
CHAPTER – XI

COAL HANDLING PLANT AND DESPATCH ARRANGEMENT

11.1 INTRODUCTION:

The West Jhiria is situated in Sohagpur Coalfields and its under administrative control of Hasdeo Area of SECL. In this mine it is proposed to deploy Surface Miner to produce coal. Due to this, it is expected that the size of coal lumps to be produced will be of the order of (-) 100mm and so no crushing arrangement is required.

11.2 SCOPE

The scope of coal handling plant is as given below:

- (i) Receipt of ROM coal from opencast mine by tipping trucks at the coal stock.
- (ii) Weighment of trucks on weigh bridges.
- (iii) Hard stand for coal stock.

11.3 SYSTEM DESCRIPTION

The cutting drum of Surface Miner will cut the coal and leave on surface itself or load in the trucks / dumpers in case the coal is left on the ground Pay Loaders will load ROM coal in the trucks / Dumpers. These trucks will carry coal to surface pit top. Coal from pit top will be transported to Rajnagar siding about 6.0 KM by road and then by rail through existing Rajnagar Railway siding.

One number of pit less electronic, 100 t capacity weigh bridge suitable to weigh tipping trucks will be installed at a suitable location near the mine for weighment of coal loaded trucks. The Weigh Bridge will have printout facility which facilitates for keeping the records of dispatch.

11.4 MANPOWER REQUIREMENT

The details manpower required for operation and maintenance of weigh bridges are shown in Appendix B.

11.5 CAPITAL INVESTMENT

Total estimated capital expenditure for the CHP has been given in Appendix A.3.5.

11.6 DESPATCH ARRANGEMENT / RAILWAY SIDING

11.6.1 INTRODUCTION

The coal from the mine will be extracted by surface miner. The coal from pit top will be sent to railway siding with the help of trucks by contractual means.

11.6.2 RAILWAY SIDING AND DESPATCH

The cutting drum of Surface Miner will cut the coal and leave on surface itself or load in the hired trucks / contractors trucks in case the coal is left on the ground Pay Loaders will load ROM coal in the trucks / dumpers. These trucks/dumpers will carry coal to surface pit top. Coal from pit top will be transported to Rajnagar siding about 6.0 KM by road and then by rail through existing Rajnagar Railway siding.

A railway siding consisting of one load standage line (suitable for 59 box N wagons), one empty standage line (suitable for 59 box N wagons), engine escape line, one loading station crossovers, turnouts, electrification, signaling etc. Will be constructed at a suitable location near the proposed siding.

A wharf wall suitable for loading of one rack (59 box N) will be constructed at the siding. The coal received from the mine will be spread along the railway siding which will be subsequently loaded into rail wagons with the help of pay loaders.

One number of road weigh bridge, 100te, electronic type, will be provided for weighment of coal at the near siding for proper record and avoiding pilferage etc.

An electronic, in motion weigh-bridge of 100t capacity will be provided at wharf wall railway siding for weighing the wagons while they are being drawn out

after loading. The print out facility will also be available which will help in keeping the records.

Proper illumination arrangement will be provided near the siding for easy operation at site.

11.7 MANPOWER REQUIREMENT

The details manpower required for operation and maintenance of weigh bridges are shown in Appendix B.

11.8 CAPITAL REQUIREMENT

The capital requirement with phasing for weigh bridges etc, are shown in Appendix – A.5.