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The information given in this report is not to be communicated either directly or indirectly to the press or to any person not holding an official position in the CIL / Government.

**Application in Form-I for  
Environmental Clearance (EC)  
Of**

**Nigahi OCP**

**(18.75 to 21.00 MTPA)**

**P.O: Nigahi, Dist. Singrauli, (M.P.)**

**[As per the MoEFCC OM No. J-11015/224/2015-IA.II dated 15.09.2017]  
with summarised EIA/EMP for Impact Assessment**

**NORTHERN COALFIELDS LIMITED**

**July-2019**

*Prepared By*

**Environmental Engineering Division**

**REGIONAL INSTITUTE – VI**

**P.O: Jayant, Dist. Singrauli, MP-486890**

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P.O: Nigahi, Dist. Singrauli, (M.P.)**

<b>PROJECT INFORMATION</b>	
Name of the project	<b>Nigahi OCP</b>
<b>Location :</b>	
- Village	Nigahi
- Tehsil	Waidhan
- Name of the Coalfield	Singrauli Coalfield
- District	Singrauli
- State	Madhya Pradesh
Name of the Company	Northern Coalfields Limited
Production Capacity (Mtpa)(in ROM)	<b>18.75 Mtpa</b>
Lease/Project Area (In ha)	3018.40 Ha ,
Prepared by QCI Accredited Consultant:	CMPDIL (Accredited by QCI vide Certificate No. NABET/ EIA/ 1720/RA 0092 dated 28/05/18, Validity up to 01.10.2020)

**NORTHERN COALFIELDS LIMITED**



**July-2019**

*Prepared by*

Environmental Engineering Division, CMPDI, RI-VI  
P.O.- Jayant, Distt.-Singrauli (MP), 486890

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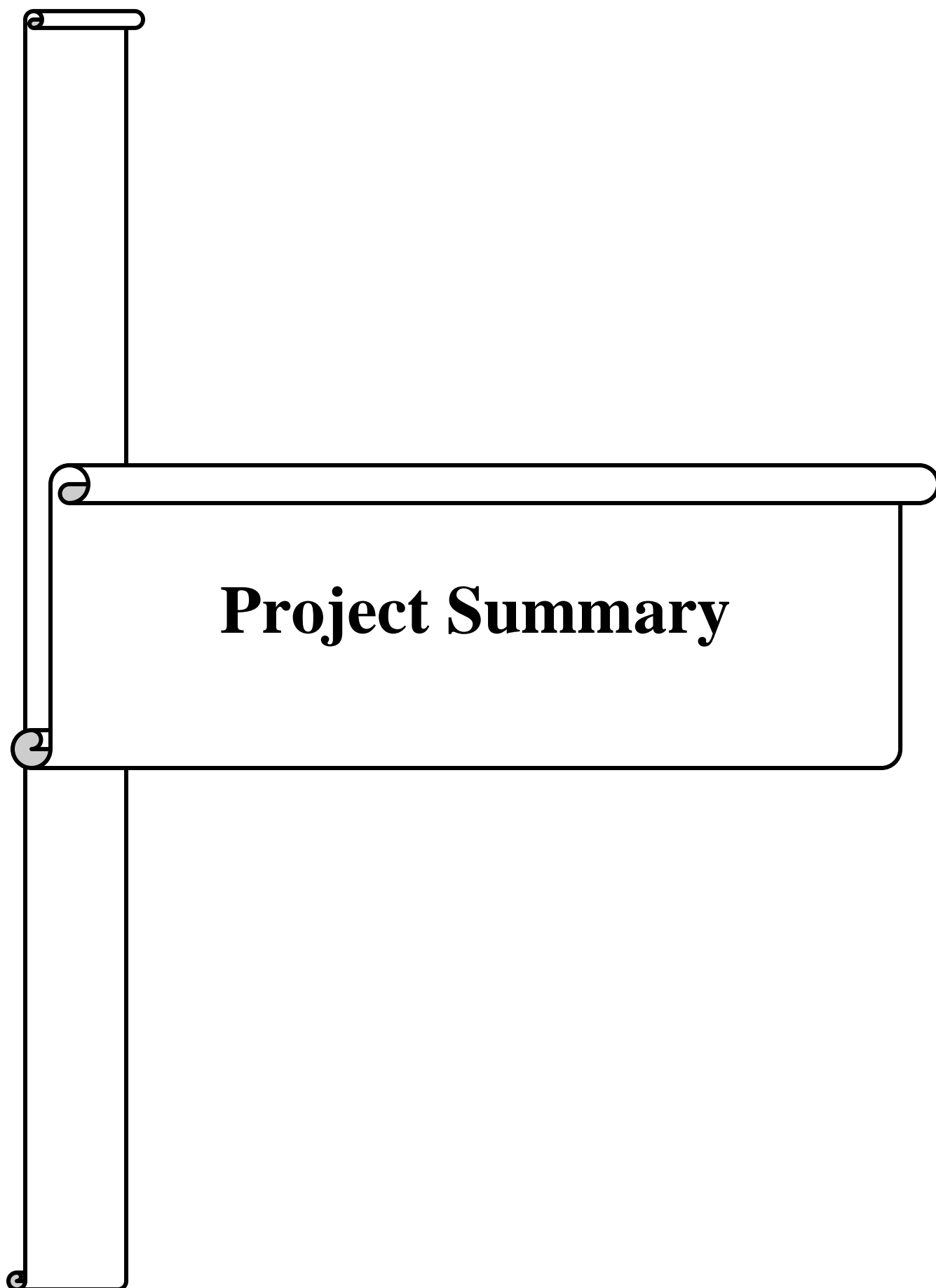
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**Application in Form-I for  
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Nigahi OCP (18.75 to 21.00 MTPA)**

