

JITPUR COLLIERY

LOCATION:

Jitpur Colliery of Collieries Division, M/s Steel Authority of India Ltd is located in the eastern part of the Jharia Coal field District Dhanbad, Jharkhand. The mine take area is around 1.62 Sq.Km. The area is covered by the Survey of India Toposheet No. 73 I/6 and is bounded by Latitude 23° 42' 32" north to 23° 43' 14" north and Longitude 86° 23' 05" east to 86° 24' 14" east.

The property is bounded by existing Jamadoba 6 & 7 pits of TISCO to the North (Rise Side), Bhutgoria mine(closed) of BCCL to the North and North-West, Jamadoba colliery(TISCO) Pit 4&5 to the south (Dip Side) & West and Digwadih (TISCO) to the East. Jitpur Colliery is well connected by metal road with district head quarter Dhanbad. It is located at 15Km south of Dha 333nbad by road.

Background:

Jitpur Colliery has been in operation prior to nationalization and operation is still continuing. There are two mouzas under Jitpur Colliery viz. Noonudih Mouza (Area: 73.68 ha) & Jitpur Mouza (Area: 87.31 ha). Both these Mouzas have been granted lease for 991 years w.e.f 22/05/1901 & 991 years w.e.f 28/05/1902 respectively.

Jitpur Colliery Colliery consists of one underground mine only. Coal from Jitpur Colliery is being transported by ropeway to Chasnalla Washery for washing.

Detailed exploration was conducted by drilling 21 exploratory bore holes in 1950s. Further, in 1959, five underground boreholes were drilled from XVI seam floor. The detailed geological investigations in the proposed mine has established the presence of 8 No. of coal seams.

1. Brief history:

- Coal mining was started in the year 1917, initially four upper seams namely 18, 17,16A and 16 were exploited during the period 1920-1960.
- With the gradual exhaustion of upper seam reserves, IISCO initiated a comprehensive development programme with the help of World Bank loan under consultancy services from M/s International Construction Company Ltd. (ICCL) U.K.
- Modernization of Jitpur colliery started in early sixties and initial development and shaft sinking, establishment of infrastructure were completed in seventies, and first mechanized Longwall Faces opened in 14 seam in 1971.
- The Longwall panel face started with shearer machine for coal cutting along with hydraulic sand stowing of mined out area. With this method of mining production built-up continued steadily.
- During this period Jitpur colliery passed through two major incidents, first incident of gas explosion took place in March, 1973 and later on followed by strata movement in shaft pillar in early 1976 resulted in closure of work in 14 seams in 1977.
- As a consequence of that an Overseas Mine Construction Company KOPEX, Poland was entrusted the job of preparation of conceptual report for reconstruction and starting production from 14 seam.

2. Mining method:

Presently, the XIV seam is being worked by longwall retreating method in conjunction with hydraulic sand stowing. Development of the seam with road headers is completed. Steel arches with wooden lagging are the main support for galleries. The seam is being extracted in three lifts with 2.4 mts of height of extraction.

3. Past 3 year's production:-

Year	Past 3 years (in Ton)			ABP 14-15
	2011-12	2012-13	2013-14	
Jitpur	50663	32223	56275	88000

A total balanced reserve of mine is around 19.33MT of coal (for the proposed virgin seams XII & XVA seams) for extraction. The quality of coal varies from W-II to W-III.

Present Status:

Presently XIV seam is the only working seam in Jitpur Colliery. It is being worked by conventional and semi-mechanised longwall method in conjunction with hydraulic sand stowing. The life of XIV seam is 15 years @ 0.13MTPA with extractable reserves of about 1.97 Mt (As per Project Report by M/s SCCL).

The present production from Jitpur Colliery is about 300t per day.

As per the Project Report prepared by M/s SCCL to extract the XII and XVA seam at rate of 2000 TPD, a Mining Plan of a total colliery capacity of @ 0.6 MTPA Nominal/ 0.7 MTPA Peak is under preparation.

The Jitpur colliery has the required infrastructure like stores, workshops, CHP, office buildings, quarters etc. The existing infrastructure is also adequate to enhance production by extraction of seams XII and XVA along with existing working in seam XIV.

BACKGROUND OF THE COMPANY

Steel Authority of India Limited is one of the top steel producers in the world with a turnover of more than Rs. 50,000 Crores. The company is among the seven Maharatnas of the country's Central Public Sector Enterprises. SAIL has five integrated steel plants, three special plants, and one subsidiary in different parts of the country.

SAIL traces its origin to the formative years of an emerging nation - India. After independence the builders of modern India worked with a vision - to lay the infrastructure for rapid industrialisation of the country. The steel sector was to propel the economic growth. Hindustan Steel Private Limited was set up on January 19, 1954.

Hindustan Steel (HSL) was initially designed to manage only one plant that was coming up at Rourkela. For Bhilai and Durgapur Steel Plants, the preliminary work was done by the Iron and Steel Ministry. From April 1957, the supervision and control of these two steel plants were also transferred to Hindustan Steel.

The Ministry of Steel and Mines drafted a policy statement to evolve a new model for managing industry. The policy statement was presented to the Parliament on December 2, 1972. On this basis the concept of creating a holding company to manage inputs and outputs under one umbrella was mooted. This led to the formation of Steel Authority of India Ltd. The company,

incorporated on January 24, 1973 with an authorized capital of Rs. 2000 crore, was made responsible for managing five integrated steel plants at Bhilai, Bokaro, Durgapur, Rourkela and Burnpur, the Alloy Steel Plant and the Salem Steel Plant. In 1978 SAIL was restructured as an operating company.

Since its inception, SAIL has been instrumental in laying a sound infrastructure for the industrial development of the country. Besides, it has immensely contributed to the development of technical and managerial expertise. It has triggered the secondary and tertiary waves of economic growth by continuously providing the inputs for the consuming industry.

Modernisation & Expansion

SAIL, is in the process of modernizing and expanding its production units, raw material resources and other facilities to maintain its dominant position in the Indian steel market. The objective is to enhance the production capacity to 23.46 MTPA of Hot Metal from the installed production capacity of 13.8 MTPA.

Coal produced from Chasnalla & Jitpur coal Mines is sent to SAIL Steel Plants after being washed at Chasnalla coal washery. The present requirement and supply of coking coal to SAIL steel plants are as under:-

Coking coal	Requirement (in Million Ton)	Indigenous supply	Imported coal
Before expansion	13.30	4.00 (30%)	9.30 (70%)

Out of above, about 0.5-0.60 mill tones of prime coking coal is available from own sources of SAIL i.e. from Chasnalla & Jitpur collieries. The balance quantities of about 3.5 mill tons of coal is being supplied from CIL sources.

Steel is one of the core industries of the country. It is a critical input to other industries including construction industry, automobiles sector, railways & hosts of other industries. One of the important raw materials for steel making is coking coal of appropriate quality. Coking coal production in India has been stagnating for the past few years. The short supply/availability of coking coal was further accentuated during last couple of years when the market price of coal touched an all-time high and good quality coking coal was in short supply in world market. SAIL is the major consumer as well as importer of coking coal in India. SAIL's requirement of coking coal is likely to increase to 21 million tons from the present level of consumption with implementation of the growth plan.

Development of Jitpur Colliery Project is, therefore an imperative for SAIL to augment indigenous coking coal availability.