

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: assessing and managing environmental and social risks and impacts, efficient natural resource management, pollution prevention and control, community health and safety, and workplace and labor conditions.

As part of the environmental and social evaluation of the project, a field visit was conducted in August 2012 to Pronaca facilities in Durán (pet food plant), Bucay (Bucay poultry slaughtering and processing plant), Guayaquil (distribution center), Pifo (processed meats and frozen products packaging plant), Santo Domingo de los Tsáchilas (San Javier and Socorro hog feeding lots and biodigestor) and Valle Hermoso (Aveproca wastewater treatment plant and organic composting facility).

Assessment and Management of Environmental and Social Risks and Impacts: Pronaca has a management system in place to monitor the environmental and social impacts associated with its operations, which it has gradually improved over the years by implementing an environmental and social action plan (ESAP). The ESAP contains a set of actions that, once implemented, will ensure ongoing compliance with Ecuadorian regulations set out in the Law on Environmental Management and the Unified Text of Secondary Environmental Legislation (TULAS), as well as good international practices established in the Performance Standards on Environmental and Social Sustainability and the Environmental, Health, and Safety Guidelines of the International Finance Corporation (IFC). Thanks to the implementation of its ESAP, Pronaca has effected improvements to its environmental management system and has also made headway in obtaining the necessary environmental permits. In this regard, it has conducted environmental audits at several of its operating centers and to date has secured 76 of the 82 required licenses and permits. The remaining licenses and permits are awaiting approval from Ecuador's Ministry of the Environment or environmental secretariats at the municipal level. Pronaca expects it will secure these remaining permits in the coming months.

Pronaca's management system is currently headed by the corporate responsibility division (Dirección de Responsabilidad Corporativa) made up of representatives from five departments, each of which is supported by a team of two to three coordinators in different operating regions: Santo Domingo, Quito, and Guayaquil, respectively. The company's environmental management and industrial health and safety departments are responsible for the operations-related aspects of Pronaca. Its community outreach department (Gerencia de Relación con Grupos de Interés) is responsible for managing social issues arising from its operations in the surrounding communities. The company's physical security department is tasked with security at its installations, and the Fundación San Luis operations department is responsible for community cooperation in education and operates two schools in Valle Hermoso and San Juan de Bucay, respectively.

Pronaca safeguards the quality and safety of its products throughout the production and supply chains. It has implemented good manufacturing practices (GMPs) at its operating centers, and complies with the Codex Alimentarius Commission's international food standards. In February 2008, Pronaca initiated certification in GMPs, in accordance with Ecuadorian regulations (Reglamento BPM No. 253) and, as of 2011, six of its plants had been audited and certified. Consequently, Pronaca is the first Ecuadorian company to comply with this legal requirement. Several Pronaca plants, including those in Bucay, Santo Domingo, and Yaruquí are certified under the hazard analysis and critical control points (HACCP) system and under ISO 22000 on food safety management systems, which covers the entire supply chain.

The company has set up an auditing system at its operating centers as they undergo certification. Suppliers of raw materials, product packaging, ingredients, and other inputs must also be certified to ensure the safety of their products. All company operating centers are equipped with laboratories that conduct testing to ensure product quality and safety. Pronaca also guarantees the quality and safety of its products through a system of controls at its poultry and hog farms and at its slaughtering and processing plants, where it implements biosafety and animal well-being procedures designed to ensure the production of safe foodstuffs. Compliance with biosafety procedures is strictly enforced and mandatory for company employees, contractors, and visitors alike. Applicable at all Pronaca operating centers, these procedures place limitations on visitors, require the use of company-issued clothing and equipment to ensure cleanliness, mandatory showers before employees are allowed to enter the facilities, hand washing, ongoing monitoring of employee health, as well as other measures designed to prevent any type of contamination risk. With regard to Pronaca standards, one key factor is animal well-being. The care provided during raising, transport, and processing of poultry and hogs is administered in such a way as to minimize stress to the animals. When transported for slaughter and processing, animals are given sufficient time to rest. Parameters are observed to ensure animals receive, inter alia, adequate care and treatment in confined spaces, when placed on loading/unloading ramps, as well as in terms of population density, location, time dedicated to cleaning, and the amount of food and water provided. Vehicles used in animal transport comply with all applicable ventilation and space requirements to ensure humane treatment of the animals and facilitate cleaning and disinfection. Controls are in place at the facilities where animals are housed to control rodents, insects, and other pests.