**(As per the MoEFCC OM No.J-11015/224/2015-IA.II dated  
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# Project Summary

# **PROJECT SUMMARY**

## **OF**

### **NIGAH OCP (21.00 MTPA) OF NCL**

#### **1.1 Introduction**

Nigahi OCP is located in the south- central part of Moher sub-basin of Singrauli Coalfield in the Singrauli district of Madhya Pradesh. Nigahi OCP mainly falls in Nigahi Block and Nigahi North Extension Block, was one of the 11 mining blocks identified in the Master Plan of Singrauli Coalfields prepared in 1974 by CMPDI in collaboration with Soviet Experts.

#### **1.2 EPR and Mining Plan of Nigahi Project**

The EPR for Nigahi OCP (15 Mtpa) had been prepared in January, 2007 and approved by the Government of India for an additional capital investment of Rs.259.40 Crores on 8th October, 2007. The mine is working since 2007-08 on 15 MTPA capacity.

The project had earlier Environmental Clearance from Ministry of Environment and Forests, Government of India for a rated capacity of 15 Mtpa of coal production in a total lease area of 3036.40 Ha with public hearing under section 12 of the Environmental Impact Assessment notification, 2006 and subsequent amendments thereto and under para 2.1.1 of MOEF circular dated 13.10.2006 vide letter No. J-11015/235/2006-IA. II (M) dated 08.05.2007.

#### **Mining Plan for Nigahi OCP (21.00 Mtpa)**

To meet the growing energy demand of coal in the country and further in order to cope up with the fluctuation in production of other mines of NCL, it is imperative that production from Nigahi OCP be further increased owing to its favourable geo-mining conditions.

Ministry of Environment, Forest and Climate Change, Government of India, vide letter No.J-11015/224/2015-IA.II dated 15.09.2017 has issued guidelines for exemption from public hearing while considering grant of Environmental Clearances to the expansion projects of coal mines, involving increase in production capacity up to 40% in 2-3 phases. Nigahi OCP fulfills the requirements enlisted in guidelines for Enhanced Coal production of 21 Mtpa as mentioned below:

- ✓ Additional Coal winning will be done by deployment of one no. of Surface Miner (3800-4000mm);
- ✓ The present capacity of CHP of Nigahi OCP is 15 Mtpa. Additionally, ROM coal of (-)100 mm size received from Surface Miner will be dispatched by railway wagons through Nigahi Wharf-wall situated within the mine leasehold area of Nigahi OCP. So, the existing Nigahi CHP / Wharf-wall will dispatch 21 Mtpa coal produced from Nigahi OCP by railway wagons;

- ✓ The additional coal produced at Nigahi OCP will be transported to consumers through railway wagons;
- ✓ Mine plan for enhanced coal production (21 Mtpa) has been prepared within the sanctioned boundary of Nigahi OCP. So, the Mine Lease area will remain same.

