
</tbody>
</table>

The Chinese laws, regulations and statutes, as presented in Table 3-2, are deemed in principle as the national legal framework for the proposed project from the social safeguards perspective. This legal framework contains: 1) laws and policies on the rights, dignity, and economic and cultural development of ethnic minorities, 2) laws and regulations regarding land expropriation, 3) laws and policies regarding housing demolition, and 4) laws and policies on labor rights and social security. These laws and policies are relevant to the project because its results and outcomes would have potential social impacts which might occur in a consequent process downstream, and the legal framework would provide the basis to cope with them. Similarly to environmental safeguard concerns, the project should incorporate the concerns of social safeguards into the development of the national strategy and sectoral and provincial action plans for MCOM implementation and into the development and implementation of those capacity building activities.

### 3.2 Safeguard Policies of the World Bank

Then safeguard policies are formulated by the World Bank to regulate loan/funding projects it involved, 8 of which relate to environmental and social development:

1. **OP 4.01 Environmental Assessment**
OP4.01, 04, 09, 11, 36 and 37 (that is, Environmental Assessment, Natural Habitats, Pest Management, Physical Cultural Resources, Forestry and Safety of Dams) focus on environmental ecology; while OP 4.10 and 4.12 (Indigenous Peoples and Involuntary Resettlement) mainly target at social development, among which OP4.11 relates to natural heritage and environmental protection. Article 11 describes information disclosure procedures (including safeguard information) necessary for project implementation, applicable both to the local community and people related and the international community.

3.2.1 Environmental related Policies and Guideline

Based on the nature of the project and potential downstream impacts of its proposed activities, this project triggers OP4.01 Environmental Assessment. In addition, the Bank’s Environment, Health and Safety Guideline (short for EHS Guideline) should be considered as necessary during project implementation.

<table>
<thead>
<tr>
<th>Policy of the World Bank</th>
<th>Abstract</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Assessment (OP 4.01)</td>
<td>EA is a process whose breadth, depth, and type of analysis depend on the nature, scale, and potential environmental impact of the proposed project. EA evaluates a project's potential environmental risks and impacts in its area of influence; examines project alternatives; identifies ways of improving project selection, siting, planning, design, and implementation by preventing, minimizing, mitigating, or compensating for adverse environmental impacts and enhancing positive impacts; and includes the process of mitigating and managing adverse environmental impacts throughout project implementation. The Bank favors preventive measures over mitigatory or compensatory measures, whenever feasible.</td>
</tr>
<tr>
<td>Environment, Health and Safety Guideline (EHS Guideline)</td>
<td>Environment, Health and Safety Guideline (short for EHS Guideline) is compiled for technical reference. In case one or more member states of the World Bank Group involve(s) in a certain project, policies and standards of the member states, as well as EHS Guideline, should be strictly followed.</td>
</tr>
</tbody>
</table>

3.2.2 Related social safeguard policies
The Bank’s social policies, namely OP4.10 Indigenous Peoples and OP4.12 Involuntary resettlement, aim to safeguard project related peoples from the possible negative social impacts caused by project implementation. These policies are relevant to the project not because of the direct influence of the project activities - the overall strategy development for the mercury management and capacity building for MCOM implementation, but the subsequent potential impacts from its subprojects’ outcomes, such as some crystalized sectoral action plans and risk assessment activities, which might potentially have downstream activities on land acquisition, or even take place among ethnic minority groups in the areas populated with the ethnic minorities. In this regard, these two Bank safeguard policies will apply to this project to ensure the proposed project activities and the to-be-developed national strategy and sectoral and provincial action plans protecting local peoples’ interests, together with the relevant national laws and regulations.

Table 3-4 Social safeguard policies relating to the project

<table>
<thead>
<tr>
<th>Policies of the World Bank</th>
<th>Abstract</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indigenous Peoples/minorities (OP 4.10)</td>
<td>The policy relates to the maintenance of the rights and interests of &quot;Indigenous Peoples&quot;, and aims at respecting the dignity, human rights, economy and culture of &quot;Indigenous Peoples&quot;, further accomplishing the mission of poverty alleviation and sustainable development. With obvious differences from mainstream social group in characteristics, &quot;Indigenous Peoples&quot; belongs to the most marginalized and vulnerable group. Their abilities to protect the rights and interests of productive resources and participate in development projects and benefit from them are often limited by their economic, social and legal status. What's worse, the relation of dependence on lands and natural resources that they rely on for survival put them into different risks and impacts resulted from development projects, or deprive them of traditional livelihood, ethnic characteristics and culture, and expose them to diseases attacks, etc. For this purpose, OP4.10 &quot;Indigenous Peoples&quot; specifies that lenders who apply for financial supports from the World Bank for projects involving &quot;Indigenous Peoples&quot; should adopt unrestricted, ex-ante and informed consultation process in local community and loans from the World Bank are only available to projects that are widely approved by the local community of &quot;Indigenous Peoples&quot; through consultation. It also specifies that the World Bank's projects should ensure that &quot;Indigenous Peoples&quot; have equal opportunities to take participation and gain social and economic interests in compliance with their culture and with gender and intergeneration inclusion. Meanwhile, loan project of the World Bank should avoid to bring negative impacts on &quot;Indigenous Peoples&quot; community, and where unavoidable, should be minimized, mitigated or compensated.</td>
</tr>
<tr>
<td>Involuntary Resettlement (OP 4.12)</td>
<td>This policy applies to involuntary land occupancy and involuntary restriction of access to legally designated parks and protected areas, and aims to avoid involuntary resettlement (including land expropriation and demolition and adverse impacts on economy), where</td>
</tr>
</tbody>
</table>
practicable, or minimize and mitigate adverse economic and social impacts.

This policy promotes affected people to participate more effectively in the planning and implementation of resettlement activities. The key economic target is to assist affected people in their efforts to recover and improve their economic incomes and livelihoods after housing demolition.

This policy expresses that the established objectives may be accomplished through compensation and other resettlement measures, and the borrower should prepare a thoughtful resettlement plan and implementation documents before the proposed project is approved by the World Bank.

