IDBInvest Altifibers

Environmental Classification: This is a category III project according to the IIC's environmental review procedure because specific impacts may result that can be avoided or mitigated by adhering to generally recognized performance standards, guidelines, and design criteria. The main environmental and labor issues related to this project include environmental management, solid waste, liquid effluents, atmospheric emissions, occupational health and workplace safety, and labor issues.

Environmental Management: The main reference document for determining the environmental regulation framework in Bolivia is Ley No. 1333 de Medio Ambiente (environmental act 1333). Articles 17, 18, and 19 of the act define responsibilities and set goals for monitoring environmental quality and for preventing, controlling, restricting, and avoiding activities that are harmful or unhealthful and/or do damage to the environment and natural resources. On July 30, 2002, the Reglamento Ambiental para el Sector Industrial Manufacturero, RASIM, was implemented to regulate the activities of the domestic manufacturing industry. In compliance with RASIM, Altifibers submitted the environmental registration form for industry (Registro Ambiental Industrial -- RAI) to the municipal government's environmental authority Instancia Ambiental del Gobierno Local -- IAGM.

However, Altifibers has yet to file the environmental statement for industry (Manifiesto Ambiental Industrial -- MAI) and its environmental management plan (Plan de Manejo Ambiental -- PMA) with the IAGM. Upon approval of the MAI and the environmental management plan, the relevant authority (IAGM) will issue an approval certificate or environmental license for Altifibers' operations, which will be valid for five years. The IIC is providing support by drawing on the Danish technical assistance fund to engage a local consultant who is helping the company as it prepares and files the MAI and environmental management plan in order to obtain an environmental license. This assistance from the IIC will enable Altifibers to improve its environmental performance.

Solid waste: The principal solid wastes generated by plant operations are soil from the suction system and sludge from the decanting tanks. These wastes are disposed of in an authorized dump. Fiber combing waste and domestic refuse are picked up and disposed of by the municipal sanitation service. The plant has a system for handling and disposing of solid waste in authorized locations. The company also sells byproducts, thus minimizing the generation of solid waste and keeping it from being a major problem.

The volume of solid waste generated by the plant can be handled and disposed of by the municipal sanitation service. Nevertheless, Altifibers shall draw up a solid waste management program with alternate waste disposal procedures for separating waste that can be reused, recycled, sold to third parties, or otherwise disposed of other than mere dumping at authorized sites.

Liquid effluents: The plant has separate drains for process water (from washing and dyeing), sewage, and rainwater; all are connected to the Aguas de Illimani (AISA) sewer system. The wash water and the dye process water both comply with AISA treatment system standards and pose no problem for the wastewater purification process (oxidation ponds) used by the city of El Alto. However, wet processes at a textile plant can become an environmental problem if the plant discharges a considerable volume of effluents into the sewer system.

Of the two wet processes carried out at the plant (washing and dyeing), dyeing is the one whose wastewater carries pollutants from a wide variety of chemical dyes. Animal fiber wash water has a high oil and fat content. The climate of El Alto is such that sudden congealing of the fat as it cools upon entering the sewer system could block the drains. The environmental regulations for the

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industrial manufacturing sector (RASIM) set upper limits for liquid discharges and define the parameters to be monitored by the Bolivian textile industry.

The volume and capacity of the current operation are such that no immediate environmental impacts from the discharge of liquid effluents are expected; the plant's discharges into the sewer system are minimal and meet the requirements of the company that manages the system (AISA). Nevertheless, as the plant increases its installed capacity and diversifies its operations, Altifibers will review different options for decreasing pollution from its liquid discharges.

Air Emissions: The main source of pollution inside the plant is dust and breathable particles. Altifibers shall ensure that operators use protective gear in dusty areas and shall implement the use of humidifiers at different locations inside the plant to prevent the generation of particles. The plant has two boilers that run on natural gas, which the manufacturing industry regards as a clean fuel because of its low toxic combustion gas emissions.

However, Altifibers shall control the combustion process by regulating the excess oxygen in the fuel load and preparing a monitoring program to keep combustion gases within permissible limits. The company will thus be able to control combustion gas quality and significantly reduce the consumption of natural gas at the plant.

Occupational Safety and Health: The plant has a firefighting system with extinguishers placed strategically throughout the facility. An industrial safety manual is being drafted. Altifibers shall implement manuals and occupational safety and health plans as required by the general occupational health, safety, and welfare act (Decreto Ley No. 16998). Noise levels in areas adjacent to the plant are low and seem to have no direct impact.

Nevertheless, Altifibers shall ensure that noise in the area remains at acceptable levels. To this end, it shall implement a noise monitoring program. The company shall provide its operators with hearing protection against occupational noise. Altifibers shall determine whether the hearing protection provided is appropriate and shall also consider using hearing protection at other locations in the plant.

Labor Considerations: The company complies with core labor standards, the ban on forced labor, and a child labor code that protects children. It also complies with Bolivian labor law.

Monitoring and Annual Reporting: The IIC will verify that the company has prepared and implemented a corrective action plan in compliance with the environmental protection, safety, and labor standards set out herein. The company will submit yearly reports summarizing follow-up data on environmental management, generation of solid waste and liquid effluents, air emissions, industrial safety, occupational health, and other labor issues.