The project has favourable geo-mining conditions for further enhancement of coal production. The increase in production would be achieved by way of improvement in availability and utilization of HEMM, increasing the no. of working days and by deployment of one no. of Surface Miner (3800-4000mm) for additional coal production. Considering the above facts, the mining plan for Nigahi OCP has been prepared for enhanced coal production of 21 Mtpa.

Nigahi OCP is located in the south-central part of Moher sub-basin of Singrauli Coalfield in the Singrauli district of Madhya Pradesh. Considering the above facts, the Mining plan incorporating Mine closure Plan for Nigahi OCP has been prepared for coal production of 21.00 Mtpa with mining leasehold area of 3018.40 Ha, and approved by NCL Board on 23.04.2019. **(Refer Annexure No.-VI)**

## 1.2 Location, Topology & Drainage

Nigahi OCP is located in the south-central part of Moher sub-basin of Singrauli Coalfield in the Singrauli district of Madhya Pradesh. The Project is covered under Topo sheet no. 63-L /12 between mine is bounded by Latitude 24°06'3.29" & 24°11'16.37" North and longitude 82°35'28.23" & 82°39'50.12" East. Nigahi OCP lies in western side of existing Jayant OCP and eastern side of Amlohri OCP.

The project is well connected to Sidhi in MP about 110 km and Varanasi in UP about 220 Km. The nearest Railway Station is Shaktinagar in UP about 07 km and Singrauli in MP on the Obra-Katni branch line of Eastern Railway which is about 22 km away and is approachable by an all-weather road.

The area is undulating and hilly terrain. The elevation varies from 300 m to 500 m above Mean Sea Level. The drainage of the area towards north into Bijul Nallah through Mehrauli/Morwa nallah, the other towards south into GBP Sagar through Motwani and Amjhar nallahs. The Project location is shown in the **Plate No.-1**.

## 1.3 Salient Features

The Project is designed to produce 21.00 Mtpa of coal from the four working seams namely, Purewa Top, Purewa Bottom, Purewa merged and Turra, with an average stripping ratio of 3.94 m<sup>3</sup>/t. The gradient of the seams varies from 2° to 3°. The average grade of coal is G-7, G-11 & G-14. The Project is linked to serve Vindhyachal Super Thermal Power Station of NTPC.

Total land requirement has been estimated as 3018.40 ha, out of which 1280.517Ha is forestland (including 38.517 Ha Revenue forest land) and, 1528.883 ha (Tenancy land and 209.00 ha Govt. /wasteland).

The Project is being worked by combined mining system deploying dragline and shovel dumper combination. The ultimate working depth has been estimated as



250m. The total O.B. during the mine life has been estimated as 1776.65 Mm<sup>3</sup> out of which 231Mm<sup>3</sup> will be dumped as external dump and balance will be backfilled internally. The overall dump slope will be kept at 28° to prevent dump slide. The present working surface plan of the project as on 01.04.2019 is given in **Plate No.-5**.

#### 1.4 Purpose of the report

This application has been made for EC for enhanced production of Nigahi OCP from 18.75 Mtpa to 21.00 Mtpa as per the MOEFCC OM No. J-11015/224/2015-IA.II dated 15.09.2017 considering grant of prior Environmental Clearance (EC) for increased capacity by 40% of Nigahi OCP to 21.00 MTPA under clause 7(ii) of EIA-Notification-2006, considering the following points.

