

LEACHATE STUDY OF FLY ASH DYKE FOR COAL BASED POWER PLANT

Introduction

The coal based thermal power plants generate large quantity of pulverized fuel ash (PFA) commonly known as fly ash. Coal as fuel is composed of varying degrees of organic matter (carbon, hydrogen, oxygen and other heteroatom), inorganic material, and moisture. A part of the inorganic material (ash) consists of trace elements that are mobilized during combustion and released to the environments in ashes, wastewater and flue gases associated with particles or as vapors. Some of these elements are essential for plant, while others are toxic for the environment and human health if present in sufficient quantities.

Scope of work

1. To study the quality of water courses existing around the ash ponds and ground water modeling.
2. collection and testing of ground water for physical and chemical parameters.
3. digging of pit for collection of water and soil samples below original ground level based on site condition
4. collection and testing of soil for physical and chemical parameters
5. collection and testing of fly ash for chemical parameters
6. laboratory study of leachate at different pH conditions of fly ash, capacity of soil to carry the leachate to the underground water course and effect of dilution achieved by leachate after passing through soil substrata
7. To provide the data on existing environmental conditions.
8. To predict the anticipated environment conditions with meteorological parameters taking a short term study.

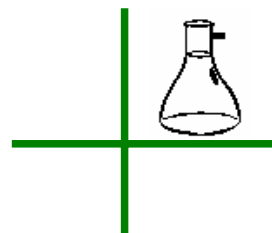
Estimated Time: 12 Months

Cost Of Project: 12 Lac.

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