While the objectives are the same for the Bank safeguard policies and Chinese national laws and regulations, there are still some gaps between the Bank and the nation in measures and process to achieve the goals. In brief, China’s laws and regulations provide more macro principles and instructions, and their putting in place mostly depends upon local or/and sectoral variables which are not necessarily controlled by the laws themselves. In comparison, the Bank policies are more directly to require self-fulfillment with clear and detailed instruments in purpose. Therefore, the project ESMF is established more directly under the requirements of the Bank safeguard policies.

4. Potential Influences or Risks

4.1 Project type

As noted, the proposed GEF project will assist China in strategy development and capacity building for the implementation of MCOM. According to the project design, subprojects involves policy and technical research, information system development and site assessment of mercury-polluted sites. It will not involve any physical investment activities.

4.2 Environmental related influences

This GEF project is designed to support technical assistance and capacity building activities, including site assessment at mercury mines and mercury contaminated industrial production sites, and disseminate project results and experience nationwide. Thus it can be seen that in general the project itself will not generate serious environmental impacts. Instead, it is expected to bring overall positive environmental benefits as a result of better managed mercury pollution issues. Having said that, outputs of the project may have downstream environmental impacts that need to be properly analyzed and assessed.

See Table 4-1 below for preliminary screening result of the environmental impact of each subproject under the Project of Building Capacity for the Implementation of MCOM in China.
<table>
<thead>
<tr>
<th>Details</th>
<th>Whether to cause environmental impacts or not (both positive and negative)</th>
<th>How Safeguards Will be Addressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Develop national strategies for MCOM implementation</td>
<td>Yes</td>
<td>TORs of these consulting contracts requires that safeguard policy requirements and international best practices be integrated into the development of strategies.</td>
</tr>
<tr>
<td>1.1 Set up project team and expert group</td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>1.2 Develop strategies for strengthening mercury supply and trade management</td>
<td>No direct impacts; Positive long term</td>
<td>TORs of these consulting contracts requires that safeguard policy requirements and international best practices be integrated into the development of strategies.</td>
</tr>
<tr>
<td>1.3 State quo of import and export of mercury and mercury-added products and evaluation on MCOM implementation requirement</td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>1.4 Develop strategies for mercury reduction in mercury-added products</td>
<td>No direct impacts; Positive long term</td>
<td></td>
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<tr>
<td>1.5 Develop strategies for mercury reduction in PVC production</td>
<td></td>
<td></td>
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<tr>
<td>1.6 Develop strategies for reducing emissions of mercury and other compounds from coal-fired power plants</td>
<td>No direct impacts; Positive long term; Potential negative impacts associated with downstream/ subsequent activities beyond this project</td>
<td></td>
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<tr>
<td>1.7 Develop strategies for reducing emissions of mercury and other compounds from coal-fired industrial boilers</td>
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<tr>
<td>1.8 Develop strategies for reducing emissions of mercury and other compounds from waste incineration</td>
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<tr>
<td>1.9</td>
<td>Develop strategies for reducing emissions of mercury and other compounds from cement clinker production</td>
<td></td>
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<tr>
<td>1.10</td>
<td>Develop strategies for reducing emissions of mercury and other compounds from non-ferrous smelting</td>
<td></td>
</tr>
<tr>
<td>1.11</td>
<td>Develop strategies for innocuous management on mercury-containing wastes and contaminated site</td>
<td></td>
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<tr>
<td>1.12</td>
<td>Develop strategies for environment and human health monitoring for MCOM implementation</td>
<td></td>
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<tr>
<td>1.13</td>
<td>Develop strategies for conducting R&amp;D for MCOM implementation</td>
<td></td>
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<tr>
<td>1.14</td>
<td>Conduct research on fund requirements and financing channels for MCOM implementation</td>
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<tr>
<td>1.15</td>
<td>Summarize national strategies for MCOM implementation</td>
<td></td>
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<tr>
<td>1.16</td>
<td>Develop provincial-level strategies for MCOM implementation by pilot provinces</td>
<td></td>
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<tr>
<td>1.17</td>
<td>Develop proposals on policies, regulations and standards formulation and revision for MCOM implementation by pilot provinces</td>
<td></td>
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<tr>
<td>1.18</td>
<td>Organize activities to improve MCOM implementation awareness of stakeholders</td>
<td>√</td>
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<tbody>
<tr>
<td>2.</td>
<td>Set up capacity building pilots project for MCOM implementation</td>
<td>√</td>
</tr>
<tr>
<td>2.1 national mercury flow management information system</td>
<td></td>
<td>√</td>
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<tr>
<td>------------------------------------------------------</td>
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</tr>
<tr>
<td>2.2 mercury monitoring capacity improvement</td>
<td>Short-term negative impact related to project activities</td>
<td>As appropriate, contracts for equipment supply and installation and TORs of these consulting contracts requires that safeguard policy requirements and international best practices be integrated into the development of these assessments.</td>
</tr>
<tr>
<td></td>
<td>Preliminary environment and social screening will also be undertaken as part of the site risk assessment to identify potential environment and social issues to be further assessed in the preparation of remediation plans and specific safeguard instruments for the contaminated sites, which will be undertaken downstream and outside the project.</td>
<td></td>
</tr>
<tr>
<td>2.3 environmental risk assessment at mercury-contaminated sites</td>
<td>No direct impact related to project activities; Positive long term; potential negative impacts associated with downstream/subsequent site management activities beyond this project</td>
<td></td>
</tr>
<tr>
<td>2.4 assessment of mercury management and recycling technologies and practices in relevant sectors (excluding waste mercury catalyst)</td>
<td>No direct impact; Positive long term</td>
<td></td>
</tr>
<tr>
<td>2.5 Popularization of experience in pilot activity of capacity improvement</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The table above shows us that subprojects on strategy development may produce environmental impacts when such a strategy and proposed action plans are implemented beyond the scope of this project. The proposed monitoring capacity strengthening activities may have short-term negative environmental impacts related to site-level activities but will have long-term positive environmental impacts with improved monitoring capacity and sound assessment and management of contaminated sites. The proposed contaminated site related risk assessment will not generate any direct environmental impacts. However, remediation of contaminated sites beyond this project may generate short-term, site specific, negative occupational, environment and community health impacts from activities such as preparation of contaminated sites, hauling and disposal of contaminated material and their occupational, environment and community health impacts. Such impacts shall be properly evaluated and mitigated as part of downstream activities.

