

Tuper S.A.

ENVIRONMENTAL & SOCIAL REVIEW SUMMARY

This Environmental and Social Review Summary is prepared and distributed in advance of the IFC Board of Directors' consideration of the proposed transaction. Its purpose is to enhance the transparency of IFC's activities, and this document should not be construed as presuming the outcome of the Board of Director's decision. Board dates are estimates only.

Any documentation which is attached to this Environmental and Social Review Summary has been prepared by the project sponsor and authorization has been given for public release. IFC has reviewed this documentation and considers that it is of adequate quality to be released to the public but does not endorse the content.

Project number	29564
Country	Brazil
Sector	Industrial & Consumer Products
Department	Global Manufacturing & Services
Company name	Tuper S.A.
Environmental category	B
Date ESRS disclosed	May 12, 2010
Status	Pend FAP

Overview of IFC's scope of review

IFC's appraisal of the project included visits to Tuper's manufacturing facilities for steel tubes, steel-related products and exhaust systems in Sao Bento do Sul and Xanxere in the state of Santa Catarina, Brazil; and visits to the plastic thermoforming plant in Curitiba, in the state of Parana. Commercial operations in other regions of Brazil, which are mainly distribution centers were not visited.

Environmental and social conditions of the operations were assessed through documentation review and interviews with the Company. Documentation review included responses to an E&S questionnaire submitted by IFC, environmental reports to the local regulators, engineering designs for the planned manufacturing lines, and internal policies and procedures. Meetings were held with Tuper's Environmental and Quality Manager and his team responsible for the environmental aspects of all the business units, with the Human Resources manager and his team who coordinates HR and Occupational Health and Safety aspects of the operations and with the Project Manager who plans and executes civil and engineering projects.

Project description

Founded in 1970, Tuper S.A. ("Tuper" or the "Company") is a Brazilian medium-sized producer of a wide range of steel tubes, steel-related products, and automotive exhaust systems.

Tuper is undertaking a US\$140 million capital expenditure program to be implemented in 2010-2011 (the "Investment Program"), as follows: (i) the construction of a new production line dedicated to higher diameter steel tubes (i.e. 5 to 12 inches) to be used for the production of structural tubes and for the production of API-rated tubes for the oil & gas industry; (ii) the expansion of Tuper's production of automotive exhaust systems, including an expansion of the manufacture of complete exhaust systems for OEMs and catalytic converters; (iii) other investments in Research and Development and working capital needs. All expansion plans will occur on the existing facilities of the company.

Identified applicable performance standards

While all Performance Standards (PS) are applicable to this investment, IFC's environmental and social review of project information indicates that the investment will have impacts which must be managed in a manner consistent with the following Performance Standards:

- PS1: Social and Environmental Assessment and Management Systems
- PS2: Labor and Working Conditions
- PS3: Pollution Prevention and Abatement
- PS4: Community Health, Safety and Security

The project will proceed at established sites, and no land acquisition is anticipated. It is for this reason that issues covered by PS6, 7 and 8 are not expected to be encountered during the course of the Project.

Environmental and social categorization and rationale

This is a category B project according to IFC's Procedure for Environmental and Social Review of Projects because a limited number of specific environmental and social impacts may result that can be avoided or mitigated by adhering to generally recognized performance standards, guidelines or design criteria as described in the following sections.

Key environmental and social issues reviewed during the appraisal include the following:

Tuper's management of social, environmental, and health and safety matters;

Incorporation of environmental and health and safety considerations during the design, construction and operation of the new production lines;

Resource conservation, including efficient use of energy and water;

Wastewater reduction, treatment and disposal;

Hazardous waste management;

Labor and working conditions;

Occupational health and safety, including machine guarding, and welding fumes and noise exposure;

Fire protection and emergency response.

Key environmental and social issues and mitigation

Tuper has presented information to show how its current practices and policies address potential adverse E&S impacts and to ensure that the proposed project will comply with the environmental and social requirements upon implementation of the specific agreed measures. The social and environmental requirements are the Brazilian laws, IFC's Performance Standards, and the applicable IFC's environmental, health and safety guidelines. The following paragraphs describe how these potential impacts are or will be addressed by Tuper. Additional actions are summarized in the attached Environmental and Social Action Plan (ESAP).

