

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 good agricultural and manufacturing practices, solid waste and liquid effluent management, hazardous product handling, air emissions and air quality, general occupational health and safety, and other labor issues.

Viluco is an active member of the producer and industrialization working groups of the Round Table on Responsible Soy Association (RTRS). The RTRS works in such areas as environment, health and safety, legislation, community relations, and good agricultural practices. Viluco is an active member of the technical group that interprets the RTRS standards and approves them at the local level. Viluco's representative before the RTRS is a certified lead auditor, and the company also has several implementers. Viluco plans to audit its grain providers. The grain that Viluco uses comes from traditional agricultural areas; therefore, Viluco will not convert native forests and will comply with all applicable legislation at the provincial (land use maps) and national (forestry act) levels. Viluco is also working on implementing the following international standards: RTRS's Principles and Criteria (P&C), International Sustainability and Carbon Certification (ISCC), Agricultura Certificada (AC), and Cámara Argentina de Biocombustibles (CARBIO). Viluco expects to become certified for its compliance with these regulations in its own fields by early 2011. All of these standards require zero change to the use of soil in areas with high conservation value, high carbon content, wetlands, and peatlands.

Viluco has worked on calculating the carbon footprint of the biodiesel it produces, dividing it into four modules: agriculture, drying and collection, crushing, and esterification, including intermediate freight. This allows Viluco to verify that the fuel it produces results in a carbon footprint at least 35% smaller than that of diesel fuel derived from petroleum.

The company is GMP Plus-certified, which includes HACCP certification. Its goal is to obtain ISO 9001 certification during 2011. The plant began operating a few months ago and has not yet reached the capacity for which it was designed. Therefore, certain processes are undergoing small adjustments. The industrial plant is located in a rural area close to the town of Frías in Santiago del Estero province, some 4 km outside any urbanized areas.

**Liquid Effluent Management:** The company has set a goal of zero industrial effluents. Its production processes do not produce liquid effluents; therefore, the only effluents are being generated by industrial activity related to machine and plant cleaning. These effluents are collected and treated by an authorized company. The company is analyzing the effluents to determine the most appropriate form of treatment.

**Solid Waste Management:** The largest volume of solid waste is organic waste from cleaning the soy. This nonhazardous waste is used as filler. General plant waste, similar to household waste, is sent to the municipal landfill. Some nonhazardous byproducts (pelleted soybean hull, soybean residue, and oil dregs) are sold. Recyclables (scraps, wood) are sold or donated.

**Handling of Hazardous Products:** The esterification process requires adding catalysts (methanol) and other products that are considered hazardous. Hexane, which is also considered hazardous, is used as a solvent in the extraction of oil. These products are stored in bulk in tanks physically away from the plant, each of which has anti-spill protection.

Viluco is a registered producer of hazardous waste (mineral oil residues, contaminated solid waste, lab waste). This waste is treated by an authorized company and must meet traceability standards until its final disposal.

**Air Emissions and Air Quality:** The boiler and grain dryer burn natural gas, consequently their emissions have a low pollutant load. Solid particles could potentially be released, particularly from the grain dryer as well as from some of the warehouses and freights; a risk evaluation is being conducted.

Hexane and methanol levels are measured frequently at several points in the plant to check for leaks or the risk of fires and explosions. The extraction and biodiesel plants each have five explosives detectors.

**Noise:** There is a risk of noise exposure in several areas of the plant, particularly in the seed preparation area, near the boiler, and in the solvent extraction plant. The use of hearing protection equipment is required throughout the plant, except for closed-off spaces that are removed from the noise (control panels, laboratory, etc.).

**Personal Safety and Emergency Response:** The industrial plant has a fire alarm and firefighting system with sprinklers, an emergency water supply, and stand-alone pumping systems (electric pump, jockey pump, and engine pump), portable extinguishers (fire and foam generator), and fire brigades. In the area with storage tanks for flammable products, there are foam tanks with sprinklers and foam generators.

In addition to the explosive detectors mentioned above, the silos have temperature gauges and smoke detectors are being installed in the laboratory and the engine control room.

Emergency brigades consist of all plant personnel (approximately 40 people per shift), who are trained and made aware of procedures for taking action in the event of spills, fires, explosions, accidents, or rescues in confined spaces or at heights. There is a training program and a health and safety manual. In addition, contractors working in the Viluco plant are required to follow a procedure for entering the plant and must observe the same security measures as plant personnel.

**Labor Practices:** Viluco complies with domestic labor laws. Mandatory core labor standards include social security benefits, freedom of association, organization of workers' unions, prohibition of forced labor and exploitative and abusive child labor, and nondiscrimination in the workplace. Under practices encouraged by RTRS, emphasis is placed on ending child labor, particularly in agriculture. Viluco employees belong to trade unions depending on the type of work they perform: stockpilers belong to the stockpilers' union, vegetable oil and biodiesel workers to the vegetable oil workers' union, administrative workers to the trade and commerce workers' union, and field laborers to the rural workers' union. Labor contracts are governed by collective bargaining agreements negotiated with each trade union, and the medical coverage received by workers and their dependents is based on their applicable Obra Social (a group health insurance and other benefits scheme). Administrative personnel, supervisors, and managers are covered by a prepaid health service.

**Social Issues:** Viluco, together with Citrusvil, a related company that operates a lemon growing and processing business, supports the work of Fundación Vicente Lucci (in honor of its founder) in several areas of corporate social responsibility. The foundation is active in 45 municipalities in 4 provinces (Salta, Tucumán, Catamarca, and Santiago del Estero) where the companies have business ties (growing crops, livestock farming, and manufacturing) to identify areas in which social contributions can be made. The foundation focused on education during the past year, providing non-academic support to approximately 12,000 children with the help of more than 400 volunteers. Other companies connected to the value chain of Viluco and Citrusvil also provide support through the foundation. Internally, the foundation gives educational assistance to workers through an agreement with the Ministry of Education, whereby workers who did not receive a middle school-level education are given the opportunity to do so. In addition, the foundation supports the cultural

activities of local artists by allowing them to use its facilities for events and exhibitions.

**Oversight and Compliance:** Viluco will prepare an Environmental Management Plan (EMP) to ensure compliance with domestic regulations and the IIC's environmental and workplace safety and health guidelines. The EMP shall include a yearly report on liquid effluent and solid waste management, air emissions, health, occupational safety and emergency response training programs, and accident reporting.