

Environmental Examination Report

(1) Project Name

Copper mine project

(2) Project Site

Region IV, Republic of Chile

(3) Project Outline

Expansion of the facility of concentrator and construction of a sea water desalination plant

(4) Category Classification

Category A

(5) Reason for Classification

The project falls into the sensitive sector (Mining sector), has sensitive characteristics and is located in or near sensitive areas under the Environmental Guidelines.

(6) Environmental Permits and Approvals

Environmental approval for Environmental Social Impact Assessment has been issued by competent authority as of February 2018 with some conditions.

(7) Pollution Mitigation Measures

It is confirmed that air quality, water quality, waste, noise, vibration and land subsidence are properly managed.

(8) Natural Environment

Appropriate measures are taken to avoid impacts to the natural environment.

(9) Social Environment

The project does not involve involuntary resettlement. Appropriate measures are taken for the protection of the social environment.

(1 0) International Standard
IFC Performance Standards

(1 1) Others, Monitoring

Taking the above environmental review into consideration, JBIC will monitor compliance status with the conditions attached to the ESIA report.

Questions

Q1. Please provide the address of the project site.

Address of the project site : IV region of Coquimbo, Chile

Q2. Please provide brief explanation of the project.

Minera Los Pelambres is a large copper mine located in Chile. Production began in late 1999 and is now running at a level of 350,000 tonnes of payable copper, with a life of mine of approximately 19 years.

Los Pelambres plans the construction of a \$1.3bn expansion to increase the treatment capacity to face the expected higher mineral hardness. The project includes:

- One Additional SAG and ball mill
- Additional flotation cells
- A stock pile expansion
- A desalination plant
- ~60 Km water pipeline from desalination plant to tailing storage facility

Q3. Will JBIC loan be applied to a new project or an executing project? In case of an executing project, please inform of strong claims by stakeholders such as local residents, as well as improvement guidance or cessation orders for construction work / operations, from environmental authorities.

- | | |
|---|--|
| <input checked="" type="checkbox"/> New Project | <input type="checkbox"/> Executing Project (with Claim etc.) |
| <input type="checkbox"/> Executing Project (without Claim etc.) | <input type="checkbox"/> Others (Please specify) |

Q4. In case of this project, is it necessary to execute Environmental and Social Impact Assessment (ESIA) based on the laws or regulations of the country where the project is to be implemented? If necessary, please inform the progress of ESIA.

- | | |
|---|---|
| <input checked="" type="checkbox"/> Required (completed) | <input type="checkbox"/> Required (under execution or under planning) |
| <input type="checkbox"/> Not Required | <input type="checkbox"/> Others (Please specify) |

Q5. In case that ESIA is already completed, please inform whether ESIA report is already approved based on the environmental and social assessment system of the country where the project is to be implemented or not. If ESIA report is already approved, please provide the date and name of authorities of the approval.

- | | |
|---|---|
| <input type="checkbox"/> Approved (without condition) | <input checked="" type="checkbox"/> Approved (with required action plans) |
| <input type="checkbox"/> Under approval process | <input type="checkbox"/> Others (Please specify) |

Date of Approval : February 2018

Name of Authorities : Servicio de Evaluacion Ambiental, Chile

Q6. If environmental and social permit(s) other than ESIA is required, please provide the name of required permit(s). Have you obtained required permit(s)?

- | | |
|--|---|
| <input type="checkbox"/> Obtained | <input type="checkbox"/> Required, but not obtained yet |
| <input checked="" type="checkbox"/> Not required | <input type="checkbox"/> Others (Please specify) |

Name(s) of required permit(s) : _____

Q7. Will the loan be used for the undertaking that cannot specify the project at this stage (e.g. export or lease of machinery that has no relation with specific project, or Two Step Loan that cannot specify the project at the time of loan agreement)?

(No)

If you answered "Yes", it is not necessary to reply to the following questions.

If you answered "No", please reply to the following questions.

Q8. Are there any environmentally sensitive area(s) shown below in and around project site(s)?

(Yes)

If you answered "Yes", please select applicable items by marking, and reply to the following questions.

If you answered "No", please reply to the questions 9 and after.