A	Nigahi OCP has got the capability of producing coal by 2.25 MTPA higher than 18.75 MTPA, with addition of one surface miner and higher utilization of existing plant & machinery.
B	The total leasehold area as per earlier approved EIA/EMP is 3018.40 Ha (extra land is not required and the forestry and other clearances have already been obtained).
C	No change in technology is proposed. It has been proposed that the OB will be removed by Outsourcing, additional coal will be produced by deploying the surface miner in the mine.
D	No change in backfilling & land reclamation plan will take place. Nigahi OCP has got Environmental Clearance and the land reclamation plan has been approved by MOEFCC. There is no change in the land reclamation plan and the same shall continue after including the increased capacity of the mine to 21.00 MTPA also.
E	The total approved manpower is 2827 (3 shift working), no increase in which is proposed. The total existing manpower as on 01.04.2019 is 2353.
F	The average grade of coal is G-10 and the linkage of coal is to serve Vindhyachal Super Thermal Power Station of NTPC. As NTPC has inter-lined Nigah Railway siding with the MGR of NTPC. It also serves as a Basket Linkage mine to meet the overall demand on NCL
G	The mine-able coal reserves has been estimated to be 483.01 MT and the average stripping ratio is 3.94 m <sup>3</sup> /t. Approximately 224.07 MT of mineable coal reserve is left to be mined as on 01.04.2019.
H	Due to the increasing demand of coal for the nation, it is requested to consider the proposal for grant of environmental clearance from MOEFCC for increased capacity of 21.00 MTPA (from 18.75 MTPA capacity to increased capacity of 21.00 MTPA).

The filled up Form-I with summarized EIA of the Project are put up for due diligence of EAC for inclusion of 21.00 MTPA increase in capacity i.e. by 2.25 MTPA of existing 18.75 Mtpa of Nigahi OCP.

## 1.5 Details of Last Public Hearing

Public hearing was conducted for the Environmental Clearance of Nigahi OCP (for 15.00 Mtpa) by State Pollution Control Board of M.P. on 18-12-2005 at Community Hall, Waidhan. As per the Public Hearing details there was not any issue related to Environment. The detail of Public Hearing along with ATR on issues raised during public hearing is enclosed as **Annexure No.-V**.

## 1.6 Need for Environmental Clearance

1. The project has already obtained EC for production capacity of 18.75 Mtpa of coal production vide letter No.J-11015/79/2013-IA.II (M) dated 19.03.2015 and subsequent amendment dated 12.10.2018. The EC letter is enclosed as **Annexure No.-III**.

There is no change in mining lease area, mining technology and other project parameters.

2. The increase in production capacity is 2.25 Mtpa which is well within the ceiling of 40% as specified in MOEFCC OM No.J-11015/224/2015-IA.II dated 15.09.2017.
3. A summarised EIA-EMP has been prepared on existing environmental scenario, impact assessment & control measures, disaster management due to increased production. As, the increased coal production will be achieved mainly by deployment of 1 No. of Surface Miner (3800-4000mm) therefore, no drilling, blasting, crushing etc. is involved.

Hence, additional coal mining is environmental friendly and there will be no increase in the pollution load except marginal increase of PM10 level which will also be within the permissible limit. The summarised Environmental Impact Assessment (EIA-EMP) is given in **Annexure No.-I**.

4. The Project authority is monitoring the Environmental Quality to determine the pollution level and ensuring that Ambient Air, Water & Noise quality is kept within permissible limit.

It is assessed that there will be no increase in the pollution load and the ambient air quality level due to peak production will be within the prescribed limit. No additional land is required for the project. No additional Resettlement and Rehabilitation is required. The EC for 18.75 Mtpa production level already exists.

All the statutory environmental requirements are complied with, therefore, it is kindly submitted that approval for environmental clearance as per the MOEFCC OM No.J-11015/224/2015-IA.II dated 15.09.2017 for 21.00 Mtpa (increase in capacity), in respect of Nigahi OCP of NCL may please be granted.

\*\*\*\*\*



**Application in Form-I**

# Application in Form-I for Environmental Clearance (EC) of

## Nigahi OCP

**(18.75 to 21.00 MTPA)**

**(As per the MoEFCC OM No.J-11015/224/2015-IA.II dated 15.09.2017  
with summarised EIA/EMP for Impact Assessment)**

Appendix -I of EIA Notification - 2006

**(See paragraph - 6)**

See paragraph 7(ii) in case of Expansion project involving increase in either lease area or production capacity to be submitted to Expert Appraisal Committee to decide on due diligence necessary for scoping for grant of Environmental Clearance of 25% increase in capacity.

