1. This is a category III project according to the IIC's environmental review procedure because specific impacts may result which can be avoided or mitigated by adhering to generally recognized performance standards, guidelines and design criteria. The principal environmental and social issues related to this project include: fire safety, spill prevention, emergency response, potential contamination from leaking underground storage tanks, liquid effluent treatment, and occupational health and safety practices. Overall, it is anticipated that this project will result in improvements in the environmental performance of ALE's operations and the gas stations that carry its brand. Amongst the measures described below there will be upgrades that will be done at the gas stations, a program to replace old tanks, new environmental requirements to be included in ALE's contracts with the gas station owners, and the preparation of an Environmental Management Plan. In addition, ALE plans to obtain ISO 14000 certification for its storage depots, gas station schools and offices in Environmental Management Systems. This is expected to create a demonstrative effect that other companies in the sector may follow.

## **Environmental Issues:**

- 2. Environmental Compliance: The Brazilian federal environmental authority, the Conselho Nacional de Meio Ambiente (CONAMA) has recently passed a law (Resolution No 273) in November 29, 2000, that applies to facilities that have storage tanks containing petroleum or other types of fuel. CONAMA now requires that these facilities be included in an official register and that they obtain environmental licenses. One of the requirements for a facility to obtain an environmental license is compliance with the Brazilian Association of Technical Standards (ABNT). The ABNT standard most relevant to gas stations is ABNT Standard NBR 13786 for the selection of equipment and underground fuel storage systems for gas stations dated August 2001. ALE's facilities and gas stations with ALE's brand are currently in the process of registering their stations with the government and are in the process of obtaining their environmental licenses throughout the next few years. An Environmental Review will be prepared for all gas stations to be built and to be added to ALE's network besides the existing ones. In addition, the project requires that the transport companies that ALE uses to distribute its fuel as well as ALE's facilities have the required operating licenses.
- 3. Environmental Studies: ALE hired an independent environmental consulting firm to conduct a General Environmental Audit of ALE's storage depots in Betim and Duque de Caxias, gas stations in ALE's network, and trucking companies that ALE uses to transport fuel. In the past, ALE has hired consultants to prepare specific environmental audits of various gas stations in its network to identify potential subsurface contamination from underground storage tanks and equipment. Since December 2001, it has become part of ALE's policy to conduct environmental audits of gas stations before they become integrated into its own network. The objective of the audits are to identify any existing contamination from previous operations or land use activities and technical upgrades needed to comply with ALE's requirements.
- 4. Contamination: In March 2000, ALE contracted a consultant to conduct a hydrogeological study (Estudos Hidrogeológicos do Aqüifero Freático-Situação de Contaminação por Derramamento de Combustivel) to identify contamination from a fuel spill at ALE's storage depot in Betim. The purpose of the study was to define the extent of the pollution and its impact on the groundwater, surface water and soil. The spill was due to excessive pumping of gasoline from a tank at an adjacent refinery (Refinaria Gabriel Passos REGAP) into a tank at ALE's storage depot, causing the tank to overflow. Approximately 69.5 m3 of fuel was spilled, and 10 m3 was recovered and treated to be reused. An emergency brigade was formed consisting of ALE, REGAP, and TESIAP to limit the spread of gasoline onto adjacent properties and to clean it up.

The General Environmental Audit commissioned by ALE does not identify any other significant spills

to have occurred at ALE's facilities. As part of the project ALE will conduct detailed environmental audits of all of the gas stations in its networks. The reports will be reviewed by the IIC and will include a Remediation Plan prepared by ALE, describing the actions to be taken to clean up any contamination that is identified. All remediation will be fully implemented before physical completion of the project. ALE will present every four months a report describing the clean up and mitigation measures implemented at these gas stations in that particular period.

In order to ensure that ALE has sufficient funds allocated to environmental liability, ALE will set aside a reserve of US\$ 1 million that may be increased or decreased depending on the findings of the audits. However, the amount will remain in place until all of the gas stations in ALE's network complete the audits, the substitution program for old tanks and the upgrade of the gas stations to comply with Brazil's new requirements.

As the future stations to be built will comply with Brazil's new technical standards, requiring leak detection, and other pollution prevention devices, the likelihood of spills is anticipated to decrease over time.

5. Spill prevention and Release detection/ Monitoring: According to Brazil's new environmental legislation (CONAMA's Resolution No. 273), all of the gas stations in ALE's network will be required to upgrade their equipment in accordance with ABNT standard NBR 13786 for the selection of equipment and underground fuel storage systems for gas stations.

