

Prefeasibility Report

FOR

Laying of Water Pipeline for Steel & Power Plant

- :: Promoter :: -

Singhal Energy Private Limited

Village: Taraimal, Tehsil: Gharghoda,

District: Raigarh [C.G.]



1.0 INTRODUCTION

1.1 Preamble

Steel being a basic commodity for all industrial activities, quantum of its consumption is considered an index of industrial prosperity. Since independence, there has been a substantial growth in the steel sector in India from 1.5 Million Tons in 1950-51 to about 31 Million Tons at present. Additional steelmaking capacity of about 8 to 10 Million Tons /year exists in the secondary steel sector. Despite the above growth in the steel sector, the per capita steel consumption continues to remain at a level of about 27 kg only, compared to about 350 to 450 kg in the developed countries and 40 to 100 kg in some of the developing countries. Further, with nearly 20% of the world population, India's contribution is only of the order of 3.4% of world steel production. Hence, short-term and long-term strategies are necessary in planning the development of the steel industry in the country to improve the level of per capita steel consumption. It is expected that with the measures taken by Govt. of India for promotion consumption of iron and steel and expected growth of Indian economy the requirement of steel will significantly increase and accordingly the domestic manufacturing capacity needs to be increase.

Presently **M/s Singhal Energy Private Limited [SEPL]** is operating Sponge Iron manufacturing unit = 60000 Tons/ year, Ferro alloys manufacturing unit = 2 x 9 MVA and Power Plant = 12 MW [4 MW through WHRB based + 8 MW FBC based Power Plant].

1.2 Acknowledgement

We wish to express sincere gratitude to the management of M/s SEPL for the confidence reposed in entrusting this valued assignment and for spontaneous and timely cooperation by their Management and Officials in preparation of this Feasibility Report.



2.0 Salient features of the major systems and project execution plans are presented below:

- 2.1** M/s Singhal Energy Private Limited (SEPL) has been promoted by well established entrepreneur belonging to Raigarh in Chhattisgarh state and already involved in trading and manufacturing of Steels and in Transport business. Seeking the huge gap in demand and supply of Steel.
- 2.2** There is meager requirement of water, only for cooling and domestic purpose which is met through Gerwani Nallah.
- 2.3** Financial analysis has been carried out for the project considering that the fund requirement will be met on a debt equity ratio of 67:33. The details are given under Chapter: Assumption for Financial Analysis.
- 2.4** Since adequate quantity of water is available, even though once through system of cooling is possible, induced draft cooling tower is proposed for the condenser and auxiliaries cooling.



3.0 Project at a Glance:

1. Name of the proposed unit : **Singhal Energy Private Limited**
2. Adminstrating Office : Singhal House, 10, Sector – 1,
Shankar Nagar,
Raipur [C.G.] 492001
3. Location unit : Village : Taraimal
Tehsil : Gharghoda
District : Raigarh [C.G.]
4. Name of Directors : i. Shri Sanjay Agrawal
ii. Shri Ajay Agarwal
5. Existing Industry : Sponge Iron = 60000 Tons/ year
Ferro Alloys = 2 x 9 MVA
WHRB based Power = 4 MW
Plant
FBC based Power Plant = 8 MW
6. Proposed units : **Induction furnace = 30000 Tons/ year**
[2 x 5 Tons]
Power Plant = 2 x 2 MW
7. Meteorological Site Condition : a. Climate tropical dry & hot summer.
b. Avg. Ambient Temp: 36°C.
c. Annual Mean R H.: 54%.
d. Average Annual Rainfall: 1200 mm.

4.0 Availability of Utilities

For successful running of any unit most important factor is the availability of Raw Materials, as well as Utilities & Power, Water Connectivity which are required to efficiently run the Equipment. The company has proposed to install their Plant & Machinery and for effective utilization and achieve desired production levels the aforesaid items are elementary and constitute the basis which was kept in mind for the purpose of the proposal:

4.1 WATER:

For this project the total water requirement is met from river water. River water is directly used for cooling purposes. For the balance water requirements necessary treatment plant will be set up to generate potable / service water. This water will be further treated for generating DM water for make up to boiler feed. There is no industrial effluent generation as the cooling water will be recycled through closed circuit while domestic effluent will be treated through septic tanks and soak pits.

4.2 POWER:

We have provided power with our available sources.

4.3 MANPOWER:

Increased industrial activity and rise in establishments of industries in the last few years have lead to the availability of experienced Skilled & Unskilled, Technical, Professional & Administrative personal for all the divisions of Integrated Steel Plant within the State of Chhattisgarh.

Our Request

Water Resources Department of Government of Chhattisgarh has allocated our Industry to draw water from Gerwani Nallah a tributary of Kelo river. A dedicated pipeline is to be laid from the river to our site and the water will be used for industrial activities. Hence you are requested to kindly look into and grant permission of above as early as possible.

Thanking You and assuring our best service at all the time.
