

**Environmental and Labor Issues:**

This is a category III project according to the IIC's environmental and labor review procedure because it could produce certain effects that may be avoided or mitigated by following generally recognized performance standards, guidelines, or design criteria. The main environmental and labor considerations related to the project are: impact on wildlife, air emissions, noise and visual impact, solid and liquid waste management, occupational health and safety, and labor and social issues. Work on the high-voltage transmission line has not yet begun. The environmental impact assessment (EIA) was conducted by the firm Análisis Territorial y Consultoría (AT&C) of Chile and submitted to the Environmental Evaluation Service (SEA) of Region II (Antofagasta) in March 2012.

**Topography and Environment:** The power transmission line will extend 77.3 km from the Encuentro Substation to the environs of the Sierra Gorda commune, the site of the mining operations. The Project covers 247 hectares, including a 32-meter-wide easement. The Project's area is classified as rural, while its surface is classified as desert, devoid of vegetation and with an almost imperceptible gradient. The easement is to be kept open and free of buildings and structures of any kind. Portions of the transmission line path are accessible by public highways, whereas the remaining portions include trails and pathways that facilitate vehicle access. The transmission line route runs near the communes of María Elena and Sierra Gorda in the province of Antofagasta, without cutting through them. The Project will not require any displacement or relocation of the population. Mining and mining-related services are the main economic activities of both the aforementioned communes. Consequently, the visual features of the landscape are affected by public roads, mining activities, and power and railway lines. The Project does not impact tourist areas or places of outstanding natural beauty.

**Flora:** The Project site is extremely arid and devoid of water sources. It includes areas where no rainfall data has been collected. At the Project site, the air is extremely dry and temperatures fluctuate widely between day and night, up to 37° C. The land is barren and does not support vegetation. Consequently, the Project has no impact on flora.

**Impact on Wildlife:** Likewise, as a desert devoid of vegetation, no species of fauna are present. As part of the EIA, a number of different methods were used to detect the presence of fauna in the transmission line area of influence but none were found. Consequently, it was determined that fauna species inhabiting river banks near Loa and San Salvador do not venture into the desert plateau. Hence, the study determined that the Project would have no impact on animal life.

**Air Emissions:** The main air emissions would occur during the construction stage, originating from vehicles and machinery used by the Project's contractors. In addition to gas emissions from internal combustion engines, the Project would also generate fugitive dust from vehicular traffic. With a view to mitigating gas emissions, engine maintenance will be performed regularly in accordance with the manufacturer's technical specifications. As a means of curbing the effects of fugitive dust emissions, signs will be posted requiring vehicles to drive slowly on unpaved surfaces, and roadways will be watered down, as necessary.

No air emissions are foreseen in the operational stage, save those generated by periodic inspection, maintenance, or repair activities.

**Noise and Electromagnetic Emissions:** During the construction stage, noise will be produced in the vicinity of the different construction works. To mitigate noise in populated areas, modular sound barriers will be deployed, and the maximum legal noise limits for the time of day will be observed. No electromagnetic emissions will be produced during the construction stage.

The main source of noise during the operational stage is the electromagnetic fields around high-voltage power lines. According to the studies performed, the levels of noise generated in the operational stage of the Project, together with the base ambient noise (e.g., wind, vehicular traffic, and noise from neighboring mining activities) level, do not exceed the maximum legal limits.

Electric and electromagnetic fields will be generated during the operational stage. Furthermore, the Project may produce radio and television interference. The aforementioned studies also show that such fields and interference would be significantly lower than the limits established in the pertinent regulations of the United States and Canada.

**Cultural and Archeological Heritage:** A study was performed of the entire path of the transmission line, detecting a significant number of archeological sites from different epochs, as the power line would lie in the area of influence of routes connecting the altiplano with the coast from pre-Columbian times to the present. These routes had been heavily used during construction of the railroads. With a view to preserving the cultural heritage and archeological sites discovered, adjustments were made to the position of some structures, establishing a minimum security corridor measuring 20 meters wide around each such site pursuant to the legislation governing national monuments. Moreover, it was decided that construction would be suspended in the event cultural and archeological heritage sites were discovered and that the National Monuments Council would be notified of such discoveries so that it could establish the appropriate protection measures.

**Solid Waste:** Although most solid waste would be generated during the construction stage, the treatment of such waste in the operational stage would be similar. Any non-hazardous industrial waste (e.g., wood, iron, cable) generated during installation or maintenance activities would be stored temporarily in a salvage yard and later removed by recycling companies or deposited in authorized landfills. Domestic waste would be temporarily stored in sealed containers and removed by an authorized company. Hazardous solid waste (e.g., paint and solvent containers, contaminated gloves and rags, batteries, and toner cartridges) would be stored in a restricted area prepared especially for such purpose and later disposed of by a company authorized by the health authority. In the event of accidental lubricant and/or fuel spills, contaminated topsoil will be removed and treated as hazardous waste.

**Liquid Waste:** As is the case of domestic waste, most liquid waste is generated during the construction stage owing to the heightened presence of workers but will be insignificant during the operational stage. Portable toilets will be placed at all worksites, as required. These toilets will be maintained by an authorized external contractor. In construction works that require the use of reinforced concrete (e.g., pylon bases) effluents will be produced from the washing of trucks and machinery. These effluents will be allowed to evaporate and the resulting matter will be treated as non-hazardous solid waste. No waste of any kind will be discharged on the Project site.

**Occupational Health and Safety:** Significant occupational risks are associated with the mounting works (e.g., working at heights and handling heavy cargo and materials), as well as the implementation, repair, and maintenance works (e.g., electrical hazards). Abengoa Chile will supervise the works and contractors, and will ensure compliance with the law and workplace safety regulations. The risk control and prevention measures envisioned include engaging the services of a risk prevention expert, setting up an on-site first aid station, carrying out regular workplace safety inspections, and implementing a security program and emergency plans (e.g., Abengoa Occupational Safety and Health and Environmental Plan).

**Labor and Social Issues:** Transmisora Mejillones is in compliance with domestic labor laws and International Labour Organization (ILO) standards. Mandatory core labor standards include legally-mandated benefits, freedom of association, organization of workers' unions, and nondiscrimination in the workplace.

**Monitoring and Reporting:** An engineering firm has been retained as an independent technical consultant to supervise implementation of the Project (Hatch Ingenieros y Consultores Limitada). The consultant will periodically inform the IIC regarding compliance with environmental, labor, and social regulations, as well as any incidents of noncompliance requiring corrective action and follow-up.