As part of ALE's project to upgrade the gas stations in its network so that they comply with the new ABNT standard (depending on the classification of the gas station), the following pollution control measures that reduce contamination due to leaks, spills, overflowing, and corrosion of underground storage tanks will be implemented.

- a) To control leaks, the gas stations will conduct or install the following:
  - Manual monitoring of the fuel volume in the tank/water tightness test
  - Automatic/electronic leak detector
  - Groundwater monitoring wells
  - Soil Vapor monitoring wells
  - Interstitial monitoring devices
- b) To control spills, the gas stations will install the following:
  - Tank Top Spill Containment Sumps
  - Pump/Dispenser Spill containment Sump
- c) To control overflows, the gas stations will install the following:
  - Quick release caps (Descarga selada)
  - Spill Containment sump for street manhole.
  - Autolimiter valve or floating ball

The double walled tanks to be installed by ALE consist of carbon steel with an additional fiberglass

wall. Tank-top sumps are also installed. These piping sumps are liquid-tight containers designed to contain leaks or spills that involve tank-top fittings from the corrosive underground environment. In addition, tank-top sumps frequently serve as the leak detection point for double-walled piping systems.

All of ALE's storage depots have secondary containment for its tanks, as well as drainage systems that lead to an oil/water separator in case of a spill. In addition, each tank has a floating cap inside in order to ensure that there are no vapor losses from the tanks. As the tanks are above ground, leak detection is facilitated.

- 6. Wastewater: The secondary containment basins around the fuel storage tanks at ALE's storage depots are connected to oil/water separators to ensure that any effluent, such as rainwater mixed with petroleum if a spill occurs will be treated prior to discharge. The gas stations in ALE's network will also have oil/water separators.
- 7. Solid Waste: ALE will require that gas station owners in its network properly dispose of oil when oil changes are done, and dispose of all other waste in an appropriate manner. ALE will also ensure that the old tanks removed from the gas stations are purged, cleaned, and disposed of at an authorized facility. ALE has a manual describing the procedures for removal of old tanks and disposal of the used tanks, as well as installation procedures for new tanks. Sludge from the septic tanks, oil from the oil/water separators, and absorbent material used in the case of spills will be disposed of in an appropriate manner, and will be described in ALE's Environmental Management Plan. Empty containers for additives used at the storage depots are returned to the manufacturer.
- 8. Accident Prevention/Fire Safety: Training offered by ALE for gas station operators/owners at the Posto Escolas (gas station schools) is an important measure in ensuring safe practices. As part of the project, ALE plans to expand the number of gas station schools from two to eight in the year 2004. An important component of the two-day training course offered at the gas station school focuses on occupational health and safety procedures, accident prevention, and environmental issues. In the course, ALE presents the importance of the following obligatory activities, such as: verification that at least two fire extinguishers are full and maintained properly, ensuring that when the tanks are being filled all fire prevention measures are implemented, verification that no equipment (i.e. tanks, pipes etc.) are leaking, maintenance of a clean environment at the gas station, ensuring that there is no waste debris that may result in accidents, ensuring that vehicles are turned off when pumping gasoline, maintenance of electrical system to avoid short circuits, and security of the gas station area.

In the event of an accidental spill or emergency, ALE will use the services provided by specialized companies dedicated to emergency response. As part of the activities to be completed as part of ALE's Environmental Management Plan, the company will be required to assist the gas station owners in preparing their own specific emergency plan/procedures manual in cases where the gas station doesn't have one. In addition, ALE's facilities and gas stations should have absorbent materials available to control any superficial spills that may occur.

A series of programs have been developed by ALE to reduce the risk of accidents at the bases. These include the preparation and implementation of the following programs that have been reviewed and approved by the environmental authority FEEMA: Risk Prevention Program, Emergency Control Program, Risk Analysis, and Operating Manual, Inspection and Preventative Maintenance Manual, and Personnel Training Program. Periodic fire drills and simulations of various types of emergency situations are included in the training program for personnel. ALE's storage depots both have been audited and approved by the state Fire Department (Corpo de Bombeiros) to ensure their

compliance with ABNT standards. Fire fighting equipment at the bases includes independent water reserve tanks to combat fires, fire extinguisher with foam for hydrocarbons, fire hydrants with foam, fire hydrants with water, connections so that fire trucks can use the reserve water to assist in combating fires, fire hoses, and an alarm system. Fire fighting equipment is located at the base of each tank, as well as on the platform used by tankard trucks for pumping. Fire extinguishers are also located in the office areas, the loading area for gasoline and alcohol, and the parking lot.

