

CHAPTER - 3

BASELINE ENVIRONMENTAL CONDITION

3.1 Introduction

Studies on various components of environment have been conducted in the “Study Area” covering 5 km radius, centering the proposed project Area. The study area has been divided in two zones, namely, “Core Zone” and “Buffer Zone”. The Core Zone is the plot area where manufacturing plant will be located. In order to establish the present environmental scenario, various environmental factors such as topography and drainage, meteorology, air, water, soil, noise, flora, fauna and socio-economics etc. have been studied in the study area.

Land, soil, water, air and noise constitute the physical environment, agricultural crops, flora and fauna constitute the biological environment of the study area and these are discussed in the following sections of this chapter.

Study Area

Balmukund Concast Pvt. Ltd. (BCPL), is situated at Mahadeopur Phulari, Bihta, District Patna, Bihar having Latitude 25°34'46.32"N & Longitude 84°52'0.09"E at 51 m. above MSL nearby NH-30. It is about 20 kms. from district head quarter Patna and is well connected by NH - 30 and rail with rest of the country. BCPL is about 2 Km. (S) from Bihta Railway Station on Howrah - Delhi Main Line Sec. of ECR

Details of Study:

Data generation with respect to air, water, soil quality, noise status, meteorology etc. was carried out by *M/s Shiva Test House, Patna*, a MoEF (Ministry of Environment & Forests,

Govt. of India) Recognized Environmental Laboratory (vide Gazette Notification No. S.O. 3744 (E), 17th Oct.'2019 & Accredited by National Accreditation Board for Testing & Calibration Laboratories (NABL). All the field studies for baseline data generation were carried out during Dec.'20. – Feb.'2021.

Components & Methodology

Baseline study is conducted in order to identify the changes to the natural and socioeconomic environments, or any potential impact and to have a thorough understanding of the nature of those existing environments prior to commencement of the proposed project activities, it is necessary to study the present scenario of the area by collecting information on the following parameters / components:

1. Land Environment
2. Meteorology
3. Air Environment
4. Noise Environment
5. Water Environment
6. Soil Environment
7. Biological Environment
8. Socio-economic Environment

Land, soil, water, air and noise constitute the physical environment, agricultural crops, flora and fauna constitute the biological environment of the study area and these are discussed in the following sections of this chapter.

3.2 Sampling / Monitoring & Analysis for Baseline Data Generation

Baseline Data generation with respect to air, water, soil quality, noise status, meteorology etc. was carried out by *M/s Shiva Test House, Patna*, a MoEF (Ministry of Environment & Forests, Govt. of India) Recognized Environmental Laboratory (vide Gazette Notification No. S.O. 3744 (E), 17th Oct.'2019 & Accredited by National Accreditation Board for Testing & Calibration Laboratories (NABL). All the field studies for baseline data generation were carried out in pre monsoon season during the period Dec.- Feb. '2021.