Social and Environmental Assessment and Management System

-Social and Environmental Assessment: Tuper expansion is planned to take place in the current production facilities of the company. The existing plants have the locally required construction and operation permits and licenses. The proposed expansion does not require an individual Environmental Impact Assessment, according to local requirements. Tuper has considered Environmental and Occupational Health and Safety (OHS) issues in the design of the project. The new lines will use best available technologies and mechanisms to save energy and resources, including closed loop cooling water systems, installation of variable speed drives, and automatic welding equipment among other technologies. The company has recently installed a new galvanization line and has applied pollution prevention and control technologies and practices to avoid and minimize adverse impacts. Technologies and practices include energy recovery mechanisms, efficient use of water, proper treatment of effluents, control of air emissions and consideration of OHS aspects of the operations.

-Social and Environmental Management Program: Tuper has been proactively managing the environmental and occupational health and safety aspects of its business. The company has developed and certified quality management systems (ISO 9001) at all plants, and these cover human resources management. Occupational Health and Safety is handled at each plant through the risk management program required by Brazilian law, and is consistent with best practices. The tubes plant (including special components) and the constructive solutions plant have ISO 14001-certified environmental management systems. The environmental management systems are functional, with well defined indicators, continuous improvement programs and measurable results mainly in terms of energy and raw materials savings. The company extends the requirements to its contractors, including those involved in the construction of new projects. Tuper will expand its existing environmental and occupational health and safety management systems to all its operations, including those in Xanxere, Curitiba and any new development. Whenever Tuper undertakes any acquisitions, it shall adopt appropriate environmental, health and safety procedures and has committed to upgrade, if necessary, any facilities that it may acquire to meet local legal requirements and IFC's Performance Standards within two years of acquisition.

-Organizational Capacity: Tuper has corporate environmental and a human resources managers overseeing the entire operations and local coordinators at each plant. The managers are supported by a group of technicians assessing and coordinating environmental and social elements on the daily operations. The planned expansion will demand expansion of the company's capacity in order to cover all the environmental and social issues and to be able to keep the continual improvement of E&S issues.

New developments are the responsibility of the engineering department; environmental and OHS elements are considered as part of the initial design. Elements considered include noise mitigation, reuse of water, and energy efficiency among others. OHS and social considerations are well defined the construction contracts, in addition the internal OHS team oversees the construction of the new production lines.

-Training: Tuper identifies training needs through a well defined individual performance assessment and the identification of general needs performed by the managers in an annual basis. All new employees are trained on basic safety aspects of the operations and undertake a detailed induction program on the assigned working station. Specific environmental and OHS training is provided to new hires. The company has a well defined training program, in particular there is a very comprehensive program for employees operating cranes, and emergency response training, which includes fire drills and evacuation exercises.

-Monitoring and Reporting: Tuper has a functional monitoring system, which is essentially aligned with local legislative requirements. Parameters monitored include liquid effluents, air emissions, waste generation, ambient noise, occupational exposure and occupational

accidents among others. Tuper takes corrective measures based on the monitored parameters and share experiences among the different production facilities. Reporting is done internally through the ISO 14001 indicators and externally to those entities requiring environmental and social monitoring. The company will implement the monitoring plan and reporting for the new facilities and those plants that are not currently covered by the Environmental management system.

Labor and working conditions

-Human Resources Policy and Management: Tuper has HR policies in place, which are communicated to all new employees. Topics covered by the policies include compensation framework, internal and external recruitment, advancement, training, and benefits. The company has an induction manual that provides additional information regarding ethics in the company, shifts and working hours, internal communications and safety elements. Existing policies, collective agreements and supplemental procedures cover the requirements of PS2.

-Terms of Employment and Workers Organizations: Tuper contracts directly its employees and signs individual contracts with each employee. Such contracts define the rights and responsibilities of both sides of the employment relationship. Salaries and benefits have been benchmarked by the company to other local industries and are competitive for the sector and above the salaries paid in the region and the minimal required by Brazilian law.

Tuper has signed collective agreements with local unions. Such agreements provide details on minimum compensation, hours of work, overtime, overtime compensation, benefits, vacation, disciplinary measures, and safety measures. All the terms of employment are in compliance with local regulations and address the PS2 requirements. The company does not limit the right of association; new units will have agreements with local unions as well.