### (I) Basic Information

Sl. No.	Item	Details
1	Name of the Project	Nigahi Opencast Project of M/s Northern Coalfields Limited
2	Serial No. in the schedule	1(a)- A
3.	*Proposed Capacity / area / length / tonnage to be handled / command are a/ lease area/number of wells to be drilled	<p><b>i) Production Capacity</b></p> <p>Existing approved production capacity 18.75 Mtpa  Proposed increase in production capacity 2.25 Mtpa  Total production capacity for which amendment in environmental clearance sought 21.00 Mtpa</p> <p><b>ii) Mine lease Area:</b></p> <p>Existing mine lease area 3018.40 Ha,  Increase in mine lease area due to proposed increase in production capacity NIL</p> <p>Total Mine lease area for which environmental clearance sought 3018.40 Ha.</p>
4.	New/Expansion/ Modernization	Expansion (Production capacity increase from 18.75 Mtpa to 21.00 Mtpa)
5.	Existing capacity/ Area etc	18.75 Mtpa / 3018.40Ha
6.	Category of the project i.e. 'A' or 'B'	'A'

7.	Does it attract the general condition? If yes, please specify.	No (General condition is applicable to 'B' Category project)
8.	Does it attract the specific condition? If yes, please specify.	No (The project does not attract the specific condition)
9.	Location	Nigahi Geological block of Singrauli district, Madhya Pradesh under survey of India topo-sheet 63/L/12. Latitude: 24° 06' 3.29" to 24° 11' 16.37" North Longitudes 82° 35' 28.23" to 82° 39' 50.12" East. <b>(Refer Plate no.-1 and 2)</b>
	Plot/Survey/ Khasra No.	The village wise Plot details of land are given in land clearance letters enclosed as Annexure No.-III.
	Village	Nigahi
	Tehsil	Waidhan
	District	Singrauli
	State	Madhya Pradesh
10	Nearest Railway station/ airport along with distance in Km.	The nearest Railway Station is Shaktinagar in UP about 07 km and Singrauli in MP about 22 km away. Nearest airport is Varanasi at a distance of 250 km.
11	Nearest town, city, district Headquarters along with distance in Km.	District headquarter Singrauli is at a distance of 06 km.
12	Village Panchayats, Zilla Parishad, Municipal Corporation, Local Body ( Complete Postal Address with Telephone Nos. to be given	Municipal corporation : Nagar Palika Nigam , Waidhan P.O. : Waidhan Dist. : Singrauli, M.P. Mayor : Smt. Premvati Khairwar Phone no. :07805-233152
13	Name of the applicant	S.K. Gomasta
14	Registered Address	Director(Tech/ P&P/Opr.) Northern Coalfields Limited, PO: Singrauli ,Distt.Singrauli, MP-486 889 <a href="tel:07805-266607">Tel:07805-266607</a> E-mail : dttp.ncl@nclhq.nic.in
15	Address for correspondence :	S.K. Gomasta, General Manager Office of the General Manager, Nigahi Project PO: Nigahi Project Dist. Singrauli Pin: 486 884 (Madhya Pradesh)

	Name	S.K. Gomasta
	Designation(Owner/Partner/ CEO)	General Manager
	Pin Code	486 884
	Email	cgmngn.ncl@coalindia.in
	Telephone	07805-276306
	Fax	07805-276306
16	Details of alternative sites examined, if any, location of these sites should be shown on a topo sheet	Not required as mining is a site specific project
17	Interlinked Projects	None
18	Whether Separate application of interlinked project has been submitted?	Not Applicable
19	If yes, date of submission	Not Applicable
20	If no, reason	Not Applicable
21	Whether the proposal involves approval/clearance under <i>(details of the same and their status to be given)</i> :	
	(a) The forest (Conservation) Act, 1980	Yes  Total land requirement has been estimated as 3018.40 ha, out of which 1280.517 Ha forestland (including 38.517 Ha Revenue forest land), 1528.883 ha Tenancy land and 209.00 ha Govt. land. The entire land has been acquired.
	(b) The Wildlife (Protection) Act, 1972	Not applicable.
	(c) The C.R.Z. Notification, 1991	Not Applicable
22	Whether there is any Government Order/ Policy relevant/ relating to the site	No
23	Forest land involved (hectares)	1280.517 Ha
24	Whether there is any litigation pending against the project and/ or	No

land in which the project is proposed to be set up?	
a. Name of the Court	
b. Case No.	
c. Orders/Directions of the Court, If any and its relevance with the proposed Project	

