

## **BRIEF SUMMARY**

Gare Palma IV/4 coal block was earlier allotted to M/s Jayaswal Neco Ltd. for captive coal mining. Hon'ble Supreme Court vide judgment dated 25<sup>th</sup> August 2014 read with its order dated 24<sup>th</sup> September 2014 cancelled the allotments of 204 coal blocks including Gare-Palma IV/4. In pursuance of the provisions of The Coal Mines (Special Provisions) Second Ordinance 2014 this coal mine was earmarked for non-regulated sector and was put on E-auction in which M/S Hindalco Industries Ltd. was the Successful Bidder. Accordingly, this Coal Mine has vested in M/S Hindalco Industries Ltd. with effect from 1<sup>st</sup> April 2015 vide Vesting Order under Clause (b) of sub rule 2 of rule 7 and sub-rule 1 of rule 13 Order No. 104/16/2015/NA dated 23<sup>rd</sup> March 2015.

Hindalco Industries Limited, metals flagship company of the Aditya Birla Group, is the industry leader in aluminium and copper. With a consolidated turnover of US\$18 billion, Hindalco is the world's largest aluminium rolling company and one of Asia's biggest producers of primary aluminium. Its state-of-art copper facility comprises a world-class copper smelter and a fertiliser plant along with a captive jetty. The copper smelter is among the world's largest custom smelters at a single location. In India, the company's aluminium units across the country encompass the gamut of operations from bauxite mining, alumina refining, coal mining, captive power plants and aluminium smelting to downstream rolling, extrusions and foils. Today, Hindalco ranks among the global aluminium majors as an integrated producer and a footprint in 10 countries outside India.

Hindalco has been accorded Star Trading House status in India. Its aluminium is accepted for delivery under the High-Grade Aluminium Contract on the London Metal Exchange (LME), while its copper quality is also registered on the LME with Grade A accreditation.

The Gare Palma IV/4 Opencast Coal mine has an area of about 885.525 ha and situated in the Eastern part of Gare Palma Coalfield. It is a running mine having production capacity of 1MTPA [(OC-0.56+ UG-0.44 MTPA)] presently. Revised Mining Plan (including Mine Closure Plan) for Gare Palma IV/4 Coal Block (4th Revision) has been prepared based on geological report namely "Geological Note on Detailed Coal Exploration in Gare Palma IV/4 Block, Mand Raigarh Coalfield, Raigarh District., Chhattisgarh state", August 2018 prepared by South West Pinnacle Limited and "Geological Report on Detailed Coal Exploration in Gare Palma IV/4 & IV/5 (Integrated), Mand Raigarh Coalfield, Raigarh District., Chhattisgarh state", December 2017 prepared by South West Pinnacle Limited. It has been prepared based on the fresh exploration undertaken by M/s Hindalco Industries Limited.

Net Available Geological Reserves has been estimated as 64.955 Million Ton. The Revised Mining Plan (including Mine Closure Plan) for Gare Palma IV/4 Coal Block (4<sup>th</sup> Revision) has been prepared for switching to total mechanised opencast mining from the present mix of underground mining and opencast mining method with the following assumptions:

- i. To maintain the production programme for first three years as per the approved Revised Mining Plan & Mine Closure Plan (3<sup>rd</sup> Revision) of Gare Palma IV/4 Coal Mine i.e. 0.44 MTPA by underground production and 0.56 MTPA by opencast mining;
- ii. To convert the entire mining operation to opencast mining in fourth and fifth year;
- iii. To increase the annual production from 1.0 MTPA to 1.5 MTPA in the fifth year and then to maintain 1.5 MTPA as the target/peak annual production rate; and

The Gare Palma IV/4 open cast mine is located at about 55 km from district HQ Raigarh in village Banjikhoh in Tamnar tehsil of Raigarh District of Chhattisgarh State. The block is

covered in the Survey of India Topo sheet No. 64 N/8 & 64 N/12. The boundary coordinates of Gare Palma IV/4 Coal Mine is given below.

**BOUNDARY COORDIANTES OF GARE PALMA IV/4 COAL MINE**

<b>Point</b>	<b>Latitude</b>	<b>Longitude</b>
A	22 <sup>0</sup> 08' 30.840" N	83 <sup>0</sup> 31' 16.008" E
B	22 <sup>0</sup> 10' 20.850" N	83 <sup>0</sup> 32' 37.378" E
C	22 <sup>0</sup> 10' 3.844" N	83 <sup>0</sup> 33' 37.747" E
D	22 <sup>0</sup> 08' 3.332" N	83 <sup>0</sup> 32' 13.979" E
E	22 <sup>0</sup> 07' 40.125" N	83 <sup>0</sup> 32' 10.659" E

The Gare Palma IV/4 Opencast Coal mine of 1.5 MTPA capacity is a captive coal mine of HINDALCO. As per the Vesting Order, the coal of this mine is to be used for captive consumption in the end use plants as described below.

