EDC PROJECT REVIEW SUMMARY: Mina Justa Greenfield Copper Mine

Project Description	Mina Justa open pit copper mine
Sponsors	Marcobre - Minsur
Country	Peru
Project Category	A
Canadian Exporter(s)	Various Canadian Exporters
Description of capital goods and/or services	Sale of Various Canadian Goods and Services
EDC Product	Project Financing
Date of publication on EDC's website (dd/mm/yy)	01/06/2018
Date of Signing (dd/mm/yy)	15/08/2018

Project Categorization

The Project is a greenfield copper mine located in a sparsely populated desert, between two nearby national protected areas—the San Fernando National Reserve (SFNR) and the Punta San Juan Marine Reserve—in the province of Nazca. The mine is approximately 40 km northeast of the city of San Juan de Marcona and the coast.

Mining will be via a conventional truck and shovel open pit. Primary Project components include the main pit and a smaller satellite pit; two process plants (for oxide and sulfide ore); two waste dumps; a ripios dump; a tailings storage facility; a multi-buoy terminal (for offloading of sulfuric acid), seawater intake system (both adjacent to San Juan de Marcona); and a seawater supply pipeline to the mine. Additional Project components include a domestic effluent and solid waste management system; a seawater desalination plant as well as other ancillary facilities such as a camp for personnel accommodation, administrative offices, and facilities for equipment and machinery maintenance.

The Project was classified as Category A. (Category definitions can be found here.)

Summary of EDC's Review

EDC reviewed the Project in accordance with its Environmental and Social Review Directive and the Equator Principles. Through its review, the Environmental Advisory Services (EAS) team determined that the Project has been designed in compliance with applicable international standards (e.g., IFC Performance Standards) and host country environmental and social requirements. To reach this conclusion, EAS reviewed the Project's Environmental Impact Assessment (EIA); environmental and social (E&S) management information submitted by the Project Sponsor; and the Lenders' Independent Environmental and Social Consultant due diligence reports. EAS' due diligence also included a site visit to the Project's facilities in April 2018.



Key environmental and social issues associated with the project, and related mitigation measures reviewed by EDC include, but are not limited to, the following:

Impacts to Air Quality: The Project is likely to cause noise and generate dust and other air emissions, particularly during the construction phase.

Mitigation Measures Include: Noise impacts will be mitigated through: the use of noise suppression measures such as acoustics barriers, deflector plates or protectors to isolate engine-driven equipment; project design; and vehicle speed limits.

To prevent dust generation and air emissions, the Project will implement dust suppression measures aligned with the IFC EHS Mining Guideline, including roadway and workplace watering; restriction on vehicle movement and speed; covering loads during transport; and storing dusty materials in sheltered areas.

Approximate Project's GHG emissions are expected to be 40,000 tons CO2e per year during the construction phase and 324,000 tons CO2e per year during operations.

As per Lender requirements, Marcobre has engaged a consultant to confirm the current GHG inventory for Scope 1 and Scope 2 and to develop a *GHG Management Plan* that will include procedures for public disclosure and reporting of annual GHG emissions.

Transportation-Related Accidents: There is the potential for traffic-related accidents and/or incidents during the transportation of personnel and material, including hazardous materials such as sulfuric acid transported to the mine from the multi-buoy terminal.

Mitigation Measures Include: A transportation route risk analysis has been finalized. The Project will adopt the UN Awareness and Preparedness for Emergencies at Local Level Program (APELL) to help communities prepare and respond to hazards and environmental emergencies, including incidents involving hazardous materials. It has also developed a Personnel Transportation Plan, a Contingency Plan and a Hazardous Chemicals Response Plan in accordance with good international practice. The Project will also monitor transport routes and train mine employees and the contract workers on prevention and first response for transportation-related incidents.

Biodiversity Impacts: Due to the location of the mine and its associated marine infrastructure, biodiversity impacts include both terrestrial and marine biodiversity impacts. This includes Guanaco habitat loss, and potential introduction of invasive species through supply vessels during the Project's operations.

Mitigation Measures Include: Impacts to terrestrial and marine biodiversity will be addressed through a *Biodiversity Management Plan* (BMP), and *Species Management Plans* (including invasive species). These plans include measures such as invasive species control, offsets for Guanaco habitat, and monitoring of wildlife and the effectiveness of mitigation measures.

Documentation Reviewed:

The following is an illustrative list of key documentation that was reviewed as part of the current confirmation of the Environmental Review Directive (ERD).

- Amended Environmental Impact Assessment (2017)
- Independent Environmental and Social Consultant Report (2018)
- Biodiversity Management Plan and annexes (2017)

Applicable International Finance Corporation (IFC) Environmental and Social Standards used by EDC (in addition to host country requirements):

- Performance Standard 1: Assessment and Management of Environmental and Social Risks and Impacts
- Performance Standard 2: Labor and Working Conditions
- Performance Standard 3: Resource Efficiency and Pollution Prevention
- Performance Standard 4: Community Health, Safety, and Security
- Performance Standard 5: Land Acquisition and Involuntary Resettlement
- Performance Standard 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources