



**D.G. KHAN
CEMENT COMPANY LIMITED
KHAIRPUR PROJECT**

**MINING LEASE FOR EXCAVATION
OF LIMESTONE NEAR KHAIRPUR
(DISTRICT CHAKWAL)**

ENVIRONMENTAL IMPACT ASSESSMENT

REPORT

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MINING LEASE FOR EXCAVATION OF LIMESTONE NEAR VILLAGE KHAIRPUR (DISTRICT CHAKWAL) – ENVIRONMENTAL IMPACT ASSESSMENT REPORT

EXECUTIVE SUMMARY

1.0 INTRODUCTION

D.G. Khan Cement Company Limited Khairpur Project is located near village Khairpur on Kallar Kahar – Choa Saiden Shah road at a distance of about 12 km from Kallar Kahar, District Chakwal.

An area 4030.00 acres has been leased to D.G. Khan Cement Company Limited by for the purpose of quarrying limestone from near village Khairpur (District Chakwal) by Directorate General of Mines and Minerals Punjab (Large Scale Mining Section) vide letter number DG(M&M) – LSM/ML-CKL-1-Limestone (46)/of 04 September 2004.

2.0 REPORT FORMAT

Keeping in view the legal obligation under the Pakistan Environmental Protection Act, 1997 (PEPA,-1997), the Director General Mines and Minerals Punjab has directed client to submit an Environmental Impact Assessment (EPA) report and the extent of any adverse effects which the quarrying operation may cause and proposal for minimizing those effects.

This present report is submitted to the said authority accordingly. The EIA report consists of nine sections. Section I deals with the project description and need & objectives of EIA. Section II covers the environment related documents and legal framework. Section III encompasses the existing project environments (Physical, biological and socio-economic/human). Section IV includes the identification of environmental issues and their impacts on the baseline environments. In section V negative impacts have been identified and mitigation measures to minimize their impacts have been mentioned. In section VI after having identified the positive

impacts enhancement measures have been suggested. Aims, objectives, organization and the functions of Monitoring Department on the project site are discussed in section VII. Rehabilitation/development plan has been given in section VIII. Conclusions drawn from the EIA study and the ensuing recommendations are appended in section IX.

3.0 EXISTING PROJECT ENVIRONMENTS

3.1 Physical Environments

3.1.1 Water Resources – Small natural channels for drainage of rain water criss-cross the quarry area. Water is available at a depth of about 100 – 150 feet and also in stone fractures beyond 400 ft. The area is arid and rain fed.

3.1.2 Land Resources – The quarry areas of limestone are located at a distance of 1 – 4 km from plant site.

3.2 Biological Environments

3.2.1 Flora – Being arid in nature there is no worth mentioning vegetation in the area except some small bushes scattered here and there.

3.2.2 Fauna – Jackals, boars, foxes and reptiles are found in small numbers. Peacocks are not found in the area at the plant site/quarry.

3.3 Socio-Economic/Human Environments

3.3.1 Social – About 8,000 persons live in village Khairpur, while Khokhar Bala, Chak Khushi and Dalailpur have populations of 75,001,090 and 4,800 respectively.

3.3.2 Economic – People are either farmers with small land holdings or are serving in the armed forces. Chakwal is the hub of industrial and business activities.

4.0 EIA PROCEDURE

4.1 General – EIA study has been carried out in accordance with PEPA - 1997, Guidelines. The relevant stakeholders were consulted as regards their views for setting up the plant.

4.2 Significant Positive Impacts

4.2.1 Quarried land will be usefully recovered for vegetation and tree plantation suited to the local climatic conditions of the area.

4.2.2 Drainage and physiography will exhibit significant positive change.

4.2.3 Lifestyle of the local people will improve through economic benefits to accrue from jobs in the factory.

4.3 Negative Impacts

4.3.1 Only a few minor negative impacts are envisaged which will be mitigated with routine environmental management practices.

4.3.2 Some quantities of dust will be generated during quarrying operation and noise. Their levels will remain within the prescribed limits of the National Environmental Quality Standards (NEQS) because adequate measures will be adopted to minimize them by proper prevention and control. Mitigation measures have been specifically earmarked for effective implementation.

5.0 ENVIRONMENTAL MONITORING AND EVALUATION

5.1 Formation of Environmental Monitoring and Evaluation Department has been proposed from within present establishment with General Manager (Works) as its head assisted by Health, Safety and Environment Officer.

6.0 REHABILITATION/DEVELOPMENT PLAN

6.1 A comprehensive rehabilitation/development plan is suggested with the purpose of environmental preservation. Salient features of the same are appended below:

6.1.1 Recycling of overburden.

6.1.2 Control of erosion and runoff.

6.1.3 Upbringing of natural habitats and ecosystem.

6.1.4 Observance of the NEQS.

6.1.5 Extensive tree plantation.

7.0 CONCLUSIONS AND RECOMMENDATIONS

7.1 Conclusions

7.1.1 D.G. Khan Cement Company Limited is endeavoring to improve the local environment by implementing the Environmental Management Plan.

7.1.2 The limestone quarry site is economically viable, socially acceptable and environmentally sound. It adds to the sustainable development of the local area.

7.2 Recommendations

7.2.1 Actions should be taken to minimize generation of dust and noise.

7.2.2 Medical check up of the quarry site workers should be undertaken frequently as a preventive measure.

7.2.3 Services of environment specialist should be hired for regular review of the environmental situation.

7.2.4 The quarry site be rehabilitated as planned.

7.2.5 Testing of particulate matter in the air should be carried out on monthly basis by a third party.