## Annex [#]. Social and Environmental Screening Template

The completed template, which constitutes the Social and Environmental Screening Report, must be included as an annex to the Project Document. Please refer to the Social and Environmental Screening Procedure and Toolkit for guidance on how to answer the 6 questions.

### **Project Information**

Project Information	
1. Project Title	National Program for the Environmental Sound Management and Live Cycle Management of Chemical Substances
2. Project Number	5706
3. Location (Global/Region/Country)	Ecuador

## Part A. Integrating Overarching Principles to Strengthen Social and Environmental Sustainability

#### QUESTION 1: How Does the Project Integrate the Overarching Principles in order to Strengthen Social and Environmental Sustainability?

#### Briefly describe in the space below how the Project mainstreams the human-rights based approach

The proposed project aims to address two global environmental problems, i) the release of Persistent Organic Pollutants (POPs) and ii) the release of mercury (Hg). Both are persistent substances that do not readily break down in the environment, bio-accumulate in the food chain, and are able to travel long distances far away from the place where they were produced. Because of their detrimental impact on human and environmental health, they are considered a global threat.

In order to address challenges at national level pertaining to POPS, mercury and other chemicals and wastes of concern, the project aims to promote the rational and sustainable life cycle management of chemicals, with the purpose of reducing negative environmental impacts and risks of chemicals, products containing chemicals and affiliated wastes.

The Universal Declaration of Human Rights proclaimed by the General Assembly, contains a number of articles that are closely linked to the scope of the proposed project. These articles which will ensure that the human-rights based approach is mainstreamed in the project, are the following:

Article 3. "Everyone has the right to life, liberty and security of person". The project will directly contribute to the protection of human health and the environment by reducing the negative impacts resulting from the use and release of POPS, mercury and other chemicals and wastes of concern, as such the project will contribute to protecting people's right to life.

Article 19. "Everyone has the right to freedom of opinion and expression"; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers. The project will ensure that stakeholders impacted by, involved in and interested in the rational and sustainable life cycle management of chemicals will be engaged in the project's development and implementation, through participation mechanisms, workshops and awareness raising events to allow them to express their opinions on the project and its intended activities.

Furthermore, project activities, objectives and results will be widely disseminated through various media channels throughout the project's implementation (in the form of case study reports capturing results and lessons-learned from main project interventions; scientific articles; project related news articles and an end-of-project report). All project prepared materials will be disseminated at national, regional and global level and published on existing long-term Knowledge Management hubs (e.g. GEF GOLD KM hub; http://www.artisanalmining.org//CASM; Swiss funded ASM -As such, the project will contribute to people's access to information and provide them with opportunities to express their opinions.

Article 23 (2) "Everyone has the right to work, to free choice of employment, to just and favorable conditions of work and to protection against unemployment". The project will improve the working conditions (in terms of health impact) of project beneficiaries (e.g. miners, healthcare workers, agricultural workers, waste workers, recyclers, among many others) that will directly benefits from the project, while replication of successful practices at national and regional level is also expected to benefit many additional workers. As such the project will contribute to protecting people's right to favorable conditions of work.

Briefly describe in the space below how the Project is likely to improve gender equality and women's empowerment

During the Project Preparation Phase of this Chemicals and Waste project, a gender analysis (see Annex P) was conducted by a national gender expert. The gender analysis (centered on sex and gender variables), allowed for the identification of the different roles and tasks that men and women perform and that put them at risk of exposure to the various hazardous chemicals that are expected to be addressed by this project. The gender assessment also identified irregularities and power relations, inequities and inequalities and helped to recognize the causes of these inequalities.

Subsequently, based on the outcomes of the gender analysis, a gender strategy (see Annex P) was formulated to help design project interventions that would help towards overcoming gender related gaps, and provide insight on how these interventions would affect the results and sustainability of the project. In order to produce a gender strategy and mainstream gender into the project, the following activities were undertaken during the PPG phase: i) Mapping of current Government policies and commitments pertaining to environment and gender equality; ii) A gender-specific analysis of the program's areas of intervention; iii) An analysis of project activities and GEF requirements; iv) Identification of gender gaps which could be influenced by the project; v) Activities that can reduce gender gaps were proposed; vi) Specific gender indicators were included in the Project's Results Framework (PRF), while other PRF indicators were made gender specific.

More specifically, the project aims to improve gender equality and women's empowerment, through the following interventions:

- Include gender sensitization modules in all training activities supported by the project.
- Align training materials and activities with local family realities, promote positive actions towards the role and involvement of women in family income generating activities
- and family finances, respect communities' ethnicity, miners/women's time availability, cultural practices, etc.
- Ensure women participation in all project related activities (varying between 30 50 %- depending on the sector to be supported).
- Conduct in-depth chemicals related inventories (UPOPs, Hg, POPs pesticides etc.), which with also collect sex disaggregated and gender specific datal and conduct a
- characterization of the impacted (work) population and measure the participation, empowerment and improvement of work/living conditions for men/women.
- Develop awareness raising materials that are specifically tailored to either men or women.
- Provide specific support to women's miming groups in exchanging experiences in ASGM.
- Support at least 2 processing plants (out of at least 5) that are used by women in improving their ore processing (including economic/business case analysis to identify
- potential financial gains).
- Provide tailored support to women miners (Jancheras) to improve ore processing.
- Support at least 1 miners group containing women (out of a total of 3) in their formalization processes.
- Support at least 1 financial entity in developing/improving a product that serves the ASGM sector and includes soft criteria that promote the formalization and association
- of women/youth, the legalization of land, and women entrepreneurship in ASGM.
- Hire a gender expert to support project implementation.

