

**Environmental Classification:** This is a category III project according to the IIC's environmental and labor review procedure because specific impacts may result that can be avoided or mitigated by adhering to generally recognized performance standards, guidelines, and design criteria. Among the environmental, labor and occupational hygiene issues related to this project are disposal of solid waste, liquid effluents, air emissions, worker health and safety, and labor considerations.

### *Main Environmental Impacts*

#### **Air Emissions**

**Noise:** Workers in high noise areas are required to wear ear protection, and they are provided with the requisite occupational health and safety training. The areas with the highest noise levels are monitored regularly by the Instituto Hondureño de Seguridad Social.

**Combustion Gases.** In the facilities there are sources of combustion gases that run on diesel or bunker fuel. The combustion gases are tested regularly; the concentration of air pollutants is within the acceptable range suggested by the World Bank for this type of activity. There are plans to use the combustion gases in the near future for the initial neutralization of untreated water in the liquid effluent treatment process.

**Particulate Matter (Cotton Dust) and Dust.** The industrial bays in the knitting area have a cotton particle and dust extraction and filtering system with extractors in channels in the floor throughout the areas that generate the most particulate matter and fine solids.

#### **Liquid Effluents**

Caracol Knits' facilities have a plant for treating wastewater from the wet fabric dyeing process. Current plant capacity is adequate for processing the volume of liquid waste generated at present. Wastewater is treated using an *activated sludge* biological purification system in which a bacterial mass developing in a specific environment biodegrades the organic matter in liquid industrial waste. The processes involved in purifying the water are standard in the industry and include screening, homogenization, oxidation, neutralization, and sedimentation.

Laboratory analyses of the treated water discharged to the Blanco River show organic load removal of more than 90%. The laboratory tests of the water discharged show that, on average, they meet the World Bank's environmental standards.

The industrial plant expansion also calls for doubling the current capacity of the liquid effluent treatment plant; this work is already under way. Sewage or domestic wastewater is treated separately in a septic tank system.

**Solid Wastes.** Fabric scraps are collected, baled, and shipped with the finished product to the client's warehouses. Other domestic solid waste is collected in receptacles placed strategically throughout the plant; Caracol Knits currently outsources waste disposal, which usually goes to open dumps. Subcontractors are providing this temporary solution. Under a special agreement, the municipality of Potrerillos, state of Cortés, Honduras, recently authorized Caracol Knits to build and manage a manual sanitary landfill, on an exclusive basis. The agreement provides for a permanent solution whereby both Caracol Knits and the community of Potrerillos will use the landfill. This will help the community dispose of solid wastes and eliminate clandestine dumps, improving health in nearby communities as well. Solid waste is estimated at some 40,000 cubic meters every five years. This solution provides for disposal of solid waste generated by Caracol Knits and surrounding communities as well; the initiative is expected to be a model for other companies in the area.

#### **Occupational Health and Hygiene**

The workers who handle chemicals and other substances used in the plant, such as inks, bleaches,

and hydrocarbons must use protective gear consisting of gloves, masks, and eye protection. There is appropriate signage identifying all hazardous areas and exit routes. The entire plant has a fire extinguishing system based on small sprinklers that are activated automatically by fire sensors throughout the facility.

### **Labor Considerations**

It is standing company policy to provide each worker with at least 40 hours of training per year in the appropriate use of company-supplied safety equipment, the hazards of the material they handle, and technical aspects of the production process. The workers are free to organize. There is no labor union in the company, but there is an employee solidarity association with a savings and loan co-op that provides economic assistance to the employees, including housing projects. The employees' wages are far higher than the legal minimum wage in Honduras.

### **Control and Monitoring**

For the construction of the new facilities an Environmental Management Plan must be prepared and submitted to the satisfaction of the IIC; it must include at least:

1. A detailed schedule of plant expansion milestones, with the pertinent environmental impact and measures taken to minimize or mitigate said impact.
2. The factors and variables that must be monitored yearly throughout the life of the project, such as liquid effluent and air emission control parameters. The IIC will verify compliance with its own environmental and labor review policy, assess the yearly control reports, and make regular site visits as part of the project supervision process.