4.3 Social related influences

The first component of this project is to develop "the national strategy and sectoral and provincial action plans" for MCOM implementation. It focuses on researching and developing national strategies and sectoral and provincial action plans to protect ecological environment and public health. The subproject itself might have no direct negative impacts and risks on the society. But the overall strategy will be divided into various sectoral and provincial action plans. Such action plans may further be developed based on concrete surveys and analysis of specific enterprise conditions, site type, pollution status and management index. For example, 1.11 "Develop strategies for innocuous management on mercury-containing wastes and contaminated site", a sub-industry study under the subproject, is designed to conduct sampling, monitoring and other activities on 45 enterprises related and 10 contaminated sites. Implementation of this activity will have to take into account the “potential downstream/subsequent impact” on these enterprises and their employees and the local society during its implementation. It will also have to consider what effects of the issuance of new strategies will be made on this industry, including all relevant enterprises and employees. When new policies and measures are taken to prevent pollutions in the foreseeable future, what the response will be made by the social group, and have their welfares been considered in the new strategies. All of these are social influences related to the project in the short term and long term and should be carefully analyzed during the development of the strategy and action plans.

The second component “capacity building for MCOM implementation” will have more specific social impacts. According to the preliminary social scanning, activities such as 2.2 “mercury monitoring capacity strengthening” and 2.3 “environmental risk assessment at selected mercury-contained contaminated sites” under Subproject II will directly involve specific locations in pilot provinces. For 2.2, technical support, training, seminars, etc., capacity building activities also include physical investments – renovation of existing laboratory facilities for the installation of new equipment. As such activities will be performed within existing facilities, no land expropriation or change of land utilization will be required.

For 2.3, project activities will be preliminarily arranged in provinces such as Shaanxi, Guizhou and Hunan with diverse ethnic minority communities. Although project sites are to be selected
during project implementation, such activities will be performed within existing facilities, no land expropriation or change of land utilization will be required. Project design will take into full account possible effects on local ethnic minority peoples, including positive and negative ones, and their reactions and opinions. In ethnic minority areas, project activities should be beneficial to the development of ethnic minority communities and compatible with their culture on the premise that the activities are recognized by local ethnic minority communities. Possible adverse effects of any project activities should be carefully analyzed and addressed or avoided at full blast. Besides, full attention should also be paid to further possible effects of the project in the long term. For example, after implementation capacity is strengthened and risk management in contaminated sites is improved, local and even national authorities may take further actions to strengthen management practices. Although beyond the scope of this project, such actions may cause closedown, suspension, combination and transformation of inefficient enterprises or unemployment later. Although such subsequent effects are not directly caused by the project, the project should provide guidance on and prepare for mitigation of subsequent adverse effects when making pilot studies and industrial strategies. The Environmental and Social Management Framework will further provide explanation and guidance in this aspect. According to laws and safeguard policies presented in Chapter 3, Table 4-2 below will provide the screening of social impacts of all project activities.
<table>
<thead>
<tr>
<th>Project Components</th>
<th>Project activity</th>
<th>Social impact of project activities</th>
<th>Downstream/ subsequent social impacts</th>
<th>Safeguard measures</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Land expropriation and resettlement</td>
<td>Ethnic Minority</td>
<td></td>
</tr>
<tr>
<td>1. Develop national strategy for MCOM implementation</td>
<td>1.1 Set up project team and expert group</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>1.2 Develop strategies for strengthening mercury supply and trade management</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>1.3 State quo of import and export of mercury and mercury-added products and evaluation on MCOM implementation requirement</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>1.4 Develop strategies for the obsolescence for mercury-added product</td>
<td>No</td>
<td>No</td>
<td>potential impacts on workers’ retrenchment</td>
</tr>
<tr>
<td></td>
<td>1.5 Develop strategies for mercury reduction in PVC production</td>
<td>No</td>
<td>No</td>
<td>potential impacts on workers’ retrenchment</td>
</tr>
<tr>
<td></td>
<td>1.6 Develop strategies for reducing emissions of mercury and other compounds from coal-fired power plants</td>
<td>No</td>
<td>No</td>
<td>Potential impacts on workers’ retrenchment</td>
</tr>
<tr>
<td></td>
<td>1.7 Develop strategies for reducing</td>
<td>No</td>
<td>No</td>
<td>Potential impacts on workers’ retrenchment</td>
</tr>
</tbody>
</table>

TORs of these consulting contracts requires that safeguard policy requirements and international best practices be integrated into the development of strategies and action.
<p>| 1.8 Develop strategies for reducing emissions of mercury and other compounds from waste incineration | No | No | Potential impacts on workers’ retrenchment plans. |
| 1.9 Develop strategies for reducing emissions of mercury and other compounds from cement clinker production | No | No | Potential impacts on workers’ retrenchment |
| 1.10 Develop strategies for reducing emissions of mercury and other compounds from non-ferrous smelting | No | No | Potential impacts on workers’ retrenchment |
| 1.11 Develop strategies for innocuous management on mercury-containing wastes and contaminated site | No | No | Potential impacts on land expropriation and resettlement; on ethnic minorities |
| 1.12 Develop strategies for environment and human health monitoring for MCOM implementation | No | No | No |
| 1.13 Develop strategies for conducting R&amp;D for MCOM implementation | No | No | No |
| 1.14 Conduct research on financing demands and financing channels for MCOM implementation | No | No | No |
| 1.15 Summarize national strategies for MCOM implementation | No | No | No |
| 1.16 Develop provincial-level MCOM | No | No | Potential impacts on TORs of these consulting |</p>
<table>
<thead>
<tr>
<th>1.17 Develop proposals on policies, regulations and standards formulation and revision for MCOM implementation by pilot provinces</th>
<th>No</th>
<th>No</th>
<th>workers’ retrenchment; on land expropriation and resettlement; on ethnic minorities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.18 Organize activities to improve MCOM implementation awareness of stakeholders</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>2.1 Development of national mercury flow direction reporting system</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>2.2 Mercury monitoring capacity improvement</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>2.2.5 Purchase analytical equipment for atmospheric mercury detection in pilot laboratory</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>2.2.6 Equip new equipment with racks for water and electricity transformation in laboratory</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>2.3 Environmental risk management at selected mercury-contaminated sites</td>
<td>No</td>
<td>No</td>
<td>Potential impacts on workers’ retrenchment; on land expropriation and resettlement; on ethnic minorities</td>
</tr>
<tr>
<td>2.3.1 Develop a framework for risk management on mercury-contained contaminated sites of existing enterprises engaging in primary mercury mining production in pilot provinces</td>
<td>No</td>
<td>No</td>
<td>TORs of these consulting contracts requires that safeguard policy requirements and international best practices be integrated into site assessment</td>
</tr>
</tbody>
</table>
2.3.2 Develop a framework for risk management on mercury-contaminated sites of closed enterprises engaging in primary mercury mining production in pilot provinces

