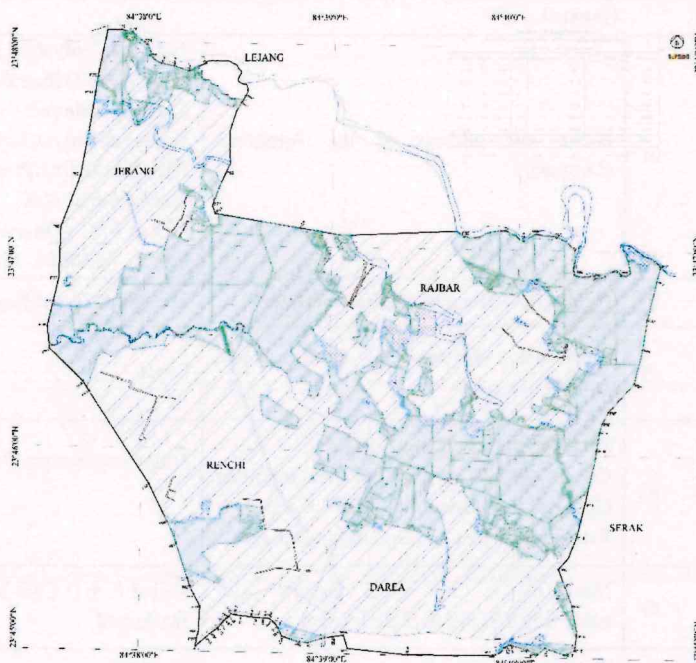




PROJECT DESCRIPTION

Tenughat Vidyut Nigam Limited



**Diversion of Forest land over an area of 564.90 Ha
in villages Rajbar, Darea, Serak, Renchi & Jerang
District Latehar, Jharkhand for Rajbar E&D Coal
Mines**

Allotted to

Tenughat Vidyut Nigam Limited

Prepared by

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FEEDBACK INFRA
Making Infrastructure Happen

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Elect. Suptd. Engineer
T.V.N.L. Ranchi 6 AUG 2025



PROJECT DESCRIPTION

1.1 Introduction

The Rajbar E & D Coal Mine in Auranga Coalfield lies in Latehar District of Jharkhand State. It has been allotted to M/s. *Tenughat Vidyut Nigam Ltd. (TVNL)*, a State of Jharkhand Undertaking for power generation; vide Order No. 103/19/2015/NA dated 30-06-2015 by MoC, GoI. The coal produced from the mine will be for captive use of extension power units (660 MW x 2) of M/s TVNL. The TVNL, presently, have functional 210 MW x 2 units. 660 MW x 2 units are proposed for expansion in Lalpania village near Tenughat Reservoir in Bokaro District of the State of Jharkhand. Hence, requirement of diversion of 564.90 ha of Forest land is required to meet the requirement.

