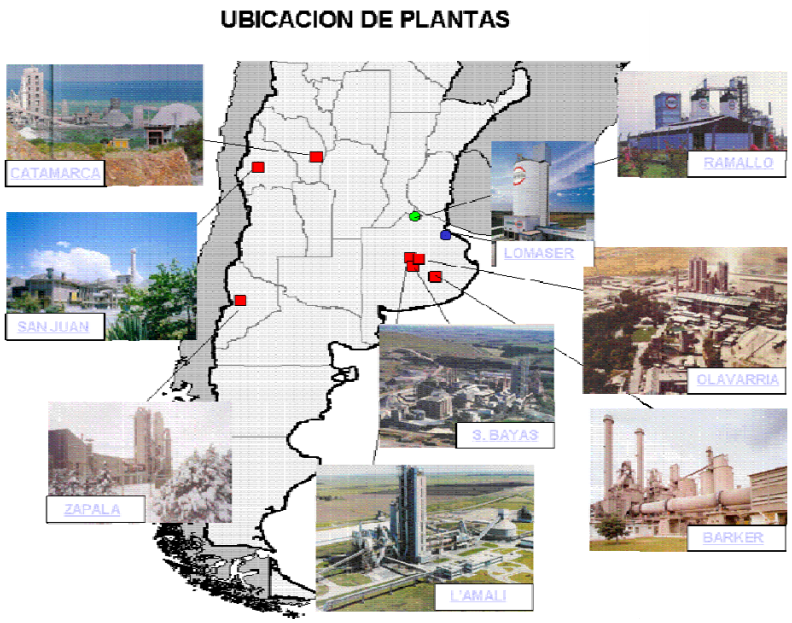
Environmental and Social Strategy

1. Project Description

Loma Negra is the largest cement producer in Argentina, and has nine production plants, including quarries: six are distributed in the Provinces of Buenos Aires, and there is one each in Neuquen, Catamarca, and San Juan (see below). The CapEx program being considered under this loan is part of a longer-term (2008-2012) program of facility expansions and environmental upgrades. The upgrades are the direct result of recommendations made by an international



environmental consulting firm following a comprehensive auditing program initiated in 2005, when Loma Negra was acquired by CCSA. The areas of investment covered by the loan include primarily capacity expansions and environmental upgrades and improvements, as follows:

Capacity investments

The budget for capacity investments is projected in US$87 MM. More than 80% of the budget is basically concerned with three main projects:

- **Cement Mill in Catamarca Plant:** The plant's overall cement production capacity is currently limited by milling capacity, leaving the kiln underutilized. Installing a new vertical mill will enable the plant to reach 100% of kiln capacity. This technology operates more efficiently and is expected to reduce energy consumption by 30% compared to current installed mills. The new mill will also allow the plant to operate outside of peak electricity demand hours.
- **Cement Mill in L´Amalí plant:** The new cement mill will increase cement capacity in L´Amalí plant doubling its current production level.
- **Cement Mill in Barker Plant:** Refurbishment of an old mill increasing the milling capacity by 250,000 tons/year and reducing bottle necks in Barker.

Environmental Investments

With the intention of reaching high environmental standards in all its facilities, Loma Negra has approved an ambitious plan in order to reach these standards by 2012. A key purpose of these investments is to reduce dust emissions mainly by installing new filters in the clinker coolers and grinding mills and by reducing dust from open air material storage and transport through the construction of warehouses for raw material and final product and closed transport systems. The plants with higher budgets are Barker, Zapala, Catamarca and Olavarría, covering 80% of total budget, although works are also being completed at San Juan and Ramallo. Additionally, the investment program includes investments in alternative fuels through the recycling of industrial waste, and upgrading its existing environmental practices to world class standards. Specific investments include:

- **Dust control** from crushing and grinding activities, the kilns and clinker coolers, and material transport using bag filters and automated dust capture and return systems
- **Dust control** from materials storage areas by containing existing areas, and building new containment, and by using water for dust suppression.
- **Remediation** of past environmental liabilities including the decommissioning and disposal of abandoned buildings and equipment, removal and disposal of contaminated soils from poor housekeeping practices (small fuel spills, waste disposal, etc.); installing contained fuel storage and handling facilities; and restoring disused quarries.

