

Concept Paper for Development of Rowghat Iron Ore Mines

Background

Rowghat is located in the Kanker/Narayanpur Districts of Chhattisgarh, about 95 Kms south of Dalli-Rajhara, 185 Kms from Bhilai and 180 Kms from Rajnandgaon. Government of Chhattisgarh vide lease deed dated 21.10.09 has granted iron ore mining lease for Deposit “F” covering an area of 2028.797 ha to BSP/SAIL.

It has proposed to develop Rowghat Deposit “F” for 14 MTPA ROM capacity to meet 12.38 finished product requirement of Bhilai Steel Plant (BSP). Deposit F comprises 7 blocks viz. Raodongri, Block-A, Tarhur, Anjrel, Korgaon, Khargaon, and Takrel. Mining will be carried out in two phases viz. Phase I and Phase II. Phase I will involve development of Block A, Tarhur and Anjrel which will comprise of an area of about 520.37 ha. In phase II, it is proposed to develop three blocks viz. Korgaon, Khargaon, Takrel and Raodongri. Mining area required in Phase II will be about 362.85 ha. All statutory approvals like Mining Plan, Environment Clearance and Forest Clearance are in place. State Government has already sanctioned water and power linkage for the project.

SAIL is looking for technically competent and financially sound Mine Developer cum Operator (MDO) to undertake the development and operation of iron ore mine at Rowghat.

Scope of Work for Selected MDO

The entire contract period shall be of 30 years (i.e 4 years Development period & 26 years of Production year) or exhaustion of reserves of Rowghat Deposit “F” whichever is earlier. Development and Operation of entire Rowghat project encompasses of the following broad activities:

1. Pre-development activities

- It will be the responsibility of the successful bidder for timely and successful completion of tree felling at mines area, electrical corridor, and water reservoir, railway siding at Rowghat in co-ordination with respective agencies.
- Further detailed exploration of entire Rowghat Deposit “F”.

- Preparation of Detailed Project Report (DPR).

2. Development activities

- Development of Mine for producing 14 MTPA ROM as per approved Mining Plan.
- Establishment of power and water supply arrangement for the project as per the prescribed battery limit.
- Construction and establishment of conveyor system and suitable crushing and screening plant as per approved Mining Plan and other statutory clearances.
- Construction of loading and dispatch yard /bay with suitable stockyard at designated place at Rowghat mine.
- Construction of unloading and stacking facilities at Dalli.
- Construction and operation of conveyor system for conveying of iron ore to beneficiation plant.
- Construction, operation & maintenance of Beneficiation plant at Dalli to process 14 MTPA ROM to generate required quantity & quality of lumps and fines.
- Construction, operation & maintenance of Beneficiation plant at Dalli to process slime.
- Construction & operation of appropriate capacity pellet plant.
- Conveying of beneficiated ore from plant to the loading stock piles.

3. Mine Operations

- Obtaining all required approvals from various government departments and such other agencies whose approvals are mandated for mine development and operation.
- Mining of iron ore as per the approved mine plan and other statutory requirements.
- Loading of crushed & screened iron ore of guaranteed quality and quantity through the agreed dispatch mode from Rowghat mines to Dalli Rajhara for beneficiation during the entire contract period as applicable.
- Loading of beneficiated iron-ore lump, sinter fines and pellets to the designated railway wagons for dispatch to Bhilai steel plant.

Indicative quality and quantity parameters

SI No.	Parameters	Size	Indicative Quality				Indicative Quantity (MTPA)
			Fe%	Al ₂ O ₃ %	SiO ₂ %	Total Gangue % (Al ₂ O ₃ + SiO ₂)	
1.	ROM Feed		62.93	2.97	2.72		14.0
2	Product						
a)	Lump	(+ 6 -30 mm) (Over & under size: max 5%)	65.00	2.00	2.00	4.00	4.90
b)	Sinter fines	(+1 -6 mm) (Over size 5% max & undersize - 0.15mm 10% max)	64.50	2.00	2.00	4.00	6.14
c)	Pellet fines	(+250# - 1 mm)					1.34
d)	Slimes		Less than 45%				1.76