By including in all training/capacity building related activities a gender sensitization module, the project expects that everyone trained by the project will become more aware of gender challenges in their respective sectors and would be better placed to help overcome gender inequality and promote gender empowerment in the future.

By involving a minimum % of women in all project activities and improving their competitiveness/capacity/knowledge in/of various sectors (ASGM, healthcare, etc.), the project expects that women become more aware of the dangers of chemicals, become more empowered in their work and their communities and increase their income, thus improving gender equality. Additionally, the project will encourage the emergence of 'champions' of better practices. Experience from other projects has demonstrated that this values-based effort can reinforce women empowerment within project facility settings and beyond. This is particularly important, as women, young children and the child in utero are particularly susceptible to the negative impact of chemicals.

In the ASGM sector in specific, the project will support a number of women mining groups in their formalization processes and in improving ore processing (increasing their gold recovery yields) — directly contributing to gender equality and increased incomes.

#### Briefly describe in the space below how the Project mainstreams environmental sustainability

The project's overall objective (to be funded by the Global Environment Facility) is to improve environmental sustainability by reducing releases of POPs, mercury and other chemicals of concern to protect human and environmental health at local, regional and global level, as POPs and Hg are considered to be global pollutants. In particular the project will strive to achieve environmental sustainability through:

- Strengthening institutional capacity and the regulatory and policy framework for the Sound Management of Chemicals (SMC) based on a Life-Cycle Approach. Eliminating POPs stockpiles and reducing the use and release of initial and newly listed POPS (including those contained in products).
- Reducing the use and releases of mercury from priority sectors.
- Raising awareness, ensure project monitoring and disseminate project results and experiences.<sup>1</sup>

In addition to the above, the project will also strive to improve the management of agricultural-, healthcare-, hazardous- and municipal- wastes, resulting in additional environmental benefits.

On the one hand the project directly supports the phase-down/out of a number of chemicals of concern — which will prevent their releases into the environment in the future. On the other hand, the project will support the improvement of the regulatory and policy framework related to the LCM of chemicals and will further enhance the capacity of national institutions and private entities in phasing down the use of chemicals of concerns and improving their management. These interventions will support the long-term sustainability of project results and the environment.

<sup>&</sup>lt;sup>1</sup>Sex, age, ethnicity, levels education, main diseases, family income, population characteristics, heads of households, time use, family members' roles, among other relevant dat.

# Part B. Identifying and Managing Social and Environmental Risks

QUESTION 2: What are the Potential Social and Environmental Risks?  Note: Describe briefly potential social and environmental risks identified in  Attachment 1 – Risk Screening Checklist (based on any "Yes" responses). If no risks have been identified in Attachment 1 then note "No Risks Identified" and skip to Question 4 and Select "Low Risk". Questions 5 and 6 not required for Low Risk Projects.	QUESTION 3: What is the level of significance of the potential social and environmental risks?  Note: Respond to Questions 4 and 5 below before proceeding to Question 6			QUESTION 6: What social and environmental assessment and management measures have been conducted and/or are required to address potential risks (for Risks with Moderate and High Significance)?
Risk Description	Impact and Probability (1-5)	Significance (Low, Moderate, High)	Comments	Description of assessment and management measures as reflected in the Project design. If ESIA or SESA is required note that the assessment should consider all potential impacts and risks.
Risk 1: The Project could potentially cause adverse impacts to habitats (e.g. modified, natural, and critical habitats) and/or ecosystems and ecosystem services	I = 2 P = 2	Low	This risk is expected to be predominantly relevant to project component 3 related to Artisanal and Small Scale Gold Mining (ASGM). Exploration for gold through Artisanal and Small Scale Gold Mining in Ecuador is intrinsically damaging to habitats ecosystems and ecosystem services. The project aims to support miners in introducing best environmental practices and best available technologies for ASGM (in particular related to mercury-free ore processing	ASGM is a particularly damaging activity to habitats, ecosystem and ecosystem services.  The project aims to support ASGM miners in phasing-out the use of — 2 tons of mercury over the project's duration, by training 350 ASGM miners and mining communities in ore analysis, recovery of minerals using mercury-free recovery methods, legislation, formalization, access to finance/existing financial incentives, tailing management, site remediation/mine closure, among else.  Furthermore, the project will support at least 5 processing plants (at least 2 occasionally used by women) in improving their ore processing (e.g. introduction of mercury-free gravimetric concentration methods, improved tailings and water management, among other interventions).  Finally, the project will also work with at least 1 financial entity to develop/improve a financial product that serves the ASGM sector to help

			management of tailings, and mine closure). It is expected that practices of those processing centers and mining groups supported by the project will have been improved from an environmental perspective by the end of the project as compared to the start of the project. However, damage to habitats/ecosystems will continue to be caused by ASGM in general as is beyond the control of the project.	introduce cleaner processing practices, which would include soft criteria that promote the formalization and association of women/youth, the legalization of land, and women entrepreneurship in ASGM.  Increased efficiency in mining as introduced by the project might also results in full exploration of mining sites and avoids the need for quickly moving on to new locations and new gold sites, reducing potential impact to such sites.
Risk 2: The project could potentially involve changes to the use of lands and resources that may have adverse impacts on habitats, ecosystems, and/or livelihoods	I = 2 P = 2	Low	This risk is expected to be predominantly relevant to the project component related to Artisanal and Small Scale Gold Mining (ASGM).  Lands and resources previously not explored for gold, could potentially be explored during the course of the project by the ASGM communities that are directly/indirectly	It is important that the project will not (indirectly) encourage the opening up of new gold mines on lands to which miners do not hold a title, or which would be located on lands where ASGM is not allowed (e.g. protected areas, etc.). The project anticipates to support ASGM miners in phasing-out the use of — 2 tons of mercury over the project's duration, by training 350 ASGM miners and mining communities in ore analysis, recovery of minerals using mercury-free recovery methods, legislation, formalization, access to finance/existing financial incentives, tailing management, site remediation/mine closure, among else.

