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, and design criteria. The main environmental and labor considerations related to the project are environmental assessment and management systems, food quality and safety, biodiversity conservation and sustainable natural resource management, liquid effluent treatment, solid and hazardous waste management, occupational safety and health, labor practices, and social issues.

Industrial Pesquera Santa Priscila (IPSP) has a safety, occupational health, and environmental department with qualified personnel assigned to handle these matters. The company has conducted environmental audits at its main industrial plants in accordance with Ecuadorian regulations and has been implementing environmental, safety, and occupational health management improvements. The quality and safety of IPSP's products have been internationally certified by third parties. The environmental and social review of the project included the information provided by IPSP on the operation of its shrimp and tilapia aquaculture farms, as well as operations at the plants that process its products. Several larva hatcheries and aquaculture farms south of Guayaquil were visited, as were two processing plants in the industrial area of Guayaquil. IPSP will develop an Environmental and Social Action Plan (ESAP) in conjunction with the IIC to ensure compliance with the IIC's environmental, labor, and workplace health and safety requirements.

Environmental Assessment and Management Systems: Current Ecuadorian regulations pursuant to the urban development master plan for Guayaquil require an environmental license for industrial activities carried out by fish and shrimp processing plants. The first step is an Environmental Compliance Audit (ECA), including submission of an environmental management plan to the municipal environmental authority for approval. Thereafter, the ECA must be submitted every two years. In order to comply with Ecuadorian regulations, IPSP conducted ECAs in 2006 and 2009 at shrimp processing plant 1. The next ECA at plant 1 will be conducted in October 2011 in order to obtain the environmental license. Plant 2 was installed more recently and will schedule its ECA for the current year, 2011, in order to file for the environmental license. The third ECA has been prepared for the tilapia plant and was submitted to the environmental authorities in July 2010. IPSP is now addressing the recommendations suggested for approval of its ECA before obtaining the environmental license. The IIC will require that IPSP complete the process of obtaining its environmental licenses for the tilapia and shrimp processing plants, as well as for its fishmeal factory.

Food Quality and Safety: IPSP has good manufacturing practices in place at its operations. The company does not use antibiotics or fertilizers in its aquaculture processes, and its use of chemicals is minimal and closely monitored under the supervision of qualified staff so that its products can comply with domestic quality standards as well as the international quality standards that its clients demand. IPSP ensures the quality of its products by monitoring its aquaculture farms and processing plants under the Hazard Analysis and Critical Control Points system (HACCP). The HACCP system is periodically checked by the Instituto Nacional de Pesca, which certifies product quality and is the regulatory agency in Ecuador accredited by the European Union with respect to exports. The products that IPSP exports to the United States must also meet Food and Drug Administration (FDA) requirements and its clients' quality standards. The operations of specific larva hatcheries and aquaculture farms, as well as the processing of their products, have been inspected by the Swiss firm IMO (Institute for Marketecology), which has certified that the company's facilities that were audited comply with the Whole Foods Market Seafood Quality Standards: Farm Standards for Finfish and Shrimp. The audited facilities that currently meet the Whole Foods quality standards will be audited again in 2011 for renewal of this quality certification.

Biodiversity Conservation and Sustainable Natural Resource Management: In Ecuador, shrimp and tilapia hatchery and farming activities are governed by the General Regulations for the Fisheries and Fisheries Development Law and Consolidated Text of the Fisheries Law, issued in 2002. The reform of these regulations, issued through Executive Decree 1391 and published in 2008, established, inter alia, mandatory normalization of all producers with inter-ministerial agreements for highland aquaculture operations (private) as well as concession holders located in beach or bay areas. All producers occupying an area greater than the area assigned that have caused environmental damage, and those operating without an inter-ministerial or concession agreement, will be subject to review during normalization. To normalize their situation, concession holders must, among other requirements, have management and reforestation plans to conserve and protect the mangrove ecosystems or conduct an environmental impact study to obtain an environmental license. For shrimp farms that intersect with or are located in protected areas and whose infrastructure was completely built or fully operational before the area was declared a protected area, national park, ecological reserve, or the equivalent thereof, Executive Decree 1391 also allows these farms to be normalized by coming into compliance with several regulations, including conducting an environmental impact study and obtaining an environmental license. The Ministry of the Environment and the National Maritime Authority will approve the areas to be reforested, verify the reforestation process, and maintain an individual, up-to-date record of compliance. The Ministry of the Environment will identify special mangrove recovery areas; these may not be used for shrimp production.