2.3.3 Develop a framework for risk management on mercury-contaminated sites of closed enterprises engaging in chlor-alkali production in pilot provinces

2.3.4 Develop a framework for risk management on mercury-contaminated sites of existing enterprises engaging in non-primary mercury mining production in pilot provinces

Preliminary environment and social screening will also be undertaken as part of the site risk assessment to identify potential environment and social issues to be further assessed in the preparation of remediation plans and specific safeguard instruments for the contaminated sites, which will be undertaken downstream and outside the project.

<table>
<thead>
<tr>
<th>Activity</th>
<th>China</th>
<th>Russia</th>
<th>US</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.4 Assessment of mercury management and recycling technologies and practices in relevant sectors (excluding waste mercury catalyst)</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>2.5 Dissemination of experience in pilot activity of capacity improvement</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>3. Project management</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>
5. Safeguard measures adopted for project activities

5.1 Safeguard policies and requirements for subprojects

As noted earlier in Table 4-1, the project has significant environmental benefits without major environmental constraints or sensitive areas or human rights issues and it is classified as a Category B project. Two project activities that may generate direct, short-term and negative environmental impacts are:

(a) the monitoring capacity strengthening that may involve equipment installation and renovation of laboratory rooms. Environmental impacts of such activities will be very limited and good practices on renovation and installation will be included as part of the procurement contracts with the equipment suppliers and renovation contractors.

(b) environmental risk assessment at mercury contaminated sites that may involve on-site control measures to limit access to such contaminated sites and technical recommendations to properly manage such sites. Direct environmental impacts of such activities will be negligible. However, implementation of such management recommendations may have serious downstream impacts that need to be properly assessed and mitigated. As such, the TOR for the risk assessment task will specify that environmental and social safeguard risks of each management recommendation be properly screened, based on international best practices as well as proper stakeholder and public consultation, and whenever necessary proper management measures for identified risks be proposed as well. The TOR will also specify how stakeholder and public consultation should be performed and how all information of this task be properly disclosed at the local and national levels. Results of impact assessment will be used to prioritize and even select of different management measures. The output of this task will clearly present (i) technical findings and recommendations; (ii) their potential negative social and environmental risks based on proper stakeholder and public consultation; and (iii) safeguard measures– environmental audit, environmental assessment, and social assessment – to be considered to assess and manage such social and environmental risks for downstream investments beyond the scope of this project.

As noted in earlier chapters and Tables 4-1 and 4-2, implementation of downstream activities of the national strategy and sectoral and provincial action plans may generate adverse environmental and social impacts to achieve long-term positive social and environmental impacts. As such, the TORs for the development of the strategy and action plans will follow the same approach as the TOR for the risk assessment and management of mercury contaminated sites. Specifically, the TORs will follow the guidance of this ESMF and require that environmental and social risks be screened for each proposed strategic item and action and evaluated based on best available information and proper stakeholder consultation. Recognizing mercury’s impacts on pregnant women, gender issues will be carefully analyzed. For identified social and environmental risks of downstream activities, the TOR will require the identification of proper safeguard measures to be performed before the implementation of any downstream activities. Section 6 provides detailed guidance on safeguard measures to be considered for downstream activities.

Results of such environmental and social risk screening will be used as inputs to the decision making process to prioritize different actions and strategic plans under the national strategy and sectoral and provincial action plans. Similarly, each TOR will specify that how information
disclosure and public participation should be performed for the development of the national strategy and sectoral and provincial action plans. In addition to these measures, activities on environmental and social monitoring and management as cross-cutting elements will be incorporated into the development of the national strategy and sectoral and provincial action plans. Such activities have been supported under the project and expected to be continued beyond this project.

5.2 Requirements for public participation and information disclosure

FECO is responsible for mobilizing public participation together with provincial department of environmental protection. Its responsibilities including: a) fulfill the public’s right to know; b) collect public opinions; c) record important findings, summaries and suggestions. It will disclose environmental and social safeguards documents, and collect opinions of potentially affected people and other stakeholders. Public opinions should be collected by means of questionnaires, seminars and hearings, among others. Public participation aims at collecting opinions of potentially affected people about subproject environmental and social impact and determining environmental and social problems that affected public consider important. All important opinions obtained from public participation will be included in environmental and social safeguard documents.

FECO is responsible for reviewing public participation records and determining whether they meet relevant requirements. If not, FECO may carry out public participation survey again as required.

In order to increase the efficiency of communications between FECO and stakeholders, FECO will provide the public with draft environmental and social safeguard documents before the collection of public opinions. All final environmental and social safeguard documents will be published in public places accessible to potentially affected people and other stakeholders. Acceptable publication methods include posters, brochures, newspapers and Internet, among others.