Risk 3: The project could pose potential	I = 2	Low	benefitting from the project.  If new lands/resources are explored, this can have an adverse impact on habitats and ecosystems	Focus of the project will be on improving the processing of ore and eliminating the use of mercury in extracting gold Furthermore, the project will also support mining groups in their formalization processes, and provide support to finance institutions to develop financial products that would serve the ASGM sector to help introduce cleaner processing practices.  Finally, the project will also develop at least 1 partnership/ agreement with legal gold buyers. These interventions (access to cleaner processing/formalization/legal financing and better gold prices for legal gold, etc.) are expected to help curb the exploration of gold mines on lands where ASGM is prohibited.  The project will also develop:  - 1 guidance document on the management of solid and liquid waste and air emissions generated by gold/ore processing plants.  - 1 Maximum Permissible Limit standard for the discharge of effluents and sludge products from mineral processing activities.  - 1 guidance document on the preparation of a mine closure plan (incl. remediation).  To minimize impact on habitats and ecosystem, as part of the project's capacity building activities, in addition to phasing out mercury and increasing gold recovery rates, the project will also train miners on good mining practices, including ecosystem management and protection, mine closure and rehabilitation, among else, to minimize the impact of ASGM practices on habitats, ecosystems, and/or livelihoods.  The project's main objectives are to:
risks 3. The project could pose potential risks to community health and safety due to the transport, storage, and use and/or disposal of hazardous or dangerous materials (e.g. explosives, fuel and other	P = 2	LOW	components that aim to significantly reduce the use of products containing POPs and	- Reduce the use of mercury in ASGM by 2 tonnes Dispose of 30 tonnes of obsolete pesticides.

chemicals during construction and operation)

mercury, introduce POPs-free and Hg-free alternatives and improve the management storage and disposal of POPS and mercury containing wastes as well as other types of wastes of which their management currently results in the releases of unintentional POPs agricultural-, healthcare-, municipal-wastes).

However, if the wastes that are expected to be managed as part of the proposed project, are not properly managed/stored disposed safely, this could create adverse impacts to community health and those people and workers coming in close contact with these types of wastes.

- Support the disposal of 90 tonnes of empty pesticide containers
- Reduce the use of POPs/Hg containing products, and reduce the generation of related hazardous wastes by introducing alternatives to POPs/Hg containing products and improving the management of POPs/Hg containing wastes.
- Dispose of 10 tons of mercury containing waste products-
- Improve the management of agricultural-, healthcare- hazardous-, municipal- wastes and other types of wastes of which their open burning/incineration is resulting in the release of UPOPs.

The main risks posed by the transport, storage and disposal of hazardous or dangerous materials as the project concerns include:

- Collection, temporary storage and disposal of 30 tonnes of obsolete pesticides
- Collection, temporary storage and disposal of 10 tons of mercury containing waste products
- Collection, transportation of 90 tonnes of empty pesticides containers (including their triple rinsing prior to collection which might result in water pollution at the site where the pesticide containers are being rinsed).
- To mitigate the risks identified, the project will engage
- (throughtransparent and competitive international procurement procedures) entities that can ensure the safe repackaging, collection, transportation and disposal and the 30 tonnes of obsolete pesticides and the 10 tonnes of mercury containing wastes.

Furthermore, the project will:

				<ul> <li>Train 30 people in chemical related emergency response procedures.</li> <li>Train 1 local transportation company and personnel of four (4) centralized temporary storage centers² in the safe repacking and transportation of obsolete pesticides (incl. gender sensitization module).</li> <li>Develop and disseminate 1 guideline on the identification, safe storage, packaging, transportation, data management, inspection/monitoring and final disposal of POPs-containing wastes and products.</li> <li>Develop and disseminate 1 guideline on the identification, safe storage, packaging,</li> </ul>
				<ul><li>inspection/monitoring and final disposal of Hg- containing wastes and products.</li><li>Develop/revise and disseminate 1 guideline on</li></ul>
				the management of obsolete pesticides.  - Introduce recommendation to reduce environmental
				<ul> <li>impact from pesticide container rinsing at 1     pesticide distributor and disseminate case study     report disseminated to other distributors</li> </ul>
				involved in container rinsing.
Risk 4: The project could pose potential risks and vulnerabilities related to occupational health and safety due to physical, chemical, biological, and	I = 2 P = 2	Low	The project includes components that aim to significantly reduce the use of products	Similar to what was indicated in relation to Risk 3 (see directly above), the main risks related to occupational health and safety as the project concerns, include:
radiological hazards during Project construction, operation, or decommissioning.			containing POPs and mercury, introduce POPs-free and Hg-free	<ul> <li>Collection, temporary storage and disposal of 30 tonnes of obsolete pesticides.</li> <li>Collection, temporary storage and disposal of</li> </ul>
_			alternatives and improve the management	<ul> <li>10 tons of mercury containing waste products.</li> <li>Collection, transportation of 90 tonnes of empty pesticides containers (including their</li> </ul>

<sup>&</sup>lt;sup>2</sup> APCSA has 4 and INNOVAGRO has 2 temporary centralized storage facilities for plastics contaminated with agrochemicals. All of them have environmental permits. These temporary storage facilities could be used by the project for the temporary storage of obsolete pesticides before disposal,

storage and disposal of POPs and mercury containing wastes, as well as other types of wastes of which their management currently results in the releases of unintentional POPs (agricultural-, healthcare-, municipal-wastes).

