Early Warning System

IFC-34228

Aurora Gold

Quick Facts

Countries	Guyana
Financial Institutions	International Finance Corporation (IFC)
Status	Active
Bank Risk Rating	A
Voting Date	2014-09-02
Borrower	Guyana Goldfields Inc
Sectors	Mining
Potential Rights Impacts	Healthy Environment, Right to Health, Right to Water
Investment Type(s)	Loan
Investment Amount (USD)	$ 50.00 million
Project Cost (USD)	$ 300.00 million

Project Description

The Aurora Gold Project entails the construction and development of a gold mine in Guyana, about 170 kilometers west of Georgetown. The mine site is connected by a 150 kilometer access road (with a ferry crossing of the Cuyuni River at Tapir) to the Buckhall port on the Essequibo River. The project is comprised of an open pit and underground gold mine, process plant, tailings management area and other associated facilities. The Buckhall port facility will also be upgraded to accommodate ocean going vessels and will provide facilities for cargo, fuel and personnel handling during project construction and operations.

The mine aims to produce 3.3 million ounces of gold over an initial 17 year mine life. Gold production is expected to average 194,000 ounces per year over the life of mine, and average 231,000 ounces per year over the first ten years. Commercial production is expected to commence in 2015. Mining will be phased with initial open pit mining commencing in 2015 (continuing through 2023) with underground mining commencing in 2018 (continuing through 2031). The process plant will also be designed in two phases with an initial capacity of 1.75 million tons per annum and subsequently being expanded to a capacity of 3.5 million tons annually. The gold will be recovered from the ore using carbon-in-leach technology, in which slurry containing gold and silver is leached by cyanide in the presence of activated carbon. Pure gold bars will be produced on-site and stored in a vault prior to being transported offsite. The resulting tailings will be treated prior to disposal into the tailings management area. The project is being implemented by the sponsor, Guyana Goldfields Inc., through a wholly-owned Guyana-registered subsidiary, AGM Inc., which holds the mining license for the project issued by the government in November 2011.

Early Warning System Project Analysis

RISK ASSESMENT: CATEGORIZATION

The IFC classified the Project as a Category A project because it is a large, complex project with correspondingly significant risks and impacts on the environment. IFC noted that key issues to address during the various phases of the Project include surface and ground water management, pollution prevention, biodiversity management, cyanide management, non-hazardous and hazardous waste management, community health and safety, security, labor and strategic stakeholder engagement.

Other issues related to the Project include the presence of artisanal and small-scale mines within the area. According to a report by the United Nations Industrial Development Organization, artisanal mining is a main source of employment in Guyana and is regulated by the Guyana Geology and Mines Commission. IFC documentation states that artisanal mining activities in the area will negatively impact biodiversity and surface water resources due to their alluvial gold extraction activities and could also pose a security risk to the Aurora mine operation. In addition, IFC states that it is possible that settlements may establish near these artisanal small-scale mining activities in order to provide opportunistic services which in turn may lead to negative social issues such as alcohol, drug abuse among others. As well, the new access to the Aurora mine site from the M3 (Aurora) extension to the Barama M3 road, has the potential to increase illegal logging and artisanal small-scale mining activity in the area. Previously artisanal small scale miners were restricted to using either the Barama M3 road alone or moving into the area along the Cuyuni River.

Additionally, Guyana Goldfields is prospecting and exploring a new site 19 miles northeast of the Aurora mine site, for a new project called Aranka Gold. Any negative environmental or social affects resulting from either project individually may combine to create larger cumulative human rights impacts in the region.

Lastly, a 10 to 15 megawatt hydropower dam has been proposed on the Cuyuni River, to support the Gold Project, approximately 8km away from the mine site, where the Cuyuni River divides into Devil's Hole and Julian Ross Itabu. If the dam were to be constructed, it may exacerbate any negative environmental and social impacts of the Project.

Sources: IFC Documentation; United Nations Industrial Development Organization Report on Artisanal Gold Mining in Guyana; Guyana Goldfield Documentation; Stabroek News: Canadian firm eyes Cuyuni for large scale mining, hydropower plant.

APPLICABLE SOCIAL AND ENVIRONMENTAL STANDARDS

PS 1 - Assessment and Management of Environmental and Social Risks and Impacts
PS 2 - Labor and working conditions
PS 3 - Resource Efficiency and Pollution Prevention
PS 4 - Community Health, Safety and Security
PS 6 - Biodiversity Conservation and Sustainable Management of Living Natural Resource

IFC determined that Performance Standard 5 (Land Acquisition and Involuntary Resettlement) is not relevant as the Company's activities will be carried out in heavily forested land which is remote and which does not have presence of communities or individual land owners. IFC further determined that Performance Standard 7(Indigenous Peoples) is also not relevant to this Project because of the absence of Indigenous People located in or using the area involved in the Company's operations. Finally, with regards to Performance Standard 8 (Cultural Heritage), although no cultural resources have been identified as part of the ESIA process, IFC states the Company has prepared a *chance finds* procedure to be applied in the event of any accidental unearthing of paleontological or cultural relics and will also conduct archaeological footprint surveys in the major project areas.

