

Environmental Highlights:

1. This is a category III project according to IIC's environmental and labor review procedures since there are potential impacts that are identifiable and that have well known technical solutions. The likely issues related to this project are: (1) land use, (2) occupational health and safety, (3) particulate emissions, and (4) fire safety, emergency response. The client has provided copies of the national environmental certificates permitting it to mine clay at the project sites. During the appraisal, the client provided the supporting documentation for the referenced licenses and information on how it proposes to meet IIC's environmental and labor requirements. The project will be implemented by sponsors who are experienced in the operations and maintenance of equipment of the type to be used in this case. Maceroti has presented plans that demonstrate its ability to address the environmental issues addressed above, such that it will comply with Guatemalan standards and IIC guidelines.

2. Liquid effluents: The project will generate very little liquid effluents other than domestic effluents, which will be treated in a septic system.

3. Air emissions: As liquid petroleum gas, a relatively clean fuel, will be the fuel used in the kilns, no significant impacts are anticipated relating to emissions. Also, due to the burn control system of the kilns to be operated, the CO and NOx emissions will comply with international standards. Fugitive dust from the truck traffic to and from the plant on dirt roads will be reduced by watering the roads down.

4. Land Use: The project will be implemented in three sites: the factory location and the clay deposits. All three sites are located in areas that have been used extensively for agricultural purposes, and are not close to sensitive ecological or archeological areas. No relocation of inhabitants will be necessary. In addition, the company has developed reforestation plans for the plant property.

5. Water Use: Significant impacts on the local water resources due to the project are not anticipated, as the water usage is minimal. The project will consume 18.14 m³ of water per day (amount equivalent to a cistern truck) from the local aquifer for the plant process, and negative impacts are not anticipated since the recovery capability of the aquifer is immediate due to the well's proximity to the Rio Grande de Zacapa. A minimal amount of water for irrigation will be taken from a stream that crosses the property. However, the IIC will require the company to monitor its water usage and potential impacts on the local water supply, as well as consider implementing a system to recycle and condensate the process water.

6. Employee Health and Safety: Maceroti is committed to developing a manual with safety and health guidelines for the workplace. Employees will be provided with protective equipment appropriate for their working conditions. In addition, the facilities will have an in-house health unit to provide emergency first aid to the employees. Areas where excessive dust is generated will be separated from the rest of the plant by walls and they will be vented.

7. Fire Protection and Emergency Response: The nature of the operations in Maceroti's factory will be such that the possibility of a damaging fire are remote, because there are very few combustibles involved in the area of packaging and production. Fire protection devices will be present in the plants including fire hoses connected to water mains, and fire alarms. Additionally, a fire safety program will be implemented, which will include the organization of fire brigades and training. In order to prevent accidents and risks related to the handling of on-site LPG stored in a 5,000 gallon tank, the company has developed specific prevention procedures and a contingency plan.

Waste Management: The suppliers will develop and implement a plan to manage waste and prevent pollution, avoiding the use of landfill or burning, by waste recycling. Empty pesticide containers will be handled appropriately and will not be re-used. The containers will be pressure washed at least three times with water, will be punctured to ensure they can not be re-used, will be kept secure until they are given its manufacturers for recycling. As part of a pilot initiative to implement organic agriculture by one of the suppliers visited during the appraisal visit, organic waste such as grapes that can no longer be harvested were being composted, thereby reducing the generation of organic waste.

8. Monitoring: The sponsors will develop an Environmental Management Plan (EMP), which will include a schedule for the implementation of environmental projects and a monitoring and reporting program to ensure that their facilities are complying with the pertinent Guatemalan laws and IIC's environmental guidelines. The EMP will also include an Environmental Management System (EMS) based on the ISO 14000 standards. The EMS will describe who will be responsible for monitoring the implementation of environmental activities. The sponsors will submit an annual report summarizing the monitoring data related to specific issues, such as air emissions, water usage, wastewater discharge, occupational health and safety, fire safety, accident reports, and labor related issues.