However, if the products and wastes that are expected to be managed as part of the proposed project, are not properly managed/stored/treate d or disposed safely, this could pose potential risks and vulnerabilities related to occupational health and safety due to chemical hazards during project operation.

- triple rinsing prior to collection which might result in water pollution at the site where the pesticide containers are being rinsed).
- Operation of entities, which release UPOPs emissions (e.g. hazardous waste management facilities/incinerators, landfills, recycling facilities, etc.).

To mitigate the risks identified, the project will engage (through transparent and competitive international procurement procedures) entities that can ensure the safe repackaging, collection, transportation and disposal and the 30 tonnes of obsolete pesticides and the 10 tonnes of mercury containing wastes. Such entities would have the proper health and safety procedures in place.

#### Furthermore, the project will:

- Train 30 people in chemical related emergency response procedures.
- Train 1 local transportation company and personnel of four (4) centralized temporary storage centers<sup>3</sup> in the safe repacking and transportation of obsolete pesticides (incl. gender sensitization module).
- Develop and disseminate 1 guideline on the identification, safe storage, packaging, transportation, data management, inspection/monitoring and final disposal of POPs-containing wastes and products.
- Develop and disseminate 1 guideline on the identification, safe storage, packaging, transportation, data management,

<sup>&</sup>lt;sup>3</sup> APCSA has 4 and INNOVAGRO has 2 temporary centralized storage facilities for plastics contaminated with agrochemicals. All of them have environmental permits. These temporary storage facilities could be used by the project for the temporary storage of obsolete pesticides before disposal.

	1		1	in an artist for a standard and final disc. I for
				inspection/monitoring and final disposal of Hg-
				containing wastes and products.
				- Develop/revise and disseminate 1 guideline
				on the management of obsolete pesticides.
				- Assess and make recommendations for the
				introduction of BEP/BAT interventions to
				reduce UPOPs releases at 2 medical waste
				incineration facilities; 1 landfill, 1 pesticide
				container recycler; <sup>4</sup> 2 hazardous waste
				incinerators/recyclers; 5,500 hectares under
				cultivation, 1 contaminated site.
Risk 5: The project may involve support	I = 2	Low	This risk is expected to	The project anticipates to support ASGM miners in
for employment or livelihoods that may	P = 3		be predominantly	phasing-out the use of — 2 tons of mercury over the
fail to comply with national and			relevant to project	project's duration, by training 350 ASGM miners and
international labor standards (i.e.			component 3 related to	mining communities in ore analysis, recovery of minerals
principles and standards of 110			Artisanal and Small Scale	using mercury-free recovery methods, legislation,
fundamental conventions).			Gold Mining (ASGM).	formalization, access to finance/existing financial
				incentives, tailing management, site remediation/mine
			The project anticipates	closure, among else. Furthermore, the project will also
			to support ASGM miners	support at least 5 processing plants (at least 2
			in phasing-out the use of	occasionally used by women) in improving their ore
			<ul><li>2 tonnes of mercury</li></ul>	processing (e.g. introduction of mercury-free gravimetric
			over the project's	concentration methods, improved tailings and water
			duration. The use of	management, among other interventions).
			mercury in ASGM is	
			nowadays prohibited in	Focus of the project will be on improving the processing
			Ecuador. Currently	of ore and eliminating the use of mercury in extracting
			it's predominantly the	gold.
			non-industrial informal	
			miners that use mercury	Furthermore, the project will also support mining groups
			to extract gold.	in their formalization processes, and provide support to
				finance institutions to develop financial products that
			Therefore, it is assumed	would serve the ASGM sector to help introduce cleaner
			that the majority of	processing practices Finally, the project will also develop
			miners who will receive	at least 1 partnership/ agreement with legal gold buyers
			project support are	

<sup>&</sup>lt;sup>4</sup> ISFFA and ISSPOL (public entities)

			informal. It is likely that their livelihoods currently fail to comply with national and international labor standards.	to make it feasible for miners on the route to formalization to obtain a better gold price.  These interventions (access to cleaner processing/formalization/legal financing and better gold prices for legal gold, etc.) are expected to help informal miners and mining groups in their formalization processes and improve their general work conditions.
Risk 6: The proposed project could possibly affect land tenure arrangements and/or community based property rights/customary rights to land, territories and/or resources.	I = 2 P = 2	Low	This risk is expected to be only relevant to project component3, which is related to Artisanal and Small Scale Gold Mining (ASGM). In Ecuador, informal ASGM miners often do not hold the titles/rights to the land on which they are mining. Such titles are most often held by titleholders that are living in larger cities, although most often these do not receive any income from mining activities conducted on their lands. In formalization/access to legal financing and better gold prices most cases informal ASGM for legal gold) are expected to entice informal miners and miners mine on lands to	An important aspect that will be considered by the project is that artisanal miners need to be able to mine legally, as it is an import aspect of becoming formalized, gaining access to loans and being able to sell gold to formal buyers for a higher price.  The project anticipates to train 350 ASGM miners and mining communities in many ASGM related subjects, including Legislation, formalization and access to finance. Furthermore, the project will also support a minimum of 3 mining groups in their formalization processes and establish partnerships with legal buyers.  These interventions (access to cleaner processing/support for formalization/access to legal financing and better gold prices for legal gold) are expected to entice informal miners and mining groups to advance their formalization processes. In turn this might impact land tenure arrangements but this would be considered a positive effect, with artisanal miners mining on lands with the appropriate authorizations.