The transportation companies used by ALE to distribute its fuel are required by ALE to have special licenses that are issued by the Ministry of Transport specifically for the transport of hazard substances. In addition, the transport companies are required to comply with Brazilian ABNT standards. ALE has developed specific procedures for loading of tanker trucks at ALE's storage depots and unloading of fuel at ALE's customers, mainly gas stations. These procedures are described in ALE's Manual de Carga/Descarga de Carro-tanques. ALE's procedures require that each tanker truck pass an inspection using a checklist before it is permitted to load fuel and transport it from ALE's storage depots. ALE will require that each truck driver has their original license to transport hazardous materials. Procedures regarding the order in which the hose should be disconnected from the tanks during unloading and loading are also specified in order to prevent fuel remaining in the hose from dripping on to the floor (e.g. when a tanker unloads its fuel at a gas station, the hose should be disconnected from the truck before being disconnected from the tank in order to ensure that the remains of the fuel drips back into the tank rather than on the floor.) The Manual also describes procedures in the case of an accidental spill or fire during loading or unloading operations.

- 9. Occupational Health and Safety: Workers at ALE's facilities are provided with the appropriate protective equipment, health insurance and first aid. All work related accidents are recorded and analyzed. The company has also trained staff at its facilities in first aid. In addition, occupational health and safety and first aid is included and will be expanded on in the two-day training course for gas station owners at ALE's gas station schools. A component on health and safety is also included in the procedures used by tankers when loading and unloading fuel, operating manuals given to gas station owners, the Risk Prevention Program, Emergency Control Program, and Training Manual for the storage depots.
- 10. Labor: The Company has a policy that persons under 18 years of age are not permitted to work. ALE has signed a collective agreement with the worker's union of the State of Minas Gerais (Acordo Coletivo de Trabalho), where wages, hours worked per week, vacation, health care and other benefits are described. One of the benefits ALE includes in the agreement is an education grant to assist employees or their children in furthering their education at the elementary, high school and university levels. A small amount of ALE's employees are members of a union (1%), however all employees are free to do so if desired.
- 11. Monitoring and Annual Reporting: ALE will develop an Environmental Management Plan (EMP), which will include a schedule for the implementation of environmental projects and a monitoring and reporting program to ensure that their facilities are complying with national laws and IIC's environmental guidelines. The EMP will also include an Environmental Management System (EMS) based on the ISO 14000 standards. The EMS will describe who will be responsible for monitoring the implementation of environmental activities. In addition, ALE plans to obtain the ISO 14000 certification for its facilities. The Company will submit an annual report to the IIC summarizing the monitoring data related to: i) the upgrades that will be done at the gas stations to install equipment to reduce the possibility of spills, leaks, overflowing, and corrosion of pipes and tanks for underground installations as per ABNT standard (NBR 13786); ii) the program to replace old and potentially leaking tanks; iii) ALE's program to include new environmental requirements in their

contracts with the gas station owners that use ALE's brand and the transportation fleet of trucks that distribute fuel from ALE's storage depot; iv) ALE's program to monitor, assist and ensure that gas stations in its network are obtaining the newly required environmental licenses and that trucking companies that distribute ALE's fuel are operating in a safe manner; v) the oil/gas survey audits to be conducted on all of the gas stations in ALE's network that have yet to be audited; vi) any remediation/clean-up efforts in the case that contamination is identified in the audits; vii) training programs for accident prevention, fire safety and emergency procedures; and viii) accident reports and labor issues.

As result of the project, ALE will include environmental requirements in the contracts with the gas station owners and trucking companies. The contracts will include the following: i) compliance with Brazilian environmental laws at both the federal and local levels, and the IIC's requirements; ii) information to ALE regarding compliance, including the submittal of all relevant environmental permits, and sanctions from the environmental authorities regarding accidents; and iii) reporting any spills, contamination on site and any complaints from local communities regarding contamination that is potentially generated. Contracts with gas stations owners or transport companies will include the new requirements when renewed. These environmental requirements in the contracts will enable ALE to directly monitor and report on compliance of gas stations in its network and in transport companies used.