5.3 Supervision, monitoring and evaluation in the implementation of subprojects

5.3.1 Supervision

Subproject contractors are responsible for the implementing safeguard measures during project implementation. FECO is responsible for supervising the implementation of agreed environmental and social safeguard measures. World Bank Project Team will supervise project implementation with the purpose of:

• Guiding the preparation of safeguard instruments as needed;

• Reviewing safeguard screening results, safeguard documents and monitoring reports;

• Supervising the implementation of safeguard instruments to ensure they conform to national laws and regulations and World Bank policies.

5.3.2 Monitoring and evaluation

FECO will hire qualified consultants to monitor the implementation of safeguard instruments, to obtain key environmental and social feedbacks of subprojects as well as to verify the effectiveness of mitigation measures as appropriate.
6. Safeguard Measures to Be Considered for Downstream Activities

This ESMF provides guidance on how environmental and social safeguards measures should be considered for downstream activities.

6.1 Environmental safeguard measures to be considered for downstream activities

Downstream investment activities as a result of the implementation of the national strategy and sectoral and provincial action plans developed by the project will prepare environmental impact assessment reports, environmental impact report forms or environmental impact registration forms in accordance with national provisions. As these activities will not be part of this project, this section highlights suggested environmental safeguard measures that shall be considered for such downstream activities. All downstream activities should be screened for environmental risks. Based on risk screen results, environmental impact assessment and mitigation and management measures should be performed. Detailed steps include:

Step 1- environmental impact screening of downstream investment activities;
Step 2-environmental classification of proposed investment activities and determination of the type of environmental documents required;
Step 3-Preparation of environmental documents;
Step 4-Public participation in environmental documents;
Step 5-Environmental audit and approval;
Step 6-Supervision;
Step 7-Report.

1) environmental impact screening of downstream investment activities

Downstream investment activities will be further screened for their potential environmental risks and impacts. A preliminary assessment of such investments will be performed to optimize the design of such investments and reduce or mitigate their potential environmental impacts.

2) environmental classification of downstream investment activities and determination of the type of environmental documents required

Based on screening results, downstream investments beyond this project should be assessed to determine the type, breadth and depth of environmental documents according to the type, location, sensitiveness and scale of such investments and characteristics and size of their potential environmental impact (see Appendix 1 for details) and Catalogue for the Classified Administration of Environmental Impact Assessments for Construction Projects (June 1, 2015).

For downstream activities, respective environmental safeguard documents shall to be prepared in accordance with applicable environmental safeguard policies:

Class A: this type of downstream activities will have major negative environmental impacts, which are sensitive, extensive and unprecedented. The scope of affected areas will be wider than that of the site where a specific investment is located. Some potential Class A downstream activities might include the clean-up of mercury contaminated sites and disposal of mercury contaminated wastes.

Environmental impact assessment report and Environmental Management Plan shall be
prepared for such projects. Besides, all bidding documents must include a standard clause on opportunistic search of physical cultural resources. Environmental impact assessments and Environmental Management Plans should be properly consulted, and submitted for proper review, approval, and public disclosure before the commencement of such investment activities.

Class B: this type of projects will have some negative environmental impacts, which are less serious than that of Class A projects. These impacts are basically limited within the project site; few of them are irreversible; in most cases, it is easy to design measures to mitigate or eliminate these impacts. Potential Class B downstream investments may include the change of mercury based production technology to non-mercury technologies and installation of advanced air pollutant removal units at coal fired industrial facilities.

Environmental impact assessment or simplified EIA and an Environmental Management Plan at least containing standard environmental practice specifications – with additional analysis provided if necessary should be prepared for such projects. Specific Environmental Management Plans and/or standard environmental practice specifications of subprojects should include provisions on opportunistic search of physical cultural resources and be included in all construction contracts/bidding documents.

Class C: this type of projects might have the least or no negative environmental impacts. Environmental safeguard documents are not required for such projects, but they must be registered as per Chinese management requirements.

3) Preparation of environmental documents by project entities

Based on environmental risk screening and classification, project entities of a downstream project needs to prepare appropriate environmental documents.

(a) Environmental impact assessment (EIA)

EIA should be implemented according to EIA guidelines of China.\(^4\) Qualified and certified EIA agencies shall carry out EIA and prepare EIA reports.

(b) Environmental management plan (EMP)

Project entities are responsible for preparation of EMP. Whenever applicable, the Bank’s EHS Guideline and other guidelines on international best practices shall be adopted. EMP should include environmental protection measures during project design, construction and implementation. These measures should eliminate or make up for adverse effects of project activities on environment and society, or at least reduce these adverse effects to an acceptable level.

4) Public consultation

Project entities of downstream activities are responsible for organizing public participation in the developed EIA documents, with main responsibilities including: a) the public right to know; b) opinion collection; c) records of important findings, summaries and suggestions. Project entities or their EIA agencies shall disclose properly environmental management documents, and collect opinions of surrounding residents and the general public. Public opinions should be collected by means of questionnaires, seminars and hearings, among others. Public

\(^4\) For donor funded activities, donors’ guidelines should also be followed.
participation aims at collecting opinions of surrounding residents about environmental impact of downstream investments and determining the priorities of environmental problems affecting local residents. All important opinions obtained from public participation will be included in environmental management documents.

Environmental management organizations or consultants they hire are responsible for reviewing public participation records and determining whether they meet relevant requirements. If not, environmental management organizations may require subproject management units to carry out public participation survey again as required.

In order to increase the efficiency of public consultation and consensus building, project entities should provide the public with draft EIA documents before the collection of public opinions. All final EIA documents should be published in public places accessible to affected people and other stakeholders. Acceptable publication methods include posters, brochures, newspapers and Internet, among others.

5) Audit and approval

Completed EIA documents (including EMPs) of the downstream investment activities should be submitted to corresponding environmental protection authorities for review and approval.

6) Supervision

During the downstream investment process, project entities shall supervise the project implementation together with local environmental protection authorities and consultants to ensure that Environmental Management Plans (EMP) are implemented as required.

7) Report

During project implementation, project entities will report and disclose EMP implementation status according to domestic regulations. Monitoring results according to EMP’s monitoring plans and corrective or protective measures taken should be properly recorded.