			which they do not hold a title.  The project will support miners and mining communities in their formalization processes. Secondly the project will support interventions that would make it easier for miners to obtain the rights to lands as well as the mining resources these hold. As such land tenure arrangements could be affected.	
Risk 7: Indigenous people are present in the project area (including project area of influence).	I = 1 P = 4	Low	The project aims to work in 3 project areas, which are Ponce Enriquez, Portovelo and Chinapintza. The gender assessment conducted as part of PPG, presented the self identified ethnicity of the women population in the 3 project areas. It is assumed that the men population has a similar make-up.  In Camilo Ponce Enriquez, 86.44% of all women are considered mestizas; 6.17% are white; 2.96% are afro	In particular in Chinapintza a large percentage of the population is indigenous (34%). It is assumed that a similar percentage of indigenous people are involved in ASGM, and/or ASGM activities. Some of these ASGM activities might be taking place on lands, which might belong to indigenous people.  In the other two project areas (Ponce Enriquez and Portovelo), the percentage of indigenous people does not appear to be large enough to be indicated in percentages. It is therefore assumed that the indigenous population in these two project sites is very small.  The project has taken up a specific target related to indigenous people: at least 5% of the miners to be supported in the three project areas would identify themselves as from indigenous decent.  It should be noted that the overall objective for the project is to reduce releases of harmful chemicals to the environment improve land management issues

			Ecuadorian and 1.62% are montubias . In Portovelo, 69.91% of all women are considered mestizas; 18.11% are montubias; 7.54% are white and 2.64% are afro-Ecuadorian.	surrounding ASGM and improve the livelihoods of people involved in mining. As such it is thought that the project's impacts on indigenous and local population will be positive rather than negative.
Risk 8: The project could potentially result in the release of pollutants to the environment due to routine or nonroutine circumstances with the potential for adverse local, regional, and/or transboundary impacts.	I = 1 P = 4	Low	The project's components and interventions aim to reduce the release of mercury, POPs and other chemicals of concern to the environment. Chemicals that have the potential for adverse local, regional and/or transboundary impact.  As a result of the project, it is expected that these pollutant releases will be significantly reduced, however, pollutant releases will continue to occur and will not be fully eliminated.  There are a number of project areas where the release of pollutants needs to be monitored	For most project activities no management measures are required, considering the objective is to support entities in reducing pollutant releases of mercury, POPs and other chemicals of concern.  However, there are a few activities supported by the project, which are thought to carry more risk that other activities, these are:  ASGM —the inadequate management of mining tailings by the project's training plant but more importantly (as it is harder to control) by the processing plants that will receive project support.  One of the main concerns is that currently mining tailing are often illegally dumped in the river and that such practices might (partially) continue during project implementation.  Proposed project measures:  - As part of the project activities, conduct an assessment on sound ways to dispose of mining tailing produced by processing facilities supported by the project.  - Develop/revise 1 guidance document on the management of solid and liquid waste and air emissions generated by gold/ore processing plants.

closely by the project,	- Develop/revise 1 Maximum Permissible Limit
these are ASGM	standard for the discharge of effluents and
activities, rinsing of	sludge products from mineral processing
empty pesticide	activities.
containers, and	
collection and treatment	Pesticide container collection/recycling. The project will
of POPS and Hg	support an increase (90 tonnes) in the collection,
containing wastes.	recycling and disposal of empty pesticide container
Containing Wastes.	handling <sup>5</sup> . The main concern with an increase in the
	collection of pesticide containers is that recycling
	requires a triple rinse procedure. These rinsing
	procedures could result in the pollution of local water
	sources if sound practices are not applied.
	sources it south practices are not applied.
	Proposed project measures:
	- Assess the facilities of 4 large pesticide-using
	companies (members of APCSA) to assess
	rinsing facilities
	- Prepare recommendation to reduce
	· · · · · · · · · · · · · · · · · · ·
	environmental impact from pesticide container
	rinsing
	- Introduce recommendations at one (1)
	pesticide distributor.
	- Prepare case study report on improved
	pesticide container rinsing practices and
	disseminated among all facilities that rinse
	pesticide containers.
	Collection and treatment of POPs and Hg containing
	wastes — As part of the project 30 tonnes of obsolete
	pesticides and 10 tonnes of mercury containing wastes
	will be collected and disposed of/treated. The
	collection, accumulation and temporary storage of such
	waste can result in the release of pollutants to the
	environment.