-Retrenchment: The recent growth of the company has led to an increase in the workforce of the company; however, due to some acquisitions and fusion of operations during 2009 the Company reduced the workforce in Xanxere and Curitiba plants. Such reduction of personnel was done under principles of non-discrimination and equal opportunity; relocation was offered when possible. Tuper compensated those workers according to the local legislation. The construction of the new production lines proposed under this project is expected to create near 200 jobs. Retrenchment is not expected from this project.

-Non-Discrimination, equal opportunities and protection of the workforce: Tuper applies principles of non-discrimination and equal opportunity during hiring, promotion and termination of employment. There is no evidence of discrimination based on personal characteristics or gender. Tuper has well defined mechanisms for performance assessment and promotion, which are based on merits and performance. Tuper has a strong focus on career development and offers support for those employees interested to continue their education. Working conditions comply with local regulations; the minimum age of employment is 18 as required by the local law.

-Occupational Health and Safety: Tuper has identified the workplace hazards and has defined measures to mitigate and monitor the risks. The company is fully compliant with national laws on occupational health and safety. Compliance with safety rules was observed among employees during the site visits. Tuper has implemented and matured several initiatives in the area of OHS including (i) a complete and functional program for the operation and maintenance of cranes; (ii) a training program based on risk profiles, and (iii) employees' participation as an integral component of the safety program through motivational campaigns and safety committees. The company has complete statistics of events and analyzes accidents to implement corrective measures.

There are important differences among the safety standards of the plants recently acquired and the plants located at headquarters of the company. Although the company has improved safety conditions in the plants of Xanxere and Curitiba, still some changes are needed; in particular regarding handling of chemicals, ventilation, ergonomics and housekeeping. The company will reinforce OHS on the plants of Xanxere and Curitiba, in particular the chemical handling program and ergonomics conditions. The company will assess the need to implement additional corporate safety procedures such as chemical handling program and lockout-tagout procedures.

Pollution Prevention and Abatement

-Resource Conservation and Energy Efficiency: Tuper has a strong focus on efficient use of resources, including water, energy and raw materials. Most of the water is handled in closed loops, this include cooling systems as well as water from the chemical treatments; the company has implemented on-site separation of oils and solids at each stage of the chemical treatment to extend the life of the baths. Tuper recently implemented heat recovery systems for its new galvanization plant and selects equipment considering energy efficiency features. The new production lines will use best available technology with equipment imported mainly from Europe with energy saving components as well as occupational safety features.

-Air Emissions: Tuper's combustion facilities are small, use natural gas, and are below the size threshold at which IFC require emissions monitoring. However the company has monitored air emissions from the boilers and limits for NOx and SO2 are well below the emissions limits. Air emissions from the manufacturing processes include gases from the welding cabins, chemical treatment and drying ovens. The company has identified all the emissions points, has operational controls to reduce emissions and where needed has implemented treatments; for instance the chemical treatment has a station for washing the gases before discharge, and the extraction system from the welding cabins have cyclones and filtration systems. Such controls are efficient as confirmed by the monitoring reports, in which all applicable parameters, including VOC's and particulate matter are in full compliance with local and IFC's requirements. The company has planned the implementation comparable controls and monitoring systems for the new production lines. Tuper will monitor air emissions from the galvanization plant including those parameters defined in IFC's guidelines.

-Liquid Effluents: The company reuses most of the water used in the industrial processes. The exhaust system plants in Sao Bento do Sul do not use water for the processes other than small amounts for cooling which are handled on closed loops. The tubes plant uses water for the washing and galvanization process, most of the water is separated and filtered on site to be reused and excess water goes to a central wastewater plant; after treatment some water is reused in the process with the remaining discharged to the municipal sewage system. The effluent levels are in compliance with local requirements and overall compliance with IFC's Guidelines.

The exhaust system manufacturing plant in Xanxere applies chromium plating to a small number of products. Water is reused as much as possible, however, when saturation is reached the baths are discharged to a storage tank and then are sent to a local authorized and licensed company (CETRIC) for its treatment and disposal. Tuper is considering alternatives to treat the effluents on site and will consider alternatives to optimize the process.