Efficient Use of Resources and Pollution Prevention: Wastewater containing organic pollutants and/or suspended solids, animal waste (primarily in the form of unmetabolized nutrients excreted as feces), and emissions of unpleasant odors are the main environmental impacts associated with the operation of the poultry and hog farms and the respective industrial slaughtering and processing facilities.

Treatment of Liquid Effluents: With a view to managing the discharge of its industrial effluents, Pronaca has installed wastewater treatment plants at its various operating centers and all such wastewater is treated before being discharged into rivers. In some cases, treated wastewater is reused to water the grounds of company facilities. On a quarterly basis, chemical and bacterial-based toxicity assays are conducted at all the company's wastewater treatment plants. These tests are performed by independent laboratories licensed for such purpose by the Ministry of Environment. As part of the project's environmental assessment, a field visit was conducted to observe operations at the company's wastewater treatment plant at Valle Hermoso—the largest of Pronaca's 13 wastewater treatment plants. This wastewater treatment plant at Valle Hermoso treats effluents from the Frimaca (hog) and Aveproca (poultry) slaughtering and processing facilities. Built at a cost of approximately US\$2.8 million some five years ago, this treatment plant was designed to treat a daily flow volume of 3,600 m³, although the plant currently operates at a lower flow volume (daily volume of 1,600 m³). Effluents from the company's chicken and hog operations are channeled to the plant's sump pits in separate conduits, from which the liquid effluents are then pumped into two dissolved air flotation (DAF) units to remove suspended solids and grease. The effluents in the DAF units are then mixed in an equalization tank and subsequently channeled for biological treatment into aeration tanks where the dissolved organic matter (present in water as BOD₅ and COD) is removed by bacteria in the activated sludge process. Lastly, the water is channeled to a sedimentation tank and then to a chlorination tank for disinfection before being used to water green areas. Any excess is discharged into a nearby stream. The sludge from the wastewater treatment plant is treated in a series of filter presses to eliminate excess water and then transferred to the composting plant. The results of Pronaca monitoring efforts to determine if the water meets quality parameters for treated water (i.e., pH, BOD₅, COD, oils and grease, and total suspended solids and

fecal coliforms) indicate that the water treated and discharged by the water treatment plant at Valle Hermoso complies with the maximum permissible limits under Ecuadorian legislation and IFC environmental guidelines. In fact, the values of these discharge parameters at all but three of the company's wastewater treatment plants are below the maximum permissible limits under Ecuadorian regulations. Three of these plants are undergoing a technical review to reach optimal levels. Pronaca estimates that its investment in industrial wastewater treatment plants has exceeded US\$10 million. Nevertheless, in keeping with its ESAP, Pronaca will continue monitoring the quality of its effluents and assessing the need for additional improvements at its wastewater treatment plants so as to ensure ongoing compliance with Ecuadorian regulations and IFC guidelines. Pronaca's commitments for 2012 and 2013 include investment in a cleaner technology wastewater treatment plant to be used in its artichoke business.