<sup>&</sup>lt;sup>5</sup> APCSA has 4 and INNOVAGRO has 2 temporary centralized storage facilities for plastics contaminated with agrochemicals. All of them have environmental permits. These temporary storage facilities could be used by the project for the temporary storage of obsolete pesticides before disposal

				Proposed project measures:  - To mitigate the risks identified, the project will engage (through transparent and competitive international procurement procedures) entities that can ensure the safe repackaging, collection, transportation and disposal and the 30 tonnes of obsolete pesticides and the 10 tonnes of mercury containing wastes and have extensive experience in this area.
				Furthermore, the project will:
				<ul> <li>Train 30 people in chemical related emergency response procedures.</li> <li>Train 1 local transportation company and personnel of four (4) centralized temporary storage centers s in the safe repacking and transportation of obsolete pesticides (incl. gender sensitization module).</li> <li>Develop and disseminate 1 guideline on the identification, safe storage, packaging, transportation, data management, inspection/monitoring and final disposal of POPs-containing wastes and products.</li> <li>Develop and disseminate 1 guideline on the identification, safe storage, packaging, transportation, data management, inspection/monitoring and final disposal of Hg-containing wastes and products.</li> </ul>
Risk 9: The proposed project would potentially result in the generation of waste (both hazardous and non-hazardous).	I = 2 P = 3	Low	The project includes components that aim to significantly reduce the use of products containing POPs and mercury, introduce POPs-free	No management measures are required, considering one of the project's objectives is to reduce the generation of POPs/Hg containing wastes (hazardous) by introducing alternatives to POPS/Hg containing products and improving the management of POPs/Hg containing wastes.

			and Hg-free alternatives and improve the management, storage and disposal of POPs and mercury containing wastes, well as other types of wastes of which their management currently results in the releases of unintentional POPS (agricultural-, healthcare-, municipal-, hazardous-wastes)	Furthermore, the project aims to improve the management of other types of wastes (agricultural-, healthcare-, municipal-, hazardous- wastes) that currently lead to releases of UPOPs.  Overall, the project will result in a reduction in the generation of hazardous wastes and improve the management of hazardous/non-hazardous wastes.
Risk 10: The proposed project would potentially involve the manufacture, trade, release, and/or use of hazardous chemicals and/or materials.	I = 2 P = 3	Low	The project includes a component that aims to 0 significantly reduce the use and release of mercury from artisanal and Small Scale Gol Mining (ASGM) and ii) to phase-out the use of mercury containing products, introduce mercury-free alternatives and demonstrate the environmentally sound disposal/treatment of mercury containing wastes.  Furthermore, the project aims to reduce POPs releases through the gradual phase-out of POPs containing	No management measures are required, considering the main project's scope is to reduce the trade, release and/or use of hazardous chemicals and materials.  Both mercury and POPs are listed in international conventions, in the Minamata Convention on Mercury and the Stockholm Convention on Persistent Organic Pollutants.  Even though the use of mercury in ASGM will be prohibited in Ecuador by December 2016, it is expected that use of mercury for gold recovery in ASGM will continue. The project will support mining communities to significantly reduce the use and their reliance on mercury, that said, mercury releases will continue to occur throughout the implementation of the project.  Secondly, the project will also support the phase-out of POPs, and Hg containing products, introduce POPs-free and Hg-free alternatives, and introduce improved waste, storage and disposal practices for wastes containing such substances. However, mercury and POPs releases, although they will be significantly decreased as

			products and their improved management improve the management of contaminated sites as well reduce UPOPs releases from processes (recycling, incineration) and burning practices.	compared to the project's baseline, will continue to occur throughout the implementation of the project.  Thirdly, the project will support various sectors in disposing of POPs pesticide stockpiles and reduce releases of unintentionally produced POPS resulting from burning/incinerations practices. Nonetheless, POPs/UPOPs releases, although significantly reduced, will continue to occur throughout the project's implementation.
Risk 11. The project could be impacted by the effects of the COVID-19 pandemic. It would cause a delay in the implementation of activities and consequently in achieving the goals of its indicators.	I=3 P=1	Moderate	This new risk has a "Moderate" impact significance because it could mainly impact components 2 and 3, related to POPs and Mercury, specifically in the processes that involve field work, consequently it would cause a delay in achieving thier objectives and goals; Regarding components 1 and 4, they do not present major complications to advance because most of their activities can be carried out using virtual tools.  The probability is "Low" because local governments adopted security protocols to restart productive	The project has taken the following measures to adapt and manage this risk: i) To adapt planning to current conditions, mainly applying flexibility and new ways of working with the use of virtual tools; ii) To identify processes that can be accelerated (originally planned for the years 2021-2022) and new opportunities for action in order to contribute to the project's objectives, for its immediate and priority execution; iii) To identify processes that cannot be implemented under current conditions; iv) To promote agreements with consultants to carry out their activities remotely and / or virtual and review of contract terms; v) To review and adjust the annual and global budget.  On the other hand, in immediate response to the pandemic, the program designed and implemented a campaign to collect donations to deliver food and basic products to a prioritized group of 35 women miners (jancheras) and their vulnerable families, who are part of the direct beneficiaries of the project, in order to mitigate the economic impact of COVID-19.

activities an	d trips to the	
interior of t	he country.	
QUESTION 4: What is the overall Project	t risk categorization?	
Select one (see <u>SESP</u> fo	or guidance)	Comments
Low Risk	X	Eleven (11) risks were identified. Of which 10 are identified to be low risk (these were identified in Prodoc) and 1 new moderate risk (It was identified during project implementation).
Moderate Risk		
High Risk		
QUESTION 5: Based on the identified risks and risk categorization, what requirements of the SES are relevant?  Check all that apply		Comments
Principle 1: Human Rights		
Principle 2: Gender Equality and Women's Empowerment		
Biodiversity Conservation and Natural     Resource Management	х	
Climate Change Mitigation and     Adaptation		
3. Community Health, Safety and Working Conditions	X	
4. Cultural Heritage		
5. Displacement and Resettlement	X	
6. Indigenous Peoples	х	
7. Pollution Prevention and Resource Efficiency	х	

