

Environmental and Labor Issues

Environmental Classification: This project, which involves the construction of a crude-oil-fired thermal power plant with a 43 MW availability guarantee power generation facility (with a gross capacity of 63 MW), and which will supply energy to the Rubiales oilfield, 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 principal environmental and social issues related to this project include air emissions, wastewater and liquid effluent management, solid waste management, occupational health and safety, emergency response, and labor issues. The environmental and social impacts of this project are limited given that the project is located within an existing oilfield that has already been developed and has no communities located within the area.

Environmental Management System: Meta Petroleum, the operator of the Rubiales oilfield (which will receive energy from the new power plant) is responsible for the environmental, social, health and safety performance of its own personnel and its contractors. Given that Termino Rubiales is a Meta Petroleum contractor, it is required to comply with the requirements of Meta Petroleum's environmental management system. Meta Petroleum has an Environmental and Health and Safety (EHS) management system in place and has committed to obtaining certification in ISO 14001 and OHSAS 18001. Meta Petroleum also closely supervises its contractors (such as Termino Rubiales) to ensure that they comply with its EHS requirements, which are included in the service agreement as contractual obligations.

In addition, the IIC will require Termino Rubiales to implement the Environmental and Social Action Plan (ESAP), which addresses the gaps in its current management practices, and international best practices, such as International Finance Corporation (IFC) and Inter-American Investment Corporation (IIC) environmental and social guidelines and requirements, respectively.

Air emissions: The project will comply with local air emissions standards for NO_x, Sox, and particulate matter according to Meta Petroleum Environmental license resolution number 1586 dated September 12, 2008 and resolution 601 dated April 6, 2001, as well as with international best practices, such as those specified in the IFC's EHS Guidelines for thermal power plants: guidelines for new plants dated July 1998. The potential impact related to air emissions is anticipated to be very low given that it is in an open area, which is unpopulated. In addition, higher energy efficiency is achieved with this engine-driven power plant (fueled by crude oil) than with conventional steam power plants, and the sulfur content of crude oil is relative low (around 1.2%). In addition, the project has another energy efficiency component because it will result in a significant reduction (40%) of the use of trucks for oil transportation (approximately 250 trucks daily) given that the new power plant will supply a pumping station that will use a new export pipeline instead for oil transportation.

Regarding greenhouse gas (GHG) emissions, there will be no gas venting or flaring at the plant for operational purposes. But rather, most greenhouse gases will be generated as part of the power plant fuel combustion. It is anticipated that the project will emit approximately 290,000 ton CO₂ per year (based on a total net capacity of at least 56.5 MW, an annual capacity factor of 75% for the plant, electric generator efficiency of 97%, and carbon emission factor of 0.765 ton CO₂/MWH).

Solid Waste: Solid waste at the plant will be classified into different waste streams including, oily waste, lubricant waste, organic waste, and recyclables and they will be disposed of according to Termino Rubiales' new waste management procedure to ensure proper handling. In addition, Meta Petroleum has implemented a sound waste management plan that satisfies local regulations and IFC's EHS guidelines. In order to ensure proper waste disposal practices are implemented, the plan

includes a waste monitoring program.

Wastewater: As the power plant will not require large amounts of water (i.e. no open cooling water circuit is required), the wastewater primarily consists of sewage from bathrooms and rainwater runoff, which will be treated in a new wastewater treatment plant to be installed.

Occupational Health and Safety: Termino Rubiales has developed and successfully implemented an Occupational Health and Safety Manual, which includes information on risk identification and assessment, personal protective equipment needed in different areas, emergency procedures, on-site training plans, a safety inspection program, accident recording and investigations, safe work procedures (i.e. for electric work, heavy lifting, etc.). Termino Rubiales' annual training program for all employees covers environmental, health and safety management. The training program has a particular emphasis on safety issues related to the construction phase, safety risk assessment, work permits, chemical storage and handling, and emergency response. Operators are provided with hearing protection in areas of high noise and the company will implement a noise monitoring program as part of the ESAP.

Labor: Termino Rubiales will adhere to local labor requirements, as well as those required by the IIC. Termino Rubiales is also required to pay unskilled workers a minimum salary established by Meta Petroleum, which is double the national minimum wage. Meta Petroleum will be responsible for contracting the unskilled labor for the project, which will come from communities in the area. In addition, Meta Petroleum employs 130 indigenous people and will provide transportation for their workers to and from indigenous reserves and to Puerto Gaitan. The workforce will have the right to form unions, although none are anticipated. As part of the ESAP, the company's human resource policy will also be updated to reflect the ILO's Core Conventions.

Emergency Preparedness and Response: Termino Rubiales has committed, as part of the ESAP, to develop emergency preparedness and response plans for the operation phase of the plant. In addition, the Company has already prepared a contingency plan for the construction phase, which considers fire and spill scenarios.

Community Health Safety and Security: All of Termino Rubiales' drivers are required to pass a defensive driving course annually. Meta Petroleum handles all issues related to security of the oilfield, where the power plant will be located, and inspects all trucks entering the oilfield. In addition, Termino Rubiales has committed to following the Voluntary Principles on Security and Human Rights. These are a voluntary set of principles to guide companies in maintaining the safety and security of their operations within an operating framework that ensures respect for human rights and fundamental freedoms.

The project does not have any direct impacts on indigenous peoples, their land, livelihoods, or cultural property. However, Termino Rubiales is located in a region containing several indigenous reserves and a number of employees are hired from these communities. Termino Rubiales will implement a vaccination program for their employees to avoid any adverse health impacts on these indigenous people. They will also not allow the workforce to go outside the boundaries of the oilfield during their twenty-one-day working period, which also helps to reduce the risk of spreading infections from the work force to indigenous communities. As part of Termino Rubiales' agreement with Meta Petroleum, the company is required to give priority to employing workers from local communities. Currently Meta Petroleum is contracting 5% - 10% indigenous people for their other operations and it is anticipated that about 5% - 10% indigenous people will be contracted during the construction and operation of the new plant.

Monitoring and Reporting: Termino Rubiales is committed to implementing an ESAP to ensure

compliance with any relevant domestic regulations and the IIC's environmental and workplace health and safety requirements. An annual environmental monitoring report should be submitted to the IIC on the implementation status of the ESAP. Termo Rubiales will also submit an EHS report to Meta Petroleum, which includes updates on environmental issues (the use of water, solid waste generated, liquid effluent management, any spills and clean-up activities, fuel consumption, etc.), safety (training activities, vehicle safety, accident performance indicator, follow-up corrective actions, occupational health including illnesses recorded, health performance indicator, training and, preventive medicine), and community engagement (percentage of national employees, local community employees, money spent on local purchases, money spent on local services.) These reports will be consolidated annually as long as Termo Rubiales is the operator and will be submitted to the IIC as part of the annual environmental monitoring report.