Because IPSP's aquaculture farms are located on land that has already been used, the project does not involve conversion or degradation of critical natural habitats. Most of the land where the aquaculture farms are located belongs to IPSP; the rest are lands managed through concession holders. IPSP grows tilapia using a polyculture system, where in addition to producing tilapia as its main product it also produces shrimp. Polyculture is considered to reduce the environmental impact of aquaculture because the shrimp feed on algae and on tilapia waste. All of the project's aquaculture facilities have permits from the Aquaculture Under-Secretariat and regulatory clearance certificates from the INP, and they were fully built and operational prior to the protected area declaration referred to in Executive Decree 1391. However, in 2009 IPSP began the normalization process for those facilities that need it. This applies to eight of IPSP's shrimp facilities that intersect with some part of the Churute Mangrove Ecological Reserve (REMCH), the El Salado Mangrove Wildlife Reserve, or the El Morro Mangrove Wildlife Refuge. The environmental impact study is being prepared for six of the eight shrimp operations, and the environmental management plan required by the Ministry of the Environment is being prepared for the other two. Twenty-six other IPSP aquaculture facilities (or concessions) began their normalization process in 2010 and are currently preparing their management plan or environmental impact study to obtain an environmental license. IPSP believes that the normalization process for these aquaculture facilities will be completed in 2012. There are also seven shrimp operations under concession that have already prepared their reforestation plans and are only awaiting approval from the Ministry of the Environment before beginning reforestation. At the request of the IIC, IPSP will complete the normalization process for all the facilities it owns or holds through concessions as required by Ecuadorian regulations.

In order to improve the environmental and social practices that IPSP has been implementing at the project's aquaculture farms, the IIC will ask the company, as an additional mitigating measure, to prepare an environmental and social management program for aquaculture farms located in mangrove ecosystems or that intersect with or adjoin protected areas and to obtain independent third-party certification in accordance with international good practices such as those established in the World Wildlife Fund (WWF) Shrimp Aquaculture Dialogue and Tilapia Aquaculture Dialogue, or those of GlobalG.A.P., a comparable certification system. In addition, the IIC will, as a second step to

this end, ask IPSP to schedule bringing the rest of its aquaculture farms or farm concessions into compliance with these internationally accepted standards and to obtain appropriate certification for the rest of its farms. Implementing this measure will ensure appropriate mitigation of potential environmental and associated social impacts, as well as compliance with Ecuadorian regulations, good international practices in these areas, and the Inter-American Development Bank's Environment and Safeguards Compliance Policy.

Treatment of Liquid Effluents: All the aquaculture farms in the project use water pumped from the Guayas River and Estero Salado, with the exception of two shrimp farms where sea water is pumped from along the Pacific coast. IPSP's shrimp farms are extensive, low-density operations. This reduces the impact on pond bottoms and water quality and results in good feed conversion ratios, unlike semi-intensive or intensive operations, which are more aggressive against the aquaculture area and the environment and require more animal protein-based feed per kilogram produced. The water authority Secretaría Nacional del Agua has certified the proper use of water at some of IPSP's aquaculture facilities because these facilities do not produce pollution. The water in IPSP's grow-out ponds is aerated and recirculated, so when it is discharged into the marsh or sea it has the same or higher quality as the water drawn from the same source. This type of certification is being processed for IPSP's other aquaculture farms and those operated by its concession holders. Wastewater from aquaculture farm employee camps is treated in septic tanks.

Liquid effluent (domestic and industrial wastewater) from plant 1 is collected in separate drainage systems. Domestic wastewater is piped to a septic tank; industrial wastewater passes through a treatment system before being discharged into the municipal sewer system. IPSP periodically monitors the quality of liquid effluents, and the results of the most recent analyses (June 2011) show that the liquid effluent from plant 1 meets Ecuadorian standards, with values below the permissible limits for discharge into the sewer system. Currently, plant 2 does not produce significant liquid effluents because the process at that plant essentially consists of freezing, packing, and storing shrimp in cold rooms. As for the tilapia processing plant, the most recent results from monitoring the liquid effluents discharged into the municipal sewer system were submitted to the environmental authorities in May 2011. Those results show that the physical-chemical parameter values analyzed for the liquid effluents from the tilapia processing plant comply with the limits permitted by Ecuadorian regulations. The feed factory located in Milagro produces fishmeal, among other products, using organic waste from tilapia processing. Feed factory wastewater is piped to biological oxidation ponds for treatment and is subsequently used to irrigate IPSP facility grounds, in compliance with local regulations. The feed factory and the oxidation ponds are located in a rural area where the impact of the odors released is controlled and insignificant.