## **Final Sign Off**

Signature	Date	Description
QA Assessor		UNDP staff member responsible for the Project, typically a UNDP Programme Officer. Final signature confirms they have "checked" to ensure that the SESP is adequately conducted.
Mr. Kasper Koefoed RTA Environment and Energy Unit UNDP	nuu	
QA Approver  Mrs. Matilde Mordt Resident Representative UNDP	Matilde Mordt	UNDP senior manager, typically the UNDP Deputy Country Director (DCD), Country Director (CD), Deputy Resident Representative (DRR), or Resident Representative (RR). The QA Approver cannot also be the QA Assessor. Final signature confirms they have "cleared" the SESP prior to submittal to the PAC.
PAC Chair	Joniea Indrado	UNDP chair of the PAC. In some cases PAC Chair may also be the QA Approver. Final signature confirms that the SESP was considered as part of the project appraisal and considered in recommendations of the PAC.
Mrs. Mónica Andrade Officer in Charge UNDP		

## SESP Attachment 1. Social and Environmental Risk Screening Checklist

Che	cklist Potential Social and Environmental <u>Risks</u>	_
Principles 1: Human Rights		Answer (Yes/No)
1.	Could the Project lead to adverse impacts on enjoyment of the human rights (civil, political, economic, social or cultural) of the affected population and particularly of marginalized groups?	No
2.	Is there a likelihood that the Project would have inequitable or discriminatory adverse impacts on affected populations, particularly people living in poverty or marginalized or excluded individuals or groups? <sup>6</sup>	No
3.	Could the Project potentially restrict availability, quality of and access to resources or basic services, in particular to marginalized individuals or groups?	No
4.	Is there a likelihood that the Project would exclude any potentially affected stakeholders, in particular marginalized groups, from fully participating in decisions that may affect them?	No
5.	Is there a risk that duty-bearers do not have the capacity to meet their obligations in the Project?	No
6.	Is there a risk that rights-holders do not have the capacity to claim their rights?	No
7.	Have local communities or individuals, given the opportunity, raised human rights concerns regarding the Project during the stakeholder engagement process?	No
8.	Is there a risk that the Project would exacerbate conflicts among and/or the risk of violence to project-affected communities and individuals?	No
Princ	ciple 2: Gender Equality and Women's Empowerment	
1.	Is there a likelihood that the proposed Project would have adverse impacts on gender equality and/or the situation of women and girls?	No
2.	Would the Project potentially reproduce discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits?	No
3.	Have women's groups/leaders raised gender equality concerns regarding the Project during the stakeholder engagement process and has this been included in the overall Project proposal and in the risk assessment?	No
4.	Would the Project potentially limit women's ability to use, develop and protect natural resources, taking into account different roles and positions of women and men in accessing environmental goods and services?	No
	For example, activities that could lead to natural resources degradation or depletion in communities who depend on these resources for their livelihoods and well being	
	ciple 3: Environmental Sustainability: Screening questions regarding environmental risks are encompassed by pecific Standard-related questions below	
Stan	dard 1: Biodiversity Conservation and Sustainable Natural Resource Management	

<sup>&</sup>lt;sup>6</sup> Prohibited grounds of discrimination include race, ethnicity, gender, age, language, disability, sexual orientation, religion, political or other opinion, national or social or geographical origin, property, birth or other status including as an indigenous person or as a member of a minority. References to "women and men" or similar is understood to include women and men, boys and girls, and other groups discriminated against based on their gender identities, such as transgender people and transsexuals.

3.1	Would elements of Project construction, operation, or decommissioning pose potential safety risks to local communities?	No
Stand	ard 3: Community Health, Safety and Working Conditions	
2.3	Is the proposed Project likely to directly or indirectly increase social and environmental vulnerability to climate change now or in the future (also known as maladaptive practices)?  For example, changes to land use planning may encourage further development of floodplains, potentially increasing the population's vulnerability to climate change, specifically flooding	No
2.2	Would the potential outcomes of the Project be sensitive or vulnerable to potential impacts of climate change?  Is the proposed Project likely to directly or indirectly increase social and environmental vulnerability to	No
2.1	Will the proposed Project result in significant <sup>7</sup> greenhouse gas emissions or may exacerbate climate change?	No
Stand	ard 2: Climate Change Mitigation and Adaptation	
	For example, a new road through forested lands will generate direct environmental and social impacts (e.g. felling of trees, earthworks, potential relocation of inhabitants). The new road may also facilitate encroachment on lands by illegal settlers or generate unplanned commercial development along the route, potentially in sensitive areas. These are indirect, secondary, or induced impacts that need to be considered. Also, if similar developments in the same forested area are planned, then cumulative impacts of multiple activities (even if not part of the same Project) need to be considered.	
1.11	Would the Project result in secondary or consequential development activities which could lead to adverse social and environmental effects, or would it generate cumulative impacts with other known existing or planned activities in the area?	No
L.10	Would the Project generate potential adverse transboundary or global environmental concerns?	No
L.9	Does the Project involve utilization of genetic resources? (e.g. collection and/or harvesting, commercial development)	No
1.8	Does the Project involve significant extraction, diversion or containment of surface or ground water? For example, construction of dams, reservoirs, river basin developments, groundwater extraction	No
1.7	Does the Project involve the production and/or harvesting of fish populations or other aquatic species?	No
1.6	Does the Project involve harvesting of natural forests, plantation development, or reforestation?	No
1.5	Would the Project pose a risk of introducing invasive alien species?	No
1.4	Would Project activities pose risks to endangered species?	No
1.3	Does the Project involve changes to the use of lands and resources that may have adverse impacts on habitats, ecosystems, and/or livelihoods?  (Note: if restrictions and/or limitations of access to lands would apply, refer to Standard 5)	Yes
1.2	Are any Project activities proposed within or adjacent to critical habitats and/or environmentally sensitive areas, including legally protected areas (e.g. nature reserve, national park), areas proposed for protection, or recognized as such by authoritative sources and/or indigenous peoples or local communities?	No
l.1	Would the Project potentially cause adverse impacts to habitats (e.g. modified, natural, and critical habitats) and/or ecosystems and ecosystem services?  For example, through habitat loss, conversion or degradation, fragmentation, hydrological changes	Yes

 $<sup>^{7}</sup>$  In regards to CO<sub>2,</sub> 'significant emissions' corresponds generally to more than 25,000 tons per year (from both direct and indirect sources).

