## **Environmental and Labor Issues:**

**Classification:** 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 include liquid effluent management, air emissions, solid waste management, noise, fire safety, personal safety, and emergency response. The company is ISO 9001:2008 certified for its corrugated cardboard box design, manufacturing, and marketing operations and it is in the process of obtaining certifications for its other production areas. It is also BASC certified.

**Liquid Effluents:** CARVIMSA's main liquid industrial waste comes from pulping the paper in an aqueous medium and preparing the pulp for feeding the papermaking machines at the mill. The effluents undergo a physical-chemical treatment with a dissolved air flotation stage and added flocculants. The fiber that is recovered with the separated solids is reused. Some of the purified water is used in the process and the remainder goes through a secondary treatment process and subsequent chlorination. The company is making some final adjustments to its secondary treatment process before implementing it.

CARVIMSA's corrugating plant produces liquid effluents, which come primarily from restrooms and from cleaning printer rollers, which contain water-soluble ink residues. The water undergoes a physical-chemical treatment in which flocculants are added and sludge is separated by decanting. Authorized external service providers dispose of the treated water and concentrated sludge. CARVIMSA's corrugated cardboard plant is not connected to the public sewer system.

Other liquid waste generated during the industrial process (oil and grease) is sent to authorized recycling plants or landfills.

**Solid Waste Management:** The solid waste generated at the paper mill consists of contaminants and impurities from recyclable materials (plastic and metal). It is disposed of in a municipal landfill, through a service provider. Wire from the bales is recycled and reused for new bales. Other metal scraps are sold to recyclers.

The principal solid waste from the corrugating plant consists of scrap paper and cardboard from crate production and other recyclable materials. This waste is returned to the paper mill. Other nonhazardous solid waste (plastic, metal, and wood) is sold to recyclers.

Hazardous waste from both plants (ink, toner, fluorescent lamps, contaminated containers, soaked rags, and batteries) is sorted and stored, and disposed of through a solid waste service provider registered with the environmental health division (Dirección General de Salud Ambiental, or DIGESA) of Peru's ministry of health.

**Air Emissions:** CARVIMSA's paper mill boiler runs on liquefied petroleum gas (LPG). The company is discontinuing the use of heavy oil (bunker fuel) for the boilers at its corrugating plant and shifting to LPG, which has a lower impact on the environment.

**Noise:** There are specific sources and locations in both plants where sound exceeds permissible levels. Workers wear hearing protection equipment and there are rotation procedures to mitigate exposure. Noise has no impact outside the plants.

Fire Safety: Both industrial plants have fire alarms and firefighting systems with sprinklers,

emergency water supply, self-contained pumping systems, portable fire extinguishers, and fire brigades. A fire detection system is being implemented at the corrugating plant because of the goods stored there. The paper mill has a monitor that covers the warehouse where raw materials (paper and cardboard bales for recycling) are stored.

**Personal Safety and Emergency Response:** The company has a contingency plan that covers fires, explosions, earthquakes, tsunamis, wind and storms, floods, leaks and spills, threats or crimes, and workplace accidents. The contingency plan involves emergency brigades, role assignment among personnel in charge of the plant, channels of communication, evacuation plans, adequate signage, first aid, rescue operations, and training. Brigades have the necessary protective gear.

Workers at the plant are provided with personal protective equipment that is specific to their job and the materials they handle. Safety data sheets are kept for products considered hazardous (such as caustic soda, antifoaming agents, adhesives, resins, ink, solvents, and alcohol) and workers who handle these products receive appropriate training. In the event of an accident, an investigation is carried out that yields recommendations for corrective actions.

**Labor Practices:** CARVIMSA complies with national labor laws. Mandatory core labor standards include social security benefits, freedom of association, organization of workers' unions, prohibition of forced labor and exploitative and abusive child labor, and nondiscrimination in the workplace. CARVIMSA's employees do not belong to a labor union. Workers and their dependents receive ESSALUD health coverage and complementary accident insurance for high-risk activities.

**Monitoring and Reporting:** CARVIMSA will prepare an Environmental Management Plan (EMP) to ensure compliance with domestic regulations and the IIC's environmental and workplace safety and health guidelines. The EMP shall provide for a yearly report on liquid effluent and solid waste management; health, occupational safety and emergency response training programs; and accident reporting.