6.2 Social safeguard measures to be considered for downstream activities

As noted earlier, two of World Bank’s social safeguard policies are applicable to this project, i.e., OP4.10 Indigenous Peoples and OP4.12 Involuntary Resettlement, due to potential social impacts of downstream investments beyond this project but not the project itself. Based on the nature of this proposed project, this Environmental and Social Management Framework provides a social assessment framework to be considered for downstream activities to properly identify and mitigate their potential social safeguard issues.

Purpose of the social assessment framework:

Social assessment is a useful tool for the preparation and implementation of investment projects. The essence of social assessment is to identify various social impacts and social risks likely to be produced by downstream activities and put forward measures and suggestions to eliminate or reduce negative social impacts as possible that are caused due to implementation of downstream activities and to increase positive social impacts. Participatory method is adopted in the social assessment to listen to appeals and hopes of different interest groups, make downstream activities benefit more stakeholders and promote inclusive development in the affected area; and to make preparation, design, construction and operation management of downstream investments meet the social and economic development goals of local
communities, local specific conditions and specific development demand of target population to provide people in the affected area with broader development opportunities.

**Tasks of social assessment**

Project entities should carry out social assessment of public participation and information disclosure towards the project based on the basic information and data obtained from baseline survey; identify major stakeholders in close relation to the project and analyze the impacts caused due to downstream investments on major stakeholders in terms of economy, the environment, gender, vulnerable groups and so on; and get to know major stakeholders’ specific detailed demands for project building (such as emission reduction, management strengthening and so on) to optimize project design so as to ensure that the stakeholders in a wider range can realize equal participation in such investments and make their suggestions obtain effective response, and based on that, the main tasks of social assessment include:

1. Identify major stakeholders of downstream investments and their benefit and demands, analyze stakeholders’ demands for such investments and conduct co-adaptability analysis on the project;

2. Analyze the impacts, degrees, categories and consequences on local society and social groups that are likely to be produced by project activities;

3. Get to know major stakeholders’ (especially the vulnerable groups and women) views on possible impacts on the economy, environment and society of the project area and other positive and negative impacts likely to be produced by the project, and identify the social risks of the project;

4. Get to know the people’s perception, satisfaction and ideas of the current mercury, production and treatment of products with mercury and the current situation in risk management of mercury pollution, identify major stakeholders’ views on the strategy formulated in all industries for emission reduction of products with mercury and their compounds and reflect stakeholders’ reasonable appeals and promote the implementation;

5. Put forward the social management plan with the aim of optimizing project design, improving information disclosure and promoting public participation through extensive informed participation and consultation to avoid risks and promote the achievement of social objectives of downstream investments;

6. Put forward the approaches to avoid and mitigate negative impacts and the methods to complete the security execution documents as required according to laws and regulations and the security policy.

In addition, means of project information dissemination, experience sharing and so on should be adopted in the process of launching consultation and negotiation towards the public to make the public fully understand the background, objective and implementation proposal of downstream investments and get involved.

**Implementation and output of social assessment activities:**

It shall be determined whether or not the affected groups and individuals will provide their extensive support for proposed downstream investments according to the social assessment and results of free, prior and informed consultation. If they are giving such support, a detailed social assessment report shall be prepared. Width, breath, type of the social assessment analysis
shall match with the nature and scale of the potential impact on the society and stakeholders. A social assessment report includes the following factors as required:

(1) Analysis of stakeholders

Identify major stakeholders involved in downstream investments. Implementation and advocacy of subprojects may render some pollution emission enterprises, urban residents, rural residents, and other social groups and individuals suffer from impacts (positive impacts or negative impacts), especially women, the aged, the poor, and other vulnerable groups. At the same time, relevant functional departments may also need to make adjustments and changes which may have impact on different groups. Besides, whether it is possible for the promotion of pilot operation and application to involve land requisition and resettlement and matters concerned. Social assessment needs to give a specific evaluation of these potential impacts, identify major stakeholders’ demand and attitude towards the project and analyze the role of major stakeholders and problems existed in the interaction process.

(2) Poverty analysis and strategy

It describes the situation of poor people in the affected area, analyze the causes of poverty and introduces relevant measures for poverty reduction and analyze the effect of poverty reduction of downstream investments and appeals of poor people to prevent the widening income gap to make sure the poor and other vulnerable groups benefit from downstream investments.

(3) Women’s demand for downstream investments

It introduces the general situation of women in the affected area, takes into account the special impacts on women caused due to implementation of downstream investments and women’s appeals, screen impacts of downstream investments on different genders depending on the implementation of downstream investments and reflect Gender Action Plan in design and implementation of downstream investments to safeguard the rights and interests of women.

(4) Social impact analysis

Implementation of downstream investments will have different impacts on different interest groups and the impacts can be divided into positive impacts, negative impact (such as workers’ retrenchment) and potential risks. Analysis of the positive impacts of downstream investments on major stakeholders aims at finding and expanding the opportunity for development while analysis of negative impacts can effectively identify, control and avoid social risks in downstream investments. The main objects to be analyzed in the social assessment are enterprises, employees, relevant functional departments, urban residents, rural farmers, and other major stakeholders that are affected by downstream investments and are the master of the local society.

(5) Public consultation and participation process

Through consultation and negotiation with major stakeholders in the earlier stage of downstream investments, it is designed to raise relevant awareness of the public with regard to specific planning and so on of downstream investments, identify the public’s demand for information disclosure and combine with the characteristics of the local community and the existing practical experience in public information disclosure to establish and improve the information disclosure mechanism of downstream investments, optimize design and ensure different stakeholders can fully and equally participate in the planning, design and
implementation of downstream investments.

(6) Social management plan and implementation

Through recognition and analysis of project risks, targeted policy suggestions and action plans should be put forward to avoid or reduce social risks existed in downstream investments and action suggestion should be raised towards the design of information disclosure and social management plan and public participation plan should be formulated according to the results of public consultation in social assessment. As appropriate, for example, actions will be proposed to mitigate potential impacts of workers’ retrenchment. Appendix 1 includes two social safeguards instruments that can guidance social management actions for downstream activities that may involve land acquisition and ethnic minority issues – Ethnic Minority Planning Framework and Resettlement Policy Framework.