*(\*Capacity corresponding to sectoral activity (such as production capacity for manufacturing, mining lease area and production capacity for mineral production, area for mineral exploration, length for linear transport infrastructure, generation capacity for power generation etc.)*

## (II) Activity

- Construction, operation or decommissioning of the Project involving actions, which will cause physical changes in the locality (topography, land use, changes in water bodies, etc.)**

Sl. No.	Information/Checklist Confirmation	Yes/ No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data (Source: Mining Plan(21.00Mtpa)/ Project Report/EIA-EMP/ NCL& Project Authority)
1.1	Permanent or temporary change in land use, land cover or topography including increase in intensity of land use (with respect to local land use plan)	Yes	<p><b>Total acquired land is 3018.40 Hectare</b></p> <p>This is an existing operating mine having EC for 18.75 Mtpa. There is no increase of leasehold area, no change in technology, no change in product mix and is not a case of lease renewal.</p> <p>The land is under mining operation and all the land has been acquired and in possession.</p> <p>All the land have been acquired and in possession. This land will undergo progressive change during operation involving O.B removal, coal extraction, progressive reclamation etc.</p> <p>Since this is capacity increase to 21.00 Mtpa coal production only vide MoEFCC OM No.J-11015/224/2015-IA.II dated 15.09.2017, no fresh acquisition of land is required. The broken land will be suitably reclaimed.</p>
1.2	Clearance of existing land, vegetation and buildings?	No	<p>This is an existing operating mine and the surface infrastructure facilities at pit head, explosive magazines, roads, residential colony etc. are already in place.</p> <p>This land will undergo progressive change during operation involving O.B removal, coal extraction,</p>

Sl. No.	Information/Checklist Confirmation	Yes/ No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data (Source: Mining Plan(21.00Mtpa)/ Project Report/EIA-EMP/ NCL& Project Authority)												
			<p>progressive reclamation etc. Land has already been acquired.</p> <p>Since the proposal is for a capacity increase to 21.00 Mtpa of coal production only, no clearance of existing land, vegetation and buildings is required, as surface infrastructure facilities have already been created.</p> <p>Total land involved is 3018.40 Ha and same has been acquired.</p> <p><b>Clearance of existing land: Forest land</b></p> <table><tr><th>Sl. No</th><th>Forest land Area in Ha</th><th>FC letter details)</th></tr><tr><td>1.</td><td>874.000</td><td>8-62/86-FC dt. 18.06.1987</td></tr><tr><td>2.</td><td>424.517</td><td>8-26/201594-FC dt. 13.09.2017</td></tr><tr><td>Total</td><td>1298.517</td><td>18 Ha Forest area carved out for adjacent mine Jayant OCP</td></tr></table> <p><b>(Refer Annexure No.-IV)</b> <b>Government/Tenancy land clearance:</b> All the land under this category has already been acquired by the project.</p> <p><b>R&amp;R status:</b> There is no increase in land requirement in the present proposal.</p>	Sl. No	Forest land Area in Ha	FC letter details)	1.	874.000	8-62/86-FC dt. 18.06.1987	2.	424.517	8-26/201594-FC dt. 13.09.2017	Total	1298.517	18 Ha Forest area carved out for adjacent mine Jayant OCP
Sl. No	Forest land Area in Ha	FC letter details)													
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2.	424.517	8-26/201594-FC dt. 13.09.2017													
Total	1298.517	18 Ha Forest area carved out for adjacent mine Jayant OCP													
1.3	Creation of new land uses?	No	Since the proposal is for capacity increase to 21.00 Mtpa coal production only, with no acquisition of land being involved, creation of new land use is not envisaged. No additional land is required.												
1.4	Pre-construction investigations e.g. bore houses, soil testing?	No	Not applicable as this is an existing mine.												
1.5	Construction works?	No	Not Applicable.												
1.6	Demolition works?	No	Demolition of infrastructure will be carried out at the end of mine life												
1.7	Temporary site used for construction works or housing of construction workers?	No	Not applicable, as no additional construction in the proposed increase in production capacity												
1.8	Above ground buildings, structures of earthworks including linear structures, cut and fill or excavations.	No	No additional building & structure is proposed in the present proposal.												