Solid and Hazardous Waste Management: The fish filleting process generates solid organic waste (such as heads, entrails, and bones) that is recovered, stored, and sent to the feed factory for use in producing fishmeal. At the shrimp processing plants, the heads and tails are recovered from the process and exported to Asia. Solid domestic waste is disposed of in the municipal sanitary landfill, and the company is currently in the process of obtaining the appropriate permit. Hazardous waste such as used motor and transmission oil is delivered to management companies authorized by Ecuador's Ministry of the Environment. Cardboard is retrieved and temporarily stored at plant 2 for recycling.

Occupational Safety and Health: ISPS's department of industrial safety, occupational health, and the environment has qualified staff assigned to handle these matters at the processing plants and aquaculture farms. There is a contingency plan in addition to emergency response brigades, signage, and evacuation routes. There are fire alarms and extinguishers; however, the company will install a fire protection system with a pump, sprinklers, pipes, and hydrants in order to improve the fire prevention measures as requested in the latest audit of plant 1. There is also a cardboard

storage room at plant 2 where the company needs to install a sufficient number of additional fire extinguishers. Ammonia used in the refrigeration system is stored at IPSP's processing plants, in tanks with labels indicating content, capacity, and hazard level, and a contingency plan is in place in the event of leaks. However, the area where the ammonia tanks are located has no fast-acting sprinkler system in the event of an ammonia leak. The IIC will require IPSP to install a sprinkler system in the ammonia storage areas at its processing plants. At the plants, diesel fuel is stored in tanks with secondary spill containment. The aquaculture farms have water pumping systems that run on diesel and bunker fuel. IPSP is implementing a program to ensure that all fuel storage tanks at the aquaculture farms have secondary containment to prevent soil and water pollution. IPSP has a medical service and doctor's office to tend to the health care needs of employees at the industrial plants. An IPSP physician and a social worker participate in health brigades that visit the aquaculture farm worker camps to provide vaccinations and medical care to the workers and their families, in coordination with the Ecuadorian health sector's rural clinics closest to the aquaculture farms. The company provides its employees with work clothes and personal protective gear according to the jobs they perform. There are high noise levels in areas such as the maintenance workshop; although the company provides employees with hearing protection, the IIC will require IPSP to periodically conduct hearing tests for workers who are exposed to high noise levels at work.

Labor Practices and Social Issues: IPSP employees receive the benefits prescribed by Ecuadorian labor legislation as well as contractual benefits such as uniforms and vacation bonuses. All employees are enrolled with the Instituto Ecuatoriano de Seguridad Social, and the company only hires employees who meet minimum working age requirements. Although there is no union, employees are free to organize if they wish. The company provides cafeteria service at no cost to employees at the processing plants and aquaculture farm camps. IPSP seeks to maintain good relations with the communities neighboring its aquaculture farms and supports them by making contributions during events and religious festivals, providing sports equipment, and making improvements to the schools. The camps have housing for the farm workers. The housing units consist of a dormitory, baths, and showers. The company is currently carrying out a building maintenance and improvement program at the camps to improve housing as required. There is wooden housing that will be rebuilt with concrete, and all of the housing will be equipped with window screens, sufficient lighting and ventilation, and septic tanks. At the request of the IIC, IPSP will ensure compliance with International Labour Organization standards such as freedom of association, abolition of forced labor, and non-discrimination in the workplace.

Monitoring and Reporting: IPSP agrees to implement the corrective and mitigating measures included in the environmental management plans prepared for the Environmental Compliance Audits of its industrial facilities, as well as the Environmental and Social Action Plan to be developed in conjunction with the IIC to ensure compliance with the IIC's environmental, labor, and workplace health and safety requirements. The company will submit an annual environmental monitoring report to the IIC on progress made in implementing the ESAP.