1.2 Project Proponent

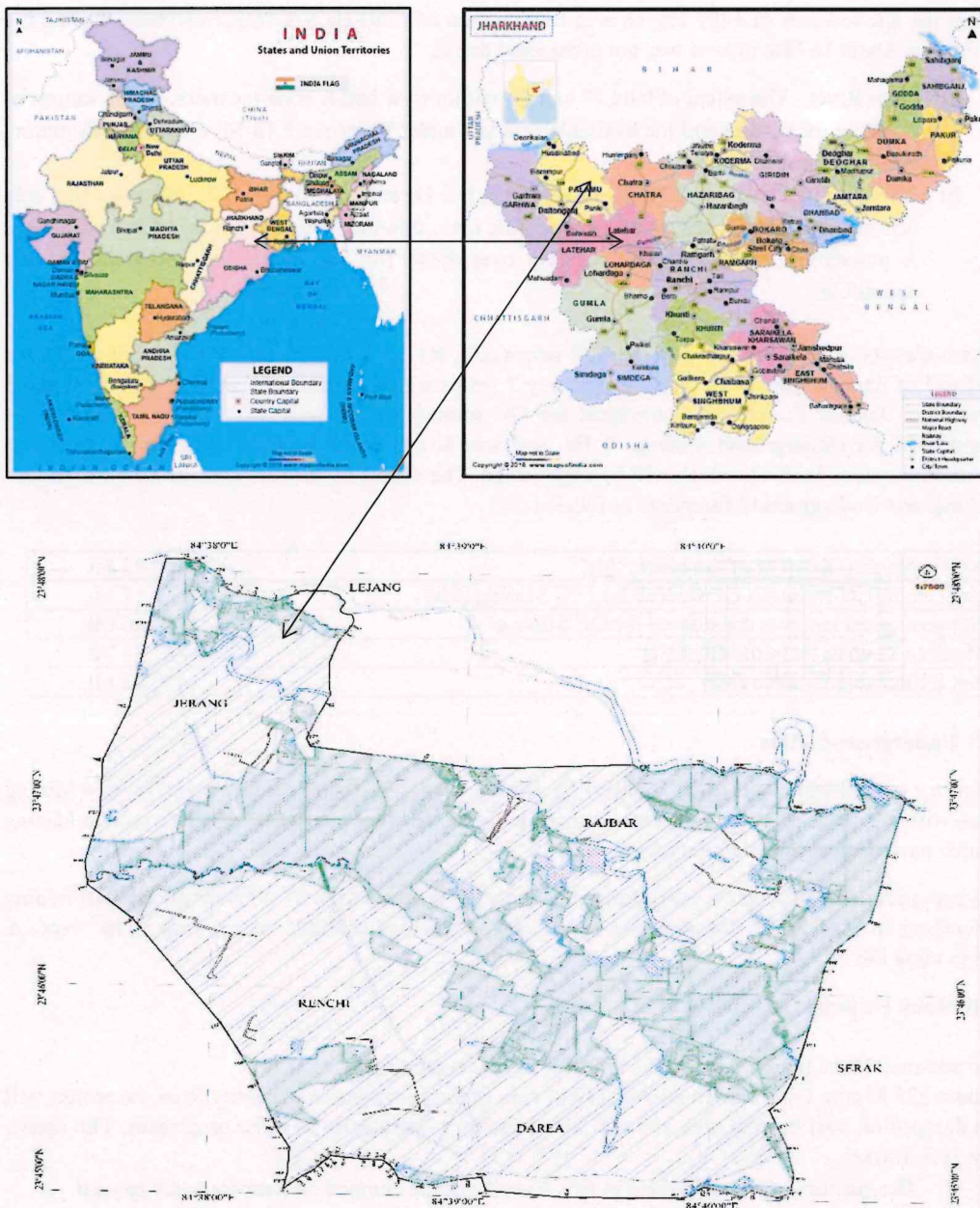
1. General		
a)	Name and address of the Applicant Company	Tenughat Vidyut Nigam Ltd. (TVNL) Registered Office & Address for Correspondence: Tenughat Vidyut Nigam Ltd. JUPMI Building Premises in ABD Area, Ranchi Smart City, P.O. & P.S. – Dhurwa, Ranchi – 834004, Jharkhand, India.
b)	Name and address of the Block Allottee	Tenughat Vidyut Nigam Ltd. (TVNL)
c)	Relationship between the applicant and allottee company	Same
d)	Status of the Applicant Company: Central /Public Sector Undertaking/State Government Undertaking/JV Company/ Pvt. Company/Public Co/Others (Specify)	State Government Undertaking
e)	Name of the Coal Block together with name of Coalfield & State located	Rajbar E & D Coal Mine; Auranga Coalfield, Jharkhand
f)	Date of allotment	30.06.2015
g)	End Use of Coal as per Approval by the Competent Authority	Power generation
h)	ROM Quantity proposed to be produced as per Mining Plan	10 MTPA
i)	Norms adopted for calculating ROM quantity requirement in case it differs from the quantity indicated in the Allotment Order.	No Difference
j)	Beneficiation required – Yes/No	No
k)	Requirement of Beneficiated Coal & expected availability thereof.	Not Applicable
l)	Period for which Mining Lease has been granted/ is to be renewed/ is to be applied for.	30 years and to be renewed for further period.
m)	Date of Expiry of earlier Mining Lease, if any	Not Applicable



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1.3 Location of the Project

The proposed Rajbar E&D Mining project is located in revenue villages – Jerang & Rajbar of *Balumath Anchal*, Renchi, Darea & Serak of *Chandwa Anchal*, Lejang of *Latehar Anchal* of Latehar District in Jharkhand. The location of the project is provided as below:-





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1.4 Extent of Land

As per Coal block allocation and the coordinates given by MoC, the total extent of the land is 1487 Ha.