People Affected By This Project

ENVIRONMENTAL AND HUMAN RIGHTS RISK ASSESSMENT

RIGHT TO A HEALTHY ENVIRONMENT

In 2007, the Harvard Law School International Human Rights Clinic documented the failure of Guyanese mining regulations to prevent severe human rights abuses and devastating damage to the natural environment and the communities in which Amerindians live. The report documented large scale environmental and health effects of mining in the interior of Guyana, including: "(1) drastic increases in the sediment content of river water, (2) increased levels of mercury in the river water, (3) creation of artificial sandbars in the rivers, (4) deforestation and degradation of land fertility, and (5) mosquito infestation and malaria."

Project documentation indicates that the biodiversity and environmental quality of the greater Project area has been significantly and adversely affected by mining and to some extent logging. Additionally, both the Cuyuni and Mazaruni basins have been historically affected by artisan small-scale mining activities, which have resulted in contamination of rivers with mercury and increased turbidity. Additional mining activity thus has the potential to result in further degradation of the natural environment.

Local communities may find the following questions relevant to assessing whether they may be suffering a human rights violation resulting from the construction or operation of the Project:

- Do you feel that your natural environment (air, water, land, animals, and plants) has changed since the start of the investment project?
- Where will solid waste, hazardous waste, and other waste products be disposed of and what impact is this likely to have on the local environment?
- What means do you have to seek redress if the environmental impact of the proposed operations become a problem for local communities and/or the local ecosystem?

RIGHT TO HEALTH

Harvard's International Human Rights Clinic Report on Gold Mining in Guyana reports that "[m]ercury as used in the mining industry in Guyana is a hazard to the health of all who are exposed to it for extended periods of time. As mercury accumulates in the body, it causes irreversible and sometimes deadly nerve damage; it can also be a source of serious birth defects."

Project documentation indicates that the Cuyuni River has experienced degradation of water quality since the 1980s from the discharge of sediment and contaminant-laden waters from artisanal small-scale mining into its tributary. Furthermore, the river has become increasingly turbid and there is evidence that mercury has accumulated in the aquatic ecosystem based in the upper Cuyuni in Venezuela. In the two communities nearest to the Project site, Aranka Mouth and Buckhall, there are no health services or related infrastructure. Diseases prone to the area include malaria, dengue fever, typhoid fever, minor injuries, and musculo-skeletal pains. Residents expressed concern for the health affects associated with the use of cyanide in the Project, dust resulting from passing vehicles, and stagnant water pools that could breed vector borne diseases. Due to the lack of accessible health care, any potential for cyanide and mercury pollution heightens the health risk to the local population.

Local communities may find the following questions relevant to assessing whether they may be suffering a human rights violation resulting from the construction or operation of the Project:

- Has your health been affected since the beginning of the investment project?
- Are there mechanisms through which people can file a complaint and/or obtain reparation when their right to health has been affected?

Investment Description

- International Finance Corporation (IFC)

For a syndicated "B" loan, IFC seeks participation from commercial banks and other financial institutions. All money still passes through IFC, however, so it remains responsible for the impacts of that financing.

Private Actors Description

The project sponsor is Guyana Goldfields Inc., which is a Canadian-based mineral exploration and development company primarily focused on the acquisition, exploration and development of gold deposits in the Guiana Shield of South America. The company was incorporated in Canada under the name Chiboug Copper Company Limited in 1953 and changed its name to Guyana Goldfields Inc. in 1995. The company's shares were listed on the TSX Venture Exchange in October 2000 and transferred to the main Toronto Stock Exchange in March 2004. In March 2005, Mr. John Patrick Sheridan Junior established a new company in Canada (under the name 6357458 Canada Inc.) and merged this with the predecessor company (where he had been a director since 1993). Shareholders of the predecessor company exchanged their shares for shares in the merged entity, which changed its name shortly thereafter to Guyana Goldfields Inc. Guyana Goldfields Inc. has one material project, namely the Aurora Gold Project, which is wholly-owned, and the company acquired its interest in the project in 1998.

AGM Inc. is the project company and is registered in Guyana. It is indirectly wholly-owned by the sponsor, Guyana Goldfields Inc., through a Barbados subsidiary. The mining license for the project was issued to AGM Inc. by the government in November 2011. Both AGM Inc. and 9154-4650 Quebec Inc., another wholly-owned subsidiary of Guyana Goldfields Inc., which operates in Guyana as a registered branch, are parties to the mineral agreement which was also signed with government in November 2011. Upon consolidation, Guyana Goldfields Inc. owns 100 percent of the Aurora Gold Project.