1.9	Underground works including mining or tunneling?	No	Not applicable. The Nigahi mine is an opencast coal mine. No underground work is envisaged.																
1.10	Reclamation works?	Yes	<p>The reclamation works involve :</p> <p><b>Technical and Biological reclamation :</b>  There are two external &amp; two internal dumps. The present mining Status is as given below :</p> <p>Till date 333.42 Ha of OB dump has been afforested with a total of 16.96 Lakhs of plants.</p> <p><u>Technical Reclamation up to Mine life:</u></p> <table> <tr> <th><u>Dump</u></th><th><u>Area (Ha)</u></th><th><u>Volume (Mm<sup>3</sup>)</u></th><th><u>No of plants</u></th></tr> <tr> <td>External</td><td>418.00</td><td>231.00</td><td>10.45 Lakhs</td></tr> <tr> <td>Internal</td><td>1405.00</td><td>1138.00</td><td>35.13 Lakhs</td></tr> <tr> <td>Total</td><td>1823.00</td><td>1369.00</td><td>45.58 Lakhs</td></tr> </table> <p>The plant species are selected in consultation with state forest department. The density of plantation in dump area will be kept @2500 nos. / Ha. as per EC</p>	<u>Dump</u>	<u>Area (Ha)</u>	<u>Volume (Mm<sup>3</sup>)</u>	<u>No of plants</u>	External	418.00	231.00	10.45 Lakhs	Internal	1405.00	1138.00	35.13 Lakhs	Total	1823.00	1369.00	45.58 Lakhs
<u>Dump</u>	<u>Area (Ha)</u>	<u>Volume (Mm<sup>3</sup>)</u>	<u>No of plants</u>																
External	418.00	231.00	10.45 Lakhs																
Internal	1405.00	1138.00	35.13 Lakhs																
Total	1823.00	1369.00	45.58 Lakhs																
1.11	Dredging?	No	No dredging is involved.																
1.12	Offshore structures?	No	Not applicable.																
1.13	Production and manufacturing processes?	Yes	<p>The coal is being produced through opencast method.</p> <p>It has been planned to mine the coal deposits by combined system of mining using shovel-dumper system and dragline. Shovel-dumper system for higher benches and dragline on the Turra parting has been planned as this the most suitable combination of technology under the existing geo-mining conditions.</p> <p><b>Drilling and blasting-</b> RBH (electrical) drills of 160 mm are being used for coal bench and RBH (electrical) drills of 250 mm size for drilling the dragline &amp; shovel benches.</p> <p><b>Loading and Transport:</b> The run-off mine coal from the opencast mine is being received into the receiving pit by means of rear discharge dumpers Through CHP, it is</p>																