The Mine Plan (Including Mine Closure Plan) has been approved for a project area of 1351 Ha.

For allied activities for this mining project 31 Ha of non-coal bearing area of land on the South and outside allotted coal block has been considered. Hence the proposed Project/ Lease area comes to 1320 Ha + 31 Ha i.e. 1351 Ha.

From the allotted area of 1487 Ha, an area to an extent of 1320 Ha has been considered for mining activities. About 167 Ha of land was not considered due to

- Sukri River: The extent of land 17 ha falls within river bed & river meander, which cannot be accessed for mining and the available reserves under River are 1.18 Mt only, as such mining this coal is not feasible.
- Part of Rajbar Village: The extent of land is 150 Ha and reserves are 7.85 Mt only. This area was not considered because of metamorphic high, thinning out of seams and thick habitation. A population of 800 persons residing over these 150 ha, makes its workability further unfeasible.

There are total 9 seams in the coal block, 2 seams (R2, R1) of Ranigunj formation and Seven seams VII to I of Barakar formation. Out 9 seams only 7 seams were (2 seams of Ranigunj formation and 5 seams of Barakar Formation) considered for OC mining and balance two seams II and I were considered for Underground mining. 1 Ha land was identified for making entries to underground mine as shown in land use which will be undisturbed. The details of reserves considered for Opencast Mining and Underground Mining are as follows :

Net Geological Reserve of the block "Mt"	706.03 Mt
Net Geological Reserves considered for U/G Mining (Mt)	131.17 Mt
Net geological reserves considered for OC Mining	574.86 Mt
Minable Reserve from the OC (Mt)	442.34 Mt
Net Extractable Reserve (Mt)	420.22 Mt

1.5 Underground Mine

Ministry of coal while according approval for Mining plan, directed to come up with revised Mining plan within 3 years of starting of mine, incorporating the reserves amenable for Underground Mining which have been excluded in the mining plan.

As per approved Mining plan, the underground mine commences from 8th -9th year of opencast mining operations to have 500 m distance from opencast workings and continues to work up to 48th year i.e. up to mine life

1.6 Muck Disposal (Dumping) Plan

No additional land has been proposed for dumping of Overburden.

About 229 M cum Over burden out of 2119 M cum of Total overburden quantity from the project will be dumped on coal bearing area and will be rehandled subsequently as mine progresses. The details are as follows :

- The quantity of OB excavated in first 4 years will be dumped on temporary dump-yard



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- From 5th onwards back filling starts. Both temporary dump and internal dump will be operated up to 22nd year
- From 23rd year onwards the total OB excavated will be dumped in internal dump yard only.
- Rehandling of OB dumped in Temporary dump will starts from 23rd year onwards and continue up 39th year.

1.7 Mode of Mineral Transportation

As per the approved Mining plan, the coal produced will be transported to the thermal power plant located at Lalpania.

The distance from project site to power plant is 159.7 kms

It is proposed to construct a railway siding at Chetar railway station which is located 13.7 km away from project site.

A closed conveyor is proposed from project site to Chetar railway station.

However, during initial period of operations (till conveyor belt is installed) the coal will be transported to Railway Siding by covered trucks and mechanically loaded in to wagons by Front End Loaders.

1.8 Electricity

As per approved Mining Plan a 10 MVA sub- station will be established at Mine site. A separate 33 Kv line will be established to meet the power requirement.

1.9 Water

The seepage water collected will be utilized for dust suppression, washing of equipment and plantation etc. Zero discharge was planned. However, for drinking purpose, ground water will be used.


1.10 Employment Generation

The employment generation of the project is divided into Permanent and Temporary. Locality people will have income opportunity in various ancillary work & other activities.

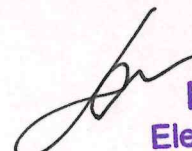
- a. Permanent/Regular Employment (Number of persons): 1461
- b. Temporary Employment (Number of person): 3000

Also, as per mining plan; Benefit to the population is as follows:

- Directly -1461 (Annual Man shift $330 \times 1461 = 482130$)
- Indirectly -about 3000 (Annual Man shift $330 \times 3000 = 990000$)
- Employment generated on non-forest land in afforestation programme.


(Rajesh Ranjan)
Electrical Superintendent Engineer
Tenughat Vidyut Nigam Limited




Rajesh Ranjan
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T.V.N.L. Ranchi
26 AUG 2025