- Waste Management: Tuper has a well defined program for the management of wastes including hazardous materials. Waste is stored and managed according to its risk. Although processes consider reduction of the amount of waste produced and recycling is promoted; the company produces significant amounts of waste. Scrap is sold as well as some reusable materials. Hazardous wastes such as oils, sludge and used PPE are disposed through authorized and licensed external companies. Wastes are stored in the premises of the company in assigned areas, with the required controls. Wastes are identified, classified and stored in conformity with good practices.

-Hazardous materials: The company handles a small amount of hazardous materials, mainly those used for the chemical treatment of tubes, oils for cooling and welding materials. The amount of hazardous materials stored is limited and storage facilities are well-constructed with secondary containment, when applicable. Tuper has detailed procedures to store, handle, and control the access to the products. Material Safety Data Sheets (MSDS) and small summaries of key hazards are maintained by the company and where the products are to be used. Employees are well trained and are familiar with the procedures in case of emergencies and follow safety rules (including crane operations in the chemical treatment area). Tuper will improve the chemical handling program in the Xanxere plant.

-Greenhouse Gas Emissions: Greenhouse emissions of the operations are associated with electricity and natural gas consumption. Natural gas is used for the thermal treatment and for the overall operations of the tubes plants. The Greenhouse emissions of the current operations have been estimated at 5000 tons of CO2 equivalent per year, 22% of which is derived from the electricity use. Equipment selected for the new lines include technologies with efficient use of energy and reduced use of fuel, therefore, this project considers reduction of Greenhouse Gas Emissions and control of other potential GHG emissions, including those from combustion facilities.

Community health, safety and security

-Community Health, Safety and Security: Tuper plants, with the exception of the plant in Curitiba are located in mixed urban-industrial areas. The company has assessed the risk to the communities in case of emergency and has concluded that events will be contained in the premises of the company. In addition the company has positive relations with the community and is receptive to external communications; so far no issues have been raised. Tuper monitors ambient noise and is in compliance with local and IFC's requirements. The described controls under pollution prevention and abatement on emissions to air and water will protect Tuper neighbors from any process-related impacts.

The design of the manufacturing plants, including the new lines has considered structural and fire risks and has addressed potential issues following Brazilian construction codes and recommendations from local firefighter authorities.

-Emergency Preparedness and Response: The company has emergency response teams for all the plants and personnel is available in all the working shifts. All the plants have emergency response plans, extensive and well maintained firefighting systems including extinguishers throughout the plants, hydrant systems and water reservoirs exclusive for firefighting. The company has considered specific controls needed such as those required to handle zinc products in the galvanization plant. Personnel receive periodic training and fire drills are performed annually at each plant. Storage and handling of chemicals and wastes have the required preventive measures such as containment areas and proper spill response equipment.

-Security Personnel: Tuper contracts a professional and authorized security company for all the plants, distribution center, stores, and transportation system. The guards are armed and had proper training and license to work as guards and operate fire arms. The security company has operational manuals and employees are trained to guarantee adequate use of the fire arms and to follow up the procedures. No fire arms ever leave Tuper's premises, and therefore there is no scope for the security guards to use the materials provided by the company in an unauthorized private manner. There has not been complains or reports regarding abusive behavior or improper use of the guns. Security personnel is managed in compliance with the requirements of PS4.

Client's community engagement

Tuper has active community engagement programs in the areas surrounding its plants, in particular in Sao Bento do Sul. Activities include local sourcing of materials and services to foment local employment, for example the company hires local truck associations and local sewing enterprises. In addition the company supports cultural activities and local sports. Tuper has defined procedures to address requests from the nearby community, the company expressed that the community perceives Tuper as a good neighbor. Several of the medical and preventive campaigns the company has for the employees are extended to the worker's families.

Local access of project documentation

This ESRS and accompanying Environmental Action Plan will be publicly disclosed locally for review and comment at:

i) Tuper's office:

Rod. BR 280, 955 – Bairro Oxford Sao Bento do Sul – SC – Brazil

ii) Tuper's website: www.tuper.com.br

To contact the project company, please write to:

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<http://www.ifc.org/ifcext/spiwebsite1.n...>

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Attachments

[E&S Action Plan Tuper Final...pdf \(16Kb\)](#)