(7) Complaint, appeal and monitoring and evaluation

In the process of preparation, construction and operation of downstream investments, extensive community participation should be guaranteed as much as possible and the channel to appeal and complain should be established to timely know and resolve the impacts and problems caused to stakeholders. Supervision and evaluation mechanism should be established to make sure information disclosure, public participation and the social management plan put forward in design of social impact assessment report can be emphasized and implemented.

Principle and framework of public participation

The World Bank points out in its participation manual that public participation is “the process that project stakeholder groups can influence and jointly control through it the development intervention, development decision and related resources with them involved”. Implementation of downstream activities shall be a process to motivate major stakeholder groups to influence and control the development action to prevent major stakeholder groups from being simply regarded as the passive aid receiver, interviewee or labor force in the development process. However, the realization of such process requires to take into account the more extensive stakeholder groups in terms of the whole nation’s economy and its relevant departments to make sure all stakeholder groups and their relationship can be recognized and taken into consideration throughout all phases of the project; make it easier for the poor to obtain the resources, especially the financial resources; and strengthen the management ability of major stakeholders and their organization. A Principle framework for major stakeholder groups to participate in the sequential stages of the project is shown in Table 5-1 below.

Table 6-1 Principles framework for public participation in downstream investments

<table>
<thead>
<tr>
<th>S.N.</th>
<th>Step</th>
<th>Role of major stakeholder groups</th>
<th>Role of government</th>
<th>Role of specialists</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Problem analysis and topic establishment</td>
<td>Analyze family, social, resource and other problems and find out the causes of these problems</td>
<td>Provide administrative, political and financial support</td>
<td>Help major stakeholder groups to analyze the problems and guide them to find out the causes of these problems</td>
<td>It can accurately detect the real problem</td>
</tr>
<tr>
<td>2</td>
<td>Project content and framework</td>
<td>Put forward own needs and compare the relationship between causes of</td>
<td>Research whether the government can support</td>
<td>Present technically feasible suggestions to the government and</td>
<td>Associate project content with the actual need of major stakeholder</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>S.N.</th>
<th>Step</th>
<th>Role of major stakeholder groups</th>
<th>Role of government</th>
<th>Role of specialists</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Project plan</td>
<td>Establish project action plan and determine the person in charge and so on according to household labor force, gender division of labor, season and other social and economic characteristics</td>
<td>Review the relationship between the plan of major stakeholder groups and government appropriation</td>
<td>Make plans together with major stakeholder groups to give early warning of risks</td>
<td>The planned activities can be in conformity with the production season, distribution of labor force and financial condition of major stakeholders</td>
</tr>
<tr>
<td>4</td>
<td>Project implementation</td>
<td>Establish and implement the organization system and elect the responsible person of each activity to carry out project activities</td>
<td>Provide implementation conditions</td>
<td>Provide technical support</td>
<td>The benefited groups should be responsible for their own activities</td>
</tr>
<tr>
<td>5</td>
<td>Monitoring and evaluation</td>
<td>Project executor should monitor its own activities and organize regular evaluation of the progress</td>
<td>Participate in monitoring and evaluation</td>
<td>Analyze the monitoring and evaluation results to report to the government and major stakeholder groups</td>
<td>The benefited groups should timely know the progress of their own activities</td>
</tr>
<tr>
<td>6</td>
<td>Final evaluation of project</td>
<td>Assess the final benefit of its own input and externally supported input</td>
<td>Participate in the evaluation process and review the benefit of government input</td>
<td>Benefit for participating in evaluation and review of technical input</td>
<td>Beneficiaries should assess if they are benefited</td>
</tr>
</tbody>
</table>

**Implementation process and capital arrangement**

Implementation process: Action plan for social management and action plan for public participation should give specific implementation schedule towards all activities to be carried out and arrange responsible organizations to determine the source of funds. Following related requirements, project entities should be responsible for implementation of action plan for social management and action plan for public participation, paying attention to requirements of downstream investments and suggestions of the affected groups, individuals and enterprises through public participation and taking relevant measures to enhance the positive benefits of downstream investments and mitigate the negative impacts.

Capital arrangement: Funds needed in the implementation process of social assessment, social action management plan and action plan for public participation should be an integral budget of downstream investments. It sources may include funds from project entities and governments at all levels, including special funds of relevant departments.
7. Organizational Arrangements of Environmental and Social Management

7.1 Organizational structure of project implementation

The Ministry of Environmental Protection, as the leading department of MCOM implementation, is responsible for the overall coordination for MCOM implementation in China. The Ministry will lead the implementation of the project via its Foreign Economic Cooperation Office in close cooperation with the provincial department of environmental protection of pilot provinces.

The institutional arrangement for the implementation of this proposed GEF Project is shown in Fig. 6-1:

![Institutional Arrangements for Project Management](image)

7.2 Division of responsibilities for social and environmental management of the project

Responsibilities of key agencies on social and environmental management issues are as follows:

(1) World Bank

Oversee the preparation and implementation of ESMF of the project.

(2) Mercury Convention Implementation Division of FECO/MEP

Prepare TORs for consultants and technical specifications of goods to be procured under the project and ensure related elements of ESMF are fully incorporated into the TORs and bidding documents; select competent consultants and good suppliers for national level activities; support provincial departments of environmental protection of pilot provinces to select competent consultants and good suppliers for provincial level activities; oversee the implementation of subprojects with the help of technical experts and provincial departments of environmental protection to ensure ESMF is closed followed and safeguard issues are properly addressed during subproject implementation; regularly report the implementation status including those on safeguards to the World Bank.
(3) Provincial departments of environmental protection

Support FECO to prepare TORs for consultants and technical specifications of goods to be procured under the project for the province and ensure related elements of ESMF are fully incorporated into the TORs and bidding documents; cooperate with FECO to select consultants and good suppliers for provincial level activities; oversee the implementation of subprojects within the province with the help of technical experts and FECO to ensure ESMF is closed followed and safeguard issues are properly addressed during subproject implementation; regularly report the implementation status including those on safeguards to FECO.