Management of Animal Waste and Odor Control: Organic animal waste, primarily feces, is treated in composting systems to produce organic fertilizer or used in biodigestors to produce biogas. For example, the company's facilities at Valle Hermoso include a composting plant to treat the sludge produced by the wastewater treatment plant while animal waste generated at its local poultry and hog operations are processed at its Abonaza organic fertilizer plant. In addition, at nearly half of its hog feedlots Pronaca has installed a "deep bedding" system made up of rice husks, where animal waste is treated by composting inside the feedlot, which offers advantages in terms of odor control and reduced water consumption. For example, during the field visit to the hog farm at San Javier no unpleasant odors were detected from the farm's perimeter or at a distance. Pronaca has been using the deep bedding system ever since 2000. This technology has minimized odor, eliminated the need for water to clean feedlots, and provided the company with a source of organic fertilizer by composting the organic waste and mixing it with rice husks. As of 2011, Pronaca had registered a number of pork production operations based on the deep bedding system with the Kyoto Protocol's Clean Development Mechanism (CDM) to obtain carbon credits. According to Pronaca estimates, the company has reduced greenhouse gas emissions by 202,617 tons of CO₂ equivalent.

In contrast to hog feedlots that use the deep bedding system, odor in the company's other conventional feedlots with cement floors is minimized by hosing them down regularly, and animal waste and effluents are treated in six biodigestors that have been set up in different locations. The biodigestors used at the hog farms are closed systems that facilitate the decomposition of organic matter under anaerobic conditions—i.e., without oxygen. This process produces organic fertilizers and biogas as by-products. A field visit was made to the biodigester at Pronaca installations in Santo Domingo. This biodigester has a capacity of 11,000 m³ and treats organic waste and wastewater generated at the hog feedlots located in Socorro. One by-product generated by the biodigester is treated wastewater, which is channeled to oxidation ponds for additional purification and disinfection before being discharged into a nearby stream. The biodigester also produces approximately 500 m³ of biogas each day, which, for the time being, is burned in an incinerator. Pronaca is currently working on a project that would enable it to use the biogas produced by its biodigestors to generate electricity. It also plans to register this project with the CDM to obtain carbon credits.

Management of solid and hazardous waste, air emissions, and noise: During the field visit to company installations, it was observed that solid wastes are separated, classified, and temporarily stored until such time as licensed environmental operators pick up the waste for recycling and/or final disposal at sites authorized by the municipality. Likewise, any hazardous waste is transferred to covered structures with cement floors. Access to these structures is restricted and the materials are stored here until operators licensed by the Ministry of Environment remove them for final disposal. The by-products generated in the poultry processing plants—including innards, bone, blood, and feathers—are subsequently rendered in kettles (rendering plant). Small quantities of the resulting

material is then added to the recipes for pet foods. Tests conducted on ambient noise levels in areas surrounding Pronaca installations indicate that they are within the maximum permissible limits established under Ecuadorian regulations. Air emissions in the form of gas and dust are insignificant. These are produced by backup diesel-fueled generators which are only operated in the event of a power outage.

Industrial Safety and Occupational Health: The company's department of occupational health and safety is responsible for all community health and safety-related issues at Pronaca facilities. Pronaca assesses the health of all new workers and conducts regular medical check-ups to monitor its employees' health. All new workers complete an induction training program before coming on board. The company provides all workers with personal protection gear (e.g., work uniforms, gloves, face masks, hairnets, hard hats, eye protection, back support belts, ear protection devices, rubber boots, and aprons, depending on the type of work performed) and requires its mandatory use. The company has restroom and shower facilities for plant employees and visitors and provides laundry service for work uniforms. It also requires all contractors entering its facilities to abide by its security measures and all workers must be registered with the Ecuadorian Social Security Administration (IESS). The company has emergency response procedures in place and provides occupational health and safety training through workshops and seminars.

At the Pronaca facilities visited during the project evaluation phase, it was confirmed that the facilities were equipped with safety signage, posted evacuation routes, alarms, fire suppression equipment, as well as other required accident prevention measures. All fuel or other chemical storage tanks display NFPA (National Fire Protection Association) hazmat diamond labels. Diesel fuel tanks are equipped with secondary containment in the event of spills, and accident records are kept, complete with statistics. Access to Pronaca facilities is restricted and includes 24-hour security service, which monitors the comings and goings of visitors. Fuel (diesel) storage tanks are equipped with secondary containment structures in the event of spills and the company maintains a registry of and statistics on accidents. Company facilities that use ammonia in refrigeration equipment are equipped with alarms in the event of leaks. Pronaca also has emergency response procedures in place. The company's meat processing plants provide an on-site health unit. With regard to occupational health and safety, Pronaca is planning to implement OHSAS 18001 at its plant in Yaruquí as soon as it obtains the requisite certification, which may be as soon as 2013.