2. Environmental and Social Setting

The facilities are all located in areas designated for industrial use, and are not located on environmentally sensitive areas or protected areas. There are communities in the areas of some of the quarries, including one indigenous community near land belonging to (but currently not use by) the Zapala plant. In terms of natural disasters Argentina is at risk from earthquakes and volcanic activity, especially in the west. Flooding is also a risk, especially in the areas around Buenos Aires. Specific information on the sites and their risks will be evaluated during the due diligence.

3. Compliance

As the facilities are existing operations and the additional equipment is not considered to present significant impacts, the company is not required by local regulations to prepare environmental impact assessments. The company is, however, required to have Certificates of Environmental Aptitude (CAA); these require a bi-annual sworn statement regarding the current environmental status of each facility. These analyses have been prepared for each of the plants in which the components of the projects will impact and reviews by the authorities have either been completed, or are in progress. During the due diligence, the approval status for each plant will be confirmed, and any additional requirements identified.

In 2005 a comprehensive auditing program by an international environmental consulting firm was initiated when Loma Negra was acquired by CCSA. In terms of overall environmental and social compliance with local requirements, the audit report listed several areas of non-compliance with local standards and requirements, in particular dust emissions and certain license requirements. The company reports that since then, many of these issues have been resolved, and currently there are no significant outstanding regulatory issues in terms of their operations and environmental and

social impacts. There are still permit applications in process, and a few submittals pending, but these are considered to be administrative with no material environmental or social effect the company's ability to operate. The audits were, however, limited to compliance with national legislation only, so there is no information as to whether the standards applied to the project meet international standards, such as those of the World Bank Group, specifically, guidance related to cement operations. A thorough review of the compliance status will be conducted during the due diligence, including a comparison with the 2007 Environmental, Health, and Safety Guidelines for Cement and Lime Manufacturing.[1] In relation to IDB Polices, this operation has triggered the following directives from the OP-703: B.4 (other risks) and B.11 Potential to cause air, soil or water contamination. Additionally, the Disaster Risk Management and the Disclosure of Information Policies apply.

4. Impacts and Risks

All of the facilities included in the investment program are existing operational facilities, and the project itself consists only in the installation of new equipment, (mills and dust control filters), and physical improvements (such as to materials storage areas), within the existing footprint of the facilities. Therefore, there will not be the construction impacts normally associated with large expansion programs or new facilities, just minor installation works directly in the process areas where the new equipment will be installed and where the raw materials areas will be upgraded.

The project impacts are primarily related to the operations once the expansion and upgrade works are completed. The most significant impact from the project is positive: the reduction in dust emissions. There will also be some energy and natural gas (for the furnaces) consumption reductions due to more energy efficient systems being installed; and although production will increase, overall the company does not anticipate a significant increase in energy consumption. This is important, as cement production is a relatively energy intensive activity. Also, there is the potential for the plants to switch their fuel source from natural gas to pet coke that is processed by the company at its own facilities, and also to use another fuel called "Recyfuel" a product made from the byproducts of industrial processes like petroleum refineries that can be used as alternative fuel in cement kilns. The energy balance, including changes in greenhouse gas emissions, will need to be evaluated in detail during the due diligence. Other outputs such as waste water, overall air emissions (including CO_2 CO, NOx, SO_2 and PM_{10}), and solid waste may increase incrementally, but these are not anticipated to be significant.

While the incremental increases in impacts at the individual plants is not considered significant, it is possible that when combined across all of the facilities, there could be a more significant cumulative impacts, especially in Buenos Aires where several facilities are clustered and therefore needs to be quantified.