(4) Technical consultants

Following the TOR and ESMF to fully incorporate environmental and social safeguards issues into the development process of its consulting reports.

(5) Good suppliers

Following the bidding documents to ensure proper installation and operation of supplied goods.

8. Complaint Mechanism

Public opinions will continue to be collected, information to be properly disclosed and community participation to be maintained during the project implementation. A complaint mechanism has been identified to ensure that complaints from potentially affected groups or individuals can be channeled to FECO and provincial department of environmental protection and be responded in time. The complaint mechanism includes: (1) recording and reporting systems, including written and oral complaint; (2) persons assigned to handle such complaints; (3) time limit for handling such complaints. Complaint procedures include: groups or individuals concerning about potential adverse environmental and social effects of subprojects and their downstream impacts may lodge an oral or written complaint directly to FECO or provincial department of environmental protection, which should respond within the required time limit after receiving such complaints. Valid concerns of filed complaints will be considered as part of stakeholder inputs to the development of the national strategy and sectoral and provincial action plans. The figure below shows the general flowchart of grievance resolution mechanism applicable to the project.

![Figure 7. Flowchart of grievance redress](image)

9. Capacity Building

FECO will designate a staff member to manage environmental and social risks of the project and ensure that appropriate elements of the ESMF are fully incorporated into various project activities. As needed, FECO will hire qualified domestic environmental consultants or consulting firms to assist FECO and provincial departments of environmental protection of
pilot provinces in carrying out activities specified in the ESMF, i.e., to assess and manage environmental risks in project assessment and implementation.

Individual or firm consultants hired by FECO will provide environmental and social safeguard training as needed to all project stakeholders. Technical training covers mainly: 1) environmental laws and regulations as well as social laws, policies and regulations regarding the project; 2) environmental impact and social assessment procedures; 3) possible environmental and social problems caused by project implementation and downstream activities; 4) requirements of relevant safeguard policies of World Bank.

10. Budget for Implementation of Environmental and Social Management Framework

Resources for the implementation of this ESMF has been fully budgeted under the project. FECO and provincial department of environmental protection will supervise consultants and suppliers to ensure proper incorporation of the ESMF into project outputs as part of routine project management efforts.

Appendix 1: Social Safeguard Instruments to Be Considered for Downstream Activities

Based on the results of social assessment, downstream activities shall consider the development and implementation of proper social safeguard instruments to mitigate identified social impacts of downstream investment activities beyond the implementation of this project. This ESMF provide two major social safeguard instruments that may be considered for downstream activities: Ethnic Minority Planning Framework and Resettlement Policy Framework.

Ethnic Minority Planning Framework

Purpose of the Ethnic Minority Planning Framework:

The implementation of downstream activities nationally may be potentially performed in areas of ethnic minorities. Therefore, the Ethnic Minority Planning Framework shall be considered for such downstream activities to ensure (a) ethnic minorities affected by downstream projects can obtain social and economic benefits identified with their cultural habits; (b) if downstream projects have potential negative effects on ethnic minorities, measures will be taken to avoid, minimize and mitigate such negative effects.

Legal basis for the Ethnic Minority Planning Framework:

The Ethnic Minority Planning Framework of downstream investments shall be determined in accordance with relevant national and local laws and regulations in the People’s Republic of China and international best practices. Relevant dedicated national laws and regulations in China mainly include:

- Amendments to the Constitution of the People’s Republic of China
- Law of the Peoples Republic of China on Regional National Autonomy
- Regulations for the Administrative Work of Ethnic Minority Townships
- Regulation for Urban Ethnic Minority Work
- Other local special rules and regulations in areas where ethnic minorities live.
Guidelines for development of the Ethnic Minority Planning Framework:

The Ethnic Minority Planning Framework should contain the following main content:

- Relevant project content
- Potential positive and negative effects of the project on ethnic minorities
- The framework ensuring preliminary and unlimited informed negotiations with affected ethnic minority communities
- Institutional arrangements for screening activities to be funded by the project, assessing effects of these activities on indigenous peoples, developing Ethnic Minority Plan and dealing with any complaints (including capacity building)
- Monitoring arrangements (including mechanisms and indicators suitable for the project)
- Arrangements for information disclosure of the Ethnic Minority Plan to be made in the Ethnic Minority Planning Framework

On Resettlement Policy Framework

Purpose of the Resettlement Policy Framework:

As downstream activities after this project may require land use changes and/or settlements, a policy framework in line with corresponding principles and guidelines international best practices shall be considered to guide planning of such issues of downstream activities.

Objectives of the Resettlement Policy Framework:

The Resettlement Policy Framework shall have the following overall goals including:

- All feasible project design schemes should be discussed so as to avoid or reduce involuntary resettlement as far as possible;
- If resettlement is unavoidable, it should be conceived and implemented as a sustainable development plan. Sufficient funds should be provided to enable migrants to share project benefits. Earnest negotiations should be made with migrants to provide them with an opportunity to participate in resettlement planning and implementation;
- Efforts should be made to help migrants improve their livelihood and living standards, at least actually restoring the higher level before resettlement or project implementation.

The Policy Framework contains principles and goals, proper criteria, rights, legal and institutional frameworks, compensation and restoration modes, participation characteristics, and complaint procedures of resettlement, to provide detailed guidance for compensation, resettlement, restoration, etc.

Guidelines for development of the Resettlement Policy Framework:

- Explanations, according to content of the project, of reasons for the failure to prepare a resettlement plan (or a simple plan) during project assessment;
- Principles and goals of preparing and implementing resettlement activities;
- Steps required for preparation and approval of a resettlement plan;
• Number of people affected, category of affected people, and scope of resettlement that can be estimated;
• Characteristics of affected people;
• Legal framework;
• Valuation method for affected properties;
• Resettlement procedures regarding the project progress;
• Compensation at replacement cost;
• Grievance redress mechanism;
• Capital arrangement;
• participation mechanism of project affected people during the design and implementation of a resettlement plan;
• Monitoring plan arrangements for resettlement process and results.