3.2	Would the Project pose potential risks to community health and safety due to the transport, storage, and use and/or disposal of hazardous or dangerous materials (e.g. explosives, fuel and other chemicals during construction and operation)?	Yes
3.3	Does the Project involve large-scale infrastructure development (e.g. dams, roads, buildings)?	No
3.4	Would failure of structural elements of the Project pose risks to communities? (e.g. collapse of buildings or infrastructure)	No
3.5	Would the proposed Project be susceptible to or lead to increased vulnerability to earthquakes, subsidence, landslides, erosion, flooding or extreme climatic conditions?	No
3.6	Would the Project result in potential increased health risks (e.g. from water-borne or other vector-borne diseases or communicable infections such as HIV/AIDS)?	No
3.7	Does the Project pose potential risks and vulnerabilities related to occupational health and safety due to physical, chemical, biological, and radiological hazards during Project construction, operation, or decommissioning?	Yes
3.8	Does the Project involve support for employment or livelihoods that may fail to comply with national and international labor standards (i.e. principles and standards of ILO fundamental conventions)?	Yes
3.9	Does the Project engage security personnel that may pose a potential risk to health and safety of communities and/or individuals (e.g. due to a lack of adequate training or accountability)?	No
Stand	ard 4: Cultural Heritage	
4.1	Will the proposed Project result in interventions that would potentially adversely impact sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture (e.g. knowledge, innovations, practices)?	No
	(Note: Projects intended to protect and conserve Cultural Heritage may also have inadvertent adverse impacts)	
4.2	Does the Project propose utilizing tangible and/or intangible forms of cultural heritage for commercial or other purposes?	No
Stand	ard 5: Displacement and Resettlement	
5.1	Would the Project potentially involve temporary or permanent and full or partial physical displacement?	No
5.2	Would the Project possibly result in economic displacement (e.g. loss of assets or access to resources due to land acquisition or access restrictions – even in the absence of physical relocation)?	No
5.3	Is there a risk that the Project would lead to forced evictions? <sup>8</sup>	No
5.4	Would the proposed Project possibly affect land tenure arrangements and/or community based property rights/customary rights to land, territories and/or resources?	Yes
Stand	ard 6: Indigenous Peoples	
6.1	Are indigenous peoples present in the Project area (including Project area of influence)?	Yes
6.2	Is it likely that the Project or portions of the Project will be located on lands and territories claimed by indigenous peoples?	No
6.3	Would the proposed Project potentially affect the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples (regardless of whether indigenous peoples possess the legal titles to such areas, whether the Project is located within or outside of the lands and territories inhabited	No

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<sup>&</sup>lt;sup>8</sup> Forced evictions include acts and/or omissions involving the coerced or involuntary displacement of individuals, groups, or communities from homes and/or lands and common property resources that were occupied or depended upon, thus eliminating the ability of an individual, group, or community to reside or work in a particular dwelling, residence, or location without the provision of, and access to, appropriate forms of legal or other protections.

	by the affected peoples, or whether the indigenous peoples are recognized as indigenous peoples by the country in question)?	
	If the answer to the screening question 6.3 is "yes" the potential risk impacts are considered potentially severe and/or critical and the Project would be categorized as either Moderate or High Risk.	
6.4	Has there been an absence of culturally appropriate consultations carried out with the objective of achieving FPIC on matters that may affect the rights and interests, lands, resources, territories and traditional livelihoods of the indigenous peoples concerned?	No
6.5	Does the proposed Project involve the utilization and/or commercial development of natural resources on lands and territories claimed by indigenous peoples?	No
6.6	Is there a potential for forced eviction or the whole or partial physical or economic displacement of indigenous peoples, including through access restrictions to lands, territories, and resources?	No
6.7	Would the Project adversely affect the development priorities of indigenous peoples as defined by them?	No
6.8	Would the Project potentially affect the physical and cultural survival of indigenous peoples?	No
6.9	Would the Project potentially affect the Cultural Heritage of indigenous peoples, including through the commercialization or use of their traditional knowledge and practices?	No
Stand	lard 7: Pollution Prevention and Resource Efficiency	
7.1	Would the Project potentially result in the release of pollutants to the environment due to routine or non-routine circumstances with the potential for adverse local, regional, and/or transboundary impacts?	Yes
7.2	Would the proposed Project potentially result in the generation of waste (both hazardous and non-hazardous)?	Yes
7.3	Will the proposed Project potentially involve the manufacture, trade, release, and/or use of hazardous chemicals and/or materials? Does the Project propose use of chemicals or materials subject to international bans or phase-outs?	Yes
	For example, DDT, PCBs and other chemicals listed in international conventions such as the Stockholm Conventions on Persistent Organic Pollutants or the Montreal Protocol	
7.4		No