The environmental audits identified several issues, mostly related to the need to improve operational practices related to environmental issues, including air emissions, materials storage, handling and disposal; outstanding permitting requirements; and issues related to the operations of the quarries. The issues identified in the audit are those that are often identified with cement production and other manufacturing processes. Recommendations were prioritized according to

[1] http://ifcln001.worldbank.org/ifcext/enviro.nsf/AttachmentsByTitle/gui_EHSGuidelines2007_CementandLimeMfg/$FILE/Final+-+Cement+and+Lime+Manufacturing.pdf

their risk. In particular, dust impacts were identified as one of the highest risk issues, along with improved and new waste waster effluent treatment plants, disposal of equipment and oils containing PCBs, improvements to hazardous/dangerous materials and waste storage areas and past areas of abandoned facilities and contamination. Health and safety issues were not identified as a significant risk in the audit report; however, these types of operations, especially in quarries, can contain potential risks to workers that need to be evaluated during the due diligence.

Based on the recommendations of the audit, Loma Negra prepared an action plan, including budgets to address the recommendations in the report. As of the end of June 2008, many of the recommendations have already been completed, such as the construction of treatment plants for effluent, removal and disposal of equipment containing PCBs, and the demolition of unused facilities. In terms of the dust issue, some plants have already had filters and other control technologies installed. The remaining dust control measures are being installed as part of the project, as are the renovations to the raw material storage areas. The project, therefore, will be directly facilitating the reduction of many of these risks. The completion of the action plan is expected to provide a significant improvement in the environmental conditions of the facilities.

No resettlement will be needed for this project. The audits did identify potential social risks related to the quarries, such as a lack of security that has lead to illegal use by others, encroachment by community residents, and some ownership disputes, which are currently being resolved. It will be important during the due diligence to ensure these aspects will not present risks to the project, especially where local communities have easy access to the quarries.

In addition to the potential risks at the Project facilities, there are also potential risks that activities of the Loma Negra group at facilities outside of the IDB financing could have environmental or social that could present credit or reputation risks to the IDB. From the initial information reviewed on the company, this does not seem to be the case, and, in fact, the group appears to have developed a high level of corporate environmental and social management and a good track record. The company appears to have systems already implemented to manage environmental and social issues, and to mitigate potential impacts. Loma Negra has an environmental policy, and has created a Health and Safety and Environment Management framework, with an overall corporate supervisor supported by supervisors at each plant. The company is currently developing its own integrated environmental, health and safety management system based on OHSAS 18000 and ISO 14000, and anticipates obtaining certification by the end of 2009. In addition, they have a well developed CSR (Corporate and Social Responsibility) program with the local communities, implemented through the Loma Negra Foundation.

Overall, the level of negative impact from the project itself is considered to be minor, as the project components result primarily in improvements. However, there will be incremental increases in overall emissions, water use resources, energy consumption that, especially when combined across the nine plants in the group, could lead to moderate overall impacts. As a result, the team proposes that the project be classified as a “B” under the IDB Policy OP-703. In addition, environmental, health and safety, and social risks, especially associated with past activities and operations, could present a moderate risk in terms of liabilities and compliance.

5. Strategy for Due Diligence

Additional potential environmental and social issues related to a capex investment of this kind relate primarily to liabilities that may exist associated with the Company's current or future operations, beyond just the activities of the investment program, especially impacts associated with increased production. For this reason, the focus of the environmental and social due diligence (ESDD) will be on the Company's capacity to identify, mitigate and manage risk, and on the overall changes in impacts resulting from the expansions. Specific attention will be given to (1) dust emissions and energy consumption resulting from the combination of new controls and increased production; (2) cumulative impacts across the nine facilities, (3) ensuring the operations of the facilities are in compliance with local requirements, relevant international standards, and IDB policies, (4) evaluating existing environmental and social liabilities and associated action plans, and (5) ensuring that the company contains the appropriate environmental, health and safety, and social management systems, procedures, and capacity to maintain the required level of performance.