Pronaca has a corporate social responsibility (CSR) policy, which is available to the public on its website (www.pronaca.com). The company addresses concerns and complaints from customers and consumers through its website and at the following phone numbers: 1-800-PRONACA, 1-800-PLUMROSE, and 1-800-SUTIENDA. With a view to ensuring the transparency of Pronaca activities, each year the company prepares a sustainability report that includes progress made in managing the environmental and social aspects of its operations. The report is based on the Global Reporting Initiative and Global Pact standards. This report includes a model of indicators with information on energy consumption, fuel and packaging materials, and nonhazardous waste and wastewater generation.

Pronaca's community outreach department develops joint action plans with communities near its operating centers as a means of building a relationship of mutual respect and trust. In 2011, for example, the department carried out a series of breast cancer prevention campaigns in the communities surrounding the company's operating centers in Guayaquil. To this end, it provided screening services to 1,522 women between 15 and 70 years of age. With support from the municipality of Bucay and the IESS, the department formed several medical brigades to raise public awareness about preventable diseases, vaccinated 65 children under age 2 against the polio and influenza viruses, and carried out a series of community workshops on preventing alcoholism and drug addiction in Bucay. Pronaca employees also took part in community efforts to clean up and

paint three schools and beautify a park in Brisas de Santay. Working through the Fundación San Luis, Pronaca supports education in rural communities by sponsoring two schools (San Juan de Bucay and San Pedro de Valle Hermoso). Moreover, it administers an adult education program, delivers food aid to foundations in partnership with other companies, and provides counseling on nutrition and proper food handling. In 2012, the first class of 23 students will graduate from the school in San Pedro de Valle Hermoso.

Workplace and Labor Conditions: The social and economic benefits Pronaca provides to its 7,734 direct employees (275 of which have a disability), meet the requirements of current Ecuadorian labor laws and include additional benefits, such as private health and life insurance, a savings plan, workplace accident insurance, and a subsidized cafeteria. It is company policy at Pronaca to pay its workers in accordance with Ecuadorian labor laws, to provide them with equal employment opportunities, and to offer personal development and promotion opportunities based on its employees' capabilities and achievements. Pronaca makes every effort to ensure that no child labor or forced labor is used at its operations, pursuant to the guidelines of the International Labour Organization and Ecuadorian law. No workers are union members and, consequently, no collective bargaining agreement has been signed with a union. However, Pronaca has an employees' association that works to secure collective benefits. Pronaca values the input and recommendations of its employees and, in keeping with its ESAP, will examine how to go about implementing a formal grievance system this year.

In its relations with suppliers, Pronaca strives to offer them a fair and reasonable price in each negotiation within a framework of ethical behavior, compliance with applicable law, and social responsibility. To this end, the company has a program entitled *de integración* for its agricultural, poultry, and livestock suppliers, which assists them with supply chain development. Through this program the company provides its direct suppliers—which it refers to as “integrated producers”—raw materials, technical assistance and training in good manufacturing and environmental practices and, in turn, the suppliers implement these practices with the necessary equipment and biosafety system.

Monitoring and Compliance: Over the life of the project with the IIC, Pronaca will continue to implement the prevention, control, and mitigation measures included in the ESAP and the company's management system regarding the aspects presented in this summary to ensure compliance with IIC environmental requirements and good international practices established in the Environmental, Health, and Safety Guidelines of IFC. Pronaca will submit annual progress reports to the IIC on the implementation of the ESAP and the IIC will evaluate the monitoring reports that the company will submit each year and conduct periodic visits to the company's facilities as part of the supervision process.