- (1) National parks, nationally-designated protected areas (coastal areas, wetlands, areas for thnic minorities or indigenous people, and cultural heritage, etc. designated by national governments)
- (2) Forests with important ecological value (including primary forests and natural forests in tropical areas)
- (3) Habitats with important ecological value (including coral reefs, mangrove, wetland and tidal flats.)
- (4) Habitats of rare species requiring protection under domestic legislation, international treaties, etc.
- (5) Areas in danger of large-scale salt accumulation or soil erosion
- (6) Areas with a remarkable tendency towards desertification
- (7) Areas with unique archaeological, historical or cultural value
- (8) Areas inhabited by ethnic minorities, indigenous peoples or nomadic peoples with traditional ways of life(including areas which are used for cultural or spiritual purposes) and other areas with special social value

Q9. Does the project involve following characteristics?

(Yes)

If you answered "Yes", please describe the scale of applicable characteristics, and reply to the questions 10 and after.

If you answered "No", please reply to the questions 11 and after.

- (1) Involuntary resettlement and/or loss of means of livelihood (Number of affected people:)
- (2) Pumping of groundwater (Scale: m³/year)
- (3) Land reclamation, development and/or clearing (Scale: 249.7 ha)
- (4) Deforestation (Scale: 74 ha)

Q10. Under the environmental and social impact assessment system of the country where the project is to be implemented, do the applicable characteristics from (1) – (4) of the questions 9 above and their scale serve as basis for executing an ESIA for the project?

- They do
- They do not
- Others (Please specify)

Q11 May the project involve significant social impacts?

(No)

If you answered "Yes", please describe the outline of the impacts, and reply to the questions 12 and after.
If you answered "No", please reply to the questions 12 and after.

- The likelihood of severe project-related human rights impacts
- Others

Q12. Will JBIC share in the project be equal or less than 5% of the total project cost, or the total amount of JBIC loan equal or less than SDR 10 million? (In the case of additional support for a past project, this shall be the accumulated total amount)

(No)

If you answered "Yes", it is not necessary to reply to the following questions.
If you answered "No", please reply to the questions 13 and after.

Q13. Does the project belong to either of the sectors that impact on the environment and society is deemed immaterial or is not anticipated under normal conditions (e.g. maintenance of the existing facilities, non-expansory renovation project, and acquisition of rights and interests without additional capital investment)?

(No)

If you answered "Yes", it is not necessary to reply to the following questions.
If you answered "No", please reply to the questions 14 and after.

Q14. Does the project belong to the following sectors?

(Yes)

If you answered "Yes", please specify the sector by marking, and reply to the questions 15 and after.
If you answered "No", it is not necessary to reply to the following questions.

- (1) Mining
- (2) Oil and natural gas development
- (3) Pipelines
- (4) Iron and steel (projects that include large furnaces)
- (5) Non-ferrous metals smelting and refining
- (6) Petrochemicals (manufacture of raw materials; including complexes)
- (7) Petroleum refining
- (8) Oil, gas and chemical terminals
- (9) Paper and pulp
- (10) Cement plants (including a greenfield quarry)
- (11) Manufacture and transport of toxic or poisonous substances regulated by international treaties, etc.
- (12) Thermal power
- (13) Nuclear power
- (14) Hydropower, dams and reservoirs
- (15) Power transmission and distribution lines involving large-scale involuntary resettlement, large-scale logging or submarine electrical cables
- (16) Roads, railways and bridges
- (17) Airports
- (18) Ports and harbors
- (19) Sewage and wastewater treatment having sensitive characteristics or located in sensitive areas or

- their vicinity
- (20) Waste management and disposal
 - (21) Agriculture involving large-scale land-clearing or irrigation
 - (22) Forestry
 - (23) Tourism (construction of hotels, etc.)

Q15. Please provide information on the scale of the project (project area, area of plants and buildings, production capacity, amounts of power generation, etc.) Further, please explain whether an execution of ESIA is required on account of the large scale of the project in the country where the project is implemented.

The nominal capacity of the plant will be expanded to 190 ktpd, while copper production increases 55ktpa from 2021.