To achieve these objectives, the environmental and social due diligence will specifically address the following:

Compliance:

a. An assessment of compliance of the project (both the plants and the associated quarries), as well as the overall company corporate status, with the applicable country (national, provincial, municipal, local) environmental, social, and health and safety, and labor regulatory requirements (e.g. laws, regulations, standards, permits, authorizations, applicable international treaties/conventions, etc.), project/company specific legal requirements (e.g. licensing/permitting requirement, etc.), international standards such as the 2007 World Bank Group Environmental, Health, and Safety Guidelines for Cement and Lime Manufacturing[2] and applicable Bank environmental and social policy or guideline, such as OP-703 Environment and Safeguards Compliance Policy, OP-102 on Information Disclosure, and the Disaster Risk Management Policy.

b. An evaluation of project-related information disclosure and public consultation activities that have been performed and the proposed future actions to provide adequate ongoing information disclosure and public consultation with the local population.

Potential Impacts and Risks:

c. An evaluation of the proposed project to confirm that the direct, indirect, and cumulative environmental and social impacts have been properly identified and evaluated (both positive and negative impacts). In particular, this will include an assessment of the impacts resulting from increased production on plant outputs (emissions waste, etc.), use of water and energy, impacts at the quarries; but also the cumulative impacts of the increased production across all the Loma Negra facilities. This will include the evaluation of the available environmental assessment reports related to the Project.

[2] http://ifcln001.worldbank.org/ifcext/enviro.nsf/AttachmentsByTitle/gui_EHSGuidelines2007_CementandLimeMfg/$FILE/Final+-+Cement+and+Lime+Manufacturing.pdf

d. An evaluation of existing and potential future environmental, social, or health and safety financial/credit risks and liabilities associated with the project, the project sites, and the company at the corporate level. The evaluation will focus on the action plan associated with the audits to ensure that it contains the necessary actions, with realistic resources and timeframes for implementation. Particular focus will be on health and safety risks (both to workers and nearby communities), especially associated with activities at the quarry, in material and machinery transport and operation, and in the plants; and environmental improvements including site remediation and equipment decommissioning/disposal; and materials and waste disposal areas.

Mitigation, Management, and Monitoring:

e. An evaluation of the company's environmental, social, health and safety, and labor management policies, systems, and procedures, to ensure their technical adequacy in relation to potential project-specific impacts and risks, including a clear definition of responsibilities, sufficient resources for implementation, and adequate procedures for training, auditing, and reporting, and in particular all the system components necessary to ensure future projects and works which will be implemented will not generate negative impacts.

f. An evaluation to confirm the existence of an acceptable environmental and social action plan, as necessary, in order to correct or mitigate any existing environmental, social, or health and safety non-compliance or liability associated with the existing project and company assets. In particular, progress will be accessed in relation to implementing the recommended actions from the audits, and what outstanding actions remain.

g. An evaluation to confirm adequate contingency plans including confirmation that all relevant project-related environmental risks have been identified, proper procedures have been developed, and sufficient resources will be made available to ensure adequate implementation.

h. A determination of key environmental and social indicators and requirements for the project execution, complete with timelines and milestones.

i. An assessment of the adequacy of proposed monitoring measures, including timelines, budgets, and allocation of responsibility for detailed procedure development and implementation.

Environmental and Social Conditions and Requirements

j. An evaluation, and further development as necessary, of project (loan agreement) supervision and evaluation procedures to ensure proper implementation of environmental, social, and health and safety actions and requirements.

k. An evaluation of environmental, social and health and safety terms and conditions in relevant project legal documents (e.g. construction/installation contracts, operations and maintenance contract, etc.), in terms of sufficiency, potential risks or liabilities, or issues.