

SAFETY & HEALTH IN THE STONE CRUSHING INDUSTRY

Introduction

Stone crushing is necessary in order to build roads, bridges, buildings and almost everything we need in our modern life. There are an estimated 12000 stone crushing units with about 500.000 workers in India. One can presume that several million workers are working in stone crushing all over Asia.

Stone crushing provides income for families but the working conditions of employees are often unhealthy and dangerous. Major concerns in stone crushing are accidents and injuries, hearing loss, dust-related lung diseases. All of these diseases can be prevented, the working conditions can be improved with simple means and minimal cost.

The purpose of this manual is to provide information and guidance to improve working conditions and safety in stone crushing units for owners, workers, governmental and non-governmental institutions, trade unions and interested persons. It will help stone crushing unit owners to improve their business by avoiding unnecessary cost.

The above-mentioned research and development project was funded by The International Development Research Centre (IDRC), Canada and included a thorough assessment of the situation, specifically the safety situation in stone crushing units and the working conditions. It used observations, walk-throughs, discussions with owners and workers as well as measurements of dust and noise levels to analyze the situation. Findings were documented with checklists, photos and data sheets.

Based on these findings, recommendations for immediate and low-cost solutions were formulated. Long-term, sometimes more costly interventions were added. The project team presented All solutions to the unit owners and discussed their feasibility with them.

Part A " Safety & Health in the Stone Crushing Industry" we look at solutions to prevent accidents and to keep workers and their families healthy. The last section discusses the elements of emergency preparedness for the industry.

Part B "Improving heavy physical work" describes long-term effects of heavy physical work and suggests solutions to reduce fatigue and prevent illness.

Part C "How Much Does an Accident Cost?" introduces a short and simple table to calculate, better: estimate, the real cost of an accident. It should help to keep the right perspective on the financial side of accidents and the monetary benefits of prevention.

In **Part D " Checklists and Benchmarks"**, we added checklists to make it easier to assess the working conditions. They help in analyzing a situation and in finding the appropriate measures to improve. These checklists can be used as benchmarks to document and compare the level of the safety and health performance of a company. Over time, progress and improvements can then be documented and experiences shared.

On the long run, we hope that such a "safety performance score" for crushing units helps in achieving better safety performances in the industry. We hope that in the future such a "score" will be included in tender processes as one of several selection criteria so that the order goes to the stone crushing units with the best protection for their workers..