Private Actor 1	Private Actor 1 Role	Private Actor 1 Sector	Relation	Private Actor 2	Private Actor 2 Role	Private Actor 2 Sector
-	-	-	-	AGM Inc.	Undisclosed	-
-	-	-	-	Guyana Goldfields Inc.	Client	-

Contact Information

AGM Inc.
7 North Road
Lacytown
Georgetown
Guyana

CONSULTATION PROCESS

Project documents indicate that IFC's involvement has included meetings with Company management and technical staff and with a range of local community members, government representatives, NGOs and senior representatives of several key local stakeholder groups. As part of this involvement, IFC staff have participated in annual supervision visits to the Project site and assisted the Company in defining its Health, Safety, Environment & Community (HSEC) Policy and related management plans and programs to manage exploration activities in line with IFC's Performance Standards (PS) and Good International Industry Practice (GIIP). When the Company was applying for their Environmental License from the Guyana Environmental Protection Agency (EPA) in 2009/2010, the environmental and social impact assessment contained a Stakeholder Engagement Plan (SEP). The Stakeholder Engagement Plan process requires a certain level of community consultation and the Company met with communities in Bartica, Itaballi, Buckhall, Kurutuku (the nearest Indigenous Peoples settlement 40 km upstream on the Cuyuni from the Project site), Parika and Aranka Mouth, as well as some artisanal small-scale mining communities adjacent to the Aurora Concession.

The Company also met with various environmental groups such as World Wildlife Fund (WWF), Conservation International (CI), and Iwokrama Rainforest Program (Iwokrama) as well as with the three Guyanese Indigenous People's NGOs, the Amerindian Peoples Association (APA), The Amerindians Action Movement of Guyana (TAMOG) and Guyanese Organization of Indigenous People (GOIP). Meetings were also held with The National Trust of Guyana, and the Ministries of Environment, Local Government, Amerindian Affairs (MOAA) and Health. At an early stage of IFC's involvement, World Wildlife Fund (WWF) Guyana completed a Rapid Biodiversity Study in order to assess biodiversity conditions around the project and whether there would be any reasons to preclude a future mine development at the site. At that time, no critical ecosystems were identified.

In January 2012, Guyana Goldfields' representatives, along with an environmental and social specialist and the Company's senior local consultant, conducted public consultations with two local unincorporated communities, Aranka Mouth and Buckhall, within the Project's social area of influence. Guyana Goldfields also had meetings in Georgetown with representatives of the Guyana Geology and Mines Commission (GGMC), Amerindian Peoples Association (APA) and the Ministry of Amerindian Affairs (MOAA). The meeting's objectives were to: (i) provide the four major stakeholders (Buckhall, GGMC, APA and MOAA) with an update on the Project; (ii) formally present information on the Project; and (iii) provide all stakeholders present with an opportunity to raise questions and any concerns they may have on the Project so they can be considered prior to completion of the final updated ESIA. IFC states that during the public consultations at Aranka Mouth and Buckhall and the meetings in Georgetown with GGMC, MOAA, and APA, all parties consulted were interested to hear about the Project's progress and appreciated the opportunity to raise questions and provide their opinions and suggestions, and they appeared overall to be in support of the Project.

IFC further noted that while community residents welcomed the prospect of job opportunities and community support, they did express concerns about the potential for further contamination of the river, and the use of cyanide, fearing the possibility of another spill like the one that occurred at OMAI Gold Mines in 1995. The Company and their consultants addressed these concerns at the meetings, giving details of the mitigation plans in place to address and avoid these types of impacts.

ACCOUNTABILITY MECHANISM OF IFC

Bank Documents

- 01_FinalGGI ESIADocumentOutline.pdf
- 02_FinalGGI ESIACompleteText_7-31-2013.pdf
- Annex1SocialManagementPlans.pdf
- Annex2GuyanaBiodiversityTablesV2.pdf
- Annex3BioAssessmentoftheCuyuniRiver.pdf
- Annex4SampleCodeofConduct.pdf
- Appendix 4BFinalCSBDReviewofBiodiversityBaselineStudies7312013.pdf
- Appendix14AFinalGoldFieldsProjectCulturalResouceOverviewFINALREPORTMay3120122
- Appendix2AFinal7312013
- Appendix4A-FinalDuplaix-Bio-AssessmentoftheCuyuniRiver7312013.pdf
- Appendix5AFinalexamplequestionnaire7312013.pdf
- Appendix5B-FinalPCDPSummaryRev27312013.pdf
- Appendix7AESMSPlanAuroraProjectFINAL07302013.pdf
- Appendix7BFinalManagementPlans7312013.pdf
- Appendix7CFinalStandardOperationProcedures5152013.pdf
- Appendix9A1Final12114SGS12088003GeochemGeotechCharacterofTailingsJuly1220104.pdf
- Appendix9A2FinalKCB120717RKineticInterpretation3.pdf
- Appendix9A3Final120202MAurorastaticARDMLInterpretation.pdf
- Appendix9BFinalNI43101GuyanaGoldfieldsTechnicalReportFINAL5152013.pdf
- Appendix9CFinalWaterQualityStudyReport07172013FINAL.pdf
- Appendix9DFinalReportfromIndependentReviewofTMADesign7302013.pdf
- FINALESIASections1to12.pdf
- Ps6.pdf