## **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 liquid effluent management, air emissions, solid waste management, agricultural aspects, natural resources management, labor issues, occupational health and safety, and fire safety and emergency response.

**Liquid Effluents:** Golden Grove currently recycles much of its process water that has not been contaminated with sugar. Water used for cleaning of sugar cane is used for irrigation of agricultural fields. In addition, Golden Grove has plans in place to further improve the management of its liquid effluent used for irrigation, and is currently analyzing wastewater treatment options (e.g. using anaerobic settling ponds). The company will ensure that the quality of the liquid effluent complies with local regulations.

**Air Emissions:** The main air emissions from sugar processing and refining result primarily from the combustion of bagasse (the fiber residue of sugar cane). Fly ash present in the flue gases from the combustion of bagasse are emitted by the boiler stacks. The company will begin obtaining monitoring data to measure compliance with local standards. The project will involve upgrading the boilers, which is likely to lead to more efficient combustion and lower air emissions. Golden Grove will take the necessary measures to ensure that the air emissions generated are in compliance with local regulations.

**Solid Waste:** The solid waste generated in the industrial areas consists primarily of the following: i) bagasse from sugar cane that is used as fuel in the boilers for generating electricity at the mill; all bagasse generated from milling the cane is used as fuel in the boilers to generate steam; and (ii) ash, sand, and sludge from cane wash water treatment facilities, which is applied as mulch on the land.

**Agricultural Aspects:** The company will ensure that sustainable agricultural practices are applied in accordance with good industry practices, such as those included in the IFC's Environmental, Health and Safety Guidelines for Plantation Crop Production dated April, 2007. Measures will be taken to reduce the potential stress on water resources, minimize soil erosion and loss of productive capacity, minimize pesticide use to the extent possible developing an Integrated Pest Management (IPM) strategy, minimize impacts of crop residues and other solid waste (i.e. pesticide containers), and reduce the potential for atmospheric emissions.

**Natural Resource Management:** The project does not involve the conversion of critical habitats and no known endangered species are affected by the project's operations. There are also no legally protected conservation areas impacted by the project. The land to be acquired is a 1,769 acre farm in Bowden, previously used for sugar cane plantation. The 1,127 ha of land leased from the government has also historically been used for sugar cane plantations. The company will lease an additional 1,500 ha from local farmers also for sugar cane plantations.

**Labor:** Golden Grove will ensure it is in compliance with national labor laws, and that no child labor or forced labor is used at its operations, including plantations. Workers are also free to join a union; however, no employees have formed or joined unions in the company. The minimum work age at Golden Grove's operations is 18 years of age.

Occupational Health and Safety: Golden Grove will implement a health and safety management

system for its mill and plantations. It currently has a safety policy. The company will ensure that workers at the mills and plantations are provided with the appropriate personal protective equipment. The facilities are equipped with fire safety equipment (hydrants and fire extinguishers) and workplace hazard signs. Golden Grove has an Emergency Response Plan in place and it monitors and reports job-related accidents/illnesses for its mills and plantations. In addition, fire drills are conducted annually (during the crop period). Disaster preparedness plans and practices are also carried out, particularly during hurricane season.

**Monitoring:** The company will implement an Environmental and Social Action Plan (ESAP) acceptable to the IIC. This ESAP will detail any necessary corrective measures to be implemented in order to ensure compliance with local environmental and labor regulations. Throughout the project, the IIC will monitor the implementation of the agreed Environmental and Social Action Plan, reviewing the monitoring reports that the company submits regularly, and making field visits as part of the project supervision process.