<b>Sr. No.</b>	<b>Name of Specified End use Plant</b>	<b>Address</b>	<b>Configuration</b>	<b>Capacity</b>
1	Captive power plant of Aditya Aluminium Project	Lapanga Dist. Sambalpur Odisha	6X 150 MW	900 MW
2	Captive power plant Of Hirakud complex	Hirakud Dist. Sambalpur Odisha	4X 100 MW 1X 67.5 MW	467.5 MW

Gare Palma-IV/4 Block in Gare area of Mand Raigarh Coalfield falls under the Tamnar tehsil, Raigarh district in Chhattisgarh state. This block is located in the south-eastern part of Mand Raigarh Coalfield, close to the Odisha State Border (Chhattisgarh State – Odisha State - 3.8 km, SE).

It is located about 15 km north east of the tehsil town of Tamnar and 55 km north- east of the district headquarter, Raigarh. The nearest railway station is Raigarh located in Howrah – Mumbai route.

**Rail Link**

The nearest railway station Raigarh is about 55 km (by road) away from the coal mine. Raigarh located in Howrah –Mumbai route.

**Air Link**

Raipur is the nearest airport to the coal mine, which is situated around 330 km from the mine site and connected by all-weather road. The newly opened Jharsuguda airport is about 145 Km from the mine lease area.

The proposed requirement of potable water requirement is met from the mine seepage water. The mine water is being stored in the mine pit for settling and storage and later treated with latest Reverse Osmosis (R.O.) technology for which established RO plant of 7500 Litre per hour capacity, which is distributed for the use of mine staffs & workers and supplied to R & R colony. For supply of pure and clean drinking water tap has been provided in the R & R villages and small overhead tanks are also built - up.

The mine discharge will be used to meet the requirement of the afforestation / plantation, dust suppression, firefighting, other industrial, domestic applications. The RO water be used for portable drinking water and supplied to the R & R colony for use.

Washery Effluent: Not Applicable

Workshop effluent: The workshop effluent will be treated properly in effluent treatment plant and reused.

Domestic effluent: STP will be provided. Sludge after digestion will be used as manure / compost.

Solid Waste Management:

The total overburden generated as per the Mining Plan is 220.52 Mm<sup>3</sup> of which only 85.98 Mm<sup>3</sup> is proposed to be dumped externally, while the remaining 134.54 Mm<sup>3</sup> of OB is proposed to be dumped internally.

Power Requirement & Supply / Source:

It is envisaged that existing power supply arrangement at 33 kV will be used to meet the power requirement of this project.

Gare Palma IV/4 is a running mine and R & R activities are going on for Banjikhola and Jaripatra part of Kondkel village. The proposed mining activities will provide employment to persons of different skills and trades. The local population will have preference to get an employment. The employment potential will ameliorate economic conditions of these families directly and provide employment to many other families indirectly who are involved in business and service oriented activities. This in-turn will improve the socio-economic conditions of the area. Total manpower required for 1.5 MTPA production is 945. Services for security, canteen rest house, colony maintenance & Transportation of coal from the mine to EUP (end use plant), biological reclamation and sanitation are proposed to be outsourced. This will give rise to indirect employment generation by the company. It is obvious to assume that the activities of the mining operations will improve the socio-economic levels in the mine area.

Gare Palma IV/4 is a running mine and the estimated project cost will be about Rs.420 crores.

Social Infrastructure:

Gare Palma IV/4 is a running project and within the mine canteen, first aid centre and rest shelter and office buildings are established. The CER activities of HINDALCO in and around the project area are already existing and helps in construction of school building, inducting community teachers, buses for school children, support to blind school, Computer classes in rural and back ward area, Organizing regular health camps in the vicinity villages, construction of toilets, installing solar light in villages etc for the development of the area. With the continuation of the mine, there will be substantial improvement in the overall economy of the local people in the form of additional income through employment, development of infrastructure in surrounding areas such as transport facility, health and education.

The objective of CER is to:

- Significantly improve the physical quality of life;
- Create opportunities for livelihood;
- Improve the level of education including adult education;
- Create health awareness among women; and
- Ensure availability of safe drinking water.

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