

## **1. Environmental Classification**

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 include air emissions, liquid effluent management, solid waste management, handling of hazardous materials, alarm and firefighting systems, personal safety, and emergency response.

## **2. Main Environmental Impacts**

### ***Air Emissions***

The sources of continuous air emissions are the auxiliary boiler and the primary reformer, which run on natural gas, and the urea granulators, which can release ammonia and particulates. These are not significant sources of pollution. All of the sources mentioned are monitored quarterly by an independent laboratory authorized by the province's sustainable development organization Organización Provincial de Desarrollo Sustentable (OPDS); emissions are below the limits set by local law. All pipes that could be a source of release (especially of NH<sub>3</sub>) are part of a flare stack system designed especially for both regular and emergency operation. There is a potential risk of accidental ammonia, hydrogen, or natural gas releases. Depending on the quantity involved, the effects of accidental ammonia releases can range from a nuisance to a health risk. Accidental natural gas or hydrogen releases pose the risk of fire or explosions. The plant is equipped with a network of gas (hydrocarbon and ammonia) detectors at key points. They are connected to the fire and gas leak alarm annunciator panel in the main control room. The detectors trigger audible and visual alarms. The risk of accidental releases is mitigated by continuous monitoring and in-plant emergency response plans, which include water as a main source of protection (e.g., a fire suppression system consisting of sprinklers, monitors, hydrants, a brigade that trains weekly, and realistic drills).

### ***Liquid Effluent Management***

There are several sources of liquid effluents, some of which undergo specific treatment according to their characteristics. Domestic wastewater from the locker rooms, kitchen, and offices is treated in a compact bacterial degradation plant and disinfected using UV radiation. Oily waste is segregated at the source, in both the production and the maintenance areas. Street stormwater and process water are sent to an oil separator. Effluents that contain acid or caustic chemicals are segregated and neutralized. Water from counterwashing sand filters is treated in a clariflocculator. The main contributor to the flow of effluents is cooling tower blowdown, which does not need treatment. Once all the effluents have been treated, they are combined in an equalizing basin and moved to a settling tank, where they undergo final testing against several parameters before they are discharged into the Bahía Blanca bay. If needed, the effluents can be corrected before discharge. Hazardous or special liquids are stored and processed by an authorized company by landfarming, incineration, or blending.

### ***Solid Waste Management***

Management of solid waste is outsourced to an authorized company that specializes in special waste management in compliance with local laws. Waste is stored in duly identified plastic containers at the source. Twice a day waste is removed from the plant, weighed, classified by type and source, and stored in a holding warehouse until final disposal. Waste is identified according to properties and hazardousness, and precautions are taken for its safe temporary storage. The company hired to manage special waste internally is also responsible for cleaning and treating any hazardous material

spills.

### **Handling of Hazardous Materials**

Profertil uses chemicals as raw materials, intermediate process chemicals, auxiliary products, and cleaning and maintenance products, all of which are classified as special or hazardous substances. One of the final products for sale (ammonia) is also a hazardous substance.

Facilities and containers are designed for the substances they store. There are spill controls, secondary containers, and recovery systems. Daily walkthroughs and audits are performed. Each product has a safety data sheet. Hazardous substances are handled by trained employees who use appropriate personal protection gear. There is an annual employee training program. Contractors' employees must receive appropriate training and comply with the same security standards. The plant is equipped with emergency protection equipment such as emergency showers, booths with protective equipment, and self-contained breathing apparatus.

### **3. Alarm and Firefighting Systems, Personal Safety, and Emergency Response**

Fire detection systems were chosen according to the nature of probable fires. There are smoke detectors in areas where there are slow-burning materials that do not produce flames. There are also flame detectors. All the detectors are connected to the central fire and gas leak alarm annunciator panel.

The plant has two fire alarm systems: a general alarm that can be activated from the annunciator and a system of partial alarms that can be activated by pressing buttons scattered throughout the plant. The fire suppression network covers the processing and storage areas, land and buildings, and the port terminal (jetty) in order to protect ships during loading and unloading operations. There is a 5,500 m<sup>3</sup> reserve water supply providing twelve hours of autonomy. The plant has another, 38,000 m<sup>3</sup>, reserve tank connected to the firefighting system, extending its autonomy to 42 hours. The system has water monitors and spray systems in specific risk areas, as well as portable foam fire extinguishers. In sensitive areas there are halon flooding (saturation) extinguishers (FM200) that can be triggered manually or automatically, through smoke detectors. There is also portable firefighting equipment (extinguishers) for initial rapid response.

In the event of an emergency (such as a fire, spill, gas leak, or accident), the fire brigade is activated. It is skilled and trained, and the emergency procedures are spelled out in the company's manuals.

### **4. Labor Practices**

Profertil is in compliance with domestic labor laws and International Labour Organization (ILO) standards. Mandatory core labor standards include social security benefits, freedom of association, organization of workers' unions, and nondiscrimination in the workplace. In accordance with Argentine law, all workers have health and occupational accident insurance coverage (ART). There is an annual check-up plan for all employees.

### **5. Monitoring and Reporting**

Profertil shall develop, to the satisfaction of the IIC, an Environmental Management Plan (EMP) to ensure compliance with domestic regulations and the IIC's environmental and workplace health and safety guidelines. The EMP shall include a yearly report on liquid effluent and solid waste management and air quality monitoring.