			led into storage bunker and finally to the SILO for loading MGR/ railway rakes. The Public railway siding facility is envisaged in the Mining plan and EPR .
1.14	Facilities for storage of goods or materials?	Yes	<p>i) Storage facilities for the explosives is maintained by adjacent mine Jayant OCP and shared by this project.</p> <p>ii) Coal will be stored in coal stock yard from where the coal will be dispatched to CHP.</p> <p>iii) Storage of goods &amp; other material is made in the material store at earmarked site with storage facilities.</p>
1.15	Facilities for treatment or disposal of solid waste or liquid effluents?	Yes	<p>Solid waste- Solid waste in the form of OB to the extent of 1776.75 million m<sup>3</sup> is likely to be generated during the life of the mine. The OB will be placed internally in the mine voids as well as at external sites. The OB dumps will be Technically and biologically reclaimed.</p> <p><b>Liquid waste-</b> The waste water from Workshop and CHP are being treated in existing ETP of 4.0MLD and 10.5 MLD capacity respectively. There is no discharge outside the mine premises except in monsoon season.</p> <p>The domestic waste water from colony are being treated in STP of 3.0 MLD capacity. Also, the Industrial buildings are having facilities of septic tank and soak pit. The treated water are being utilized for Industrial and Horticulture purpose.</p> <p>The TSS from mine water are being removed at Sump and then at Old Bareja reservoir and then in New Bareja Reservoir. The clear water are being utilized for Industrial purposes</p>
1.16	Facilities for long term housing of operational workers?	Yes	Provision of additional 256 residential quarters has been made in EPR for operational workers. As per sanctioned EPR, for total sanctioned manpower of

			2827, there are sufficient houses provided in the project.
1.17	New road, rail or sea traffic during construction or operation?	No	No additional construction of road & railway siding due to this proposal.
1.18	New road, rail, air waterborne or other transport infrastructure including new or altered routes and stations, ports, airports etc.?	No	No additional construction or alteration of road, rail or other transport infrastructure.
1.19	Closure or diversion of existing transport routes or infrastructure leading to change in traffic movements?	No	No closure or diversion of existing transport routes or infrastructures leading to change in traffic movements.
1.20	New or diverted transmission lines or pipelines?	No	No new construction or diversion of transmission lines or pipelines.
1.21	Impoundment, damming, culver ting, re-alignment or other changes to the hydrology of watercourses or aquifers?	No	<p>i) Surface water : There is no nalla or river in the project at present. There will no re-alignment, damming or other changes of water courses in present proposal.</p> <p>ii) Ground water : The ground water status will not change as was indicated in the earlier EMP of March-2006 which has EC for 15.00 Mtpa.</p>
1.22	Stream crossings?	No	There are no stream crossing in the project lease area.
1.23	Abstraction or transfers of water from ground or surface waters?	Yes	<p><b>Requirement of Water : (Av.demand)</b></p> <p>Domestic water : 2688 m<sup>3</sup>/day (0.71 MGD) Industrial water: 11546 m<sup>3</sup>/day (3.05 MGD) <b>Total : 14234 m<sup>3</sup>/day (3.76 MGD)</b> Firefighting : 1817 m<sup>3</sup>/day (0.48 MGD) (occasional use)</p> <p>This will be met by integrated water supply scheme (IWSS) at Khadia Project, mine water and reuse of treated water. The Mine water and treated water from ETP and STP are being used for haul road dust suppression, Horticulture and other industrial use.</p>

			<p><b>ii) Ground water :</b>          Due to excavation strata seepage gets accumulated at the floor of the coal seam in the sump having capacity to deal with peak rainfall. In order to maintain the working faces dry for coal production this water is pumped out daily.</p> <p>Mine water discharge at maximum mine depth(250 m) = 9874 m<sup>3</sup>/ day</p>
1.24	Changes in water bodies or the land surface affecting drainage or run-off?	No	Due to present proposal there will be no changes in surface drainage pattern from present stage.
1.25	Transport of personnel or materials for construction, operation or decommissioning?	Yes	<p>The mine is already in operation and personnel have been provided transport facilities upto time office of the mine.</p> <p>There will be no increase in manpower due to increase in production capacity.</p> <p>At present stage of production, dumpers are used for transportation of Coal &amp; OB. There will be no further increase in no of transport equipment for present proposal from present stage.</p> <p>Decommissioning of infrastructure will be carried out at the end of mine life.</p>
1.26	Long-term dismantling or decommissioning or restoration works?	No	Not envisaged at present. Dismantling / decommissioning work may start after mine closure. Mine closure plan has already been prepared and approved.
1.27	Ongoing activity during decommissioning which could have an impact on the environment?	No	Not envisaged at present. Decommissioning of CHP, Workshop & other infrastructure will have some minor impact on the environment for a short period. But this activity will start after mine closure.

1.28	Influx of people to an area in either temporarily or permanently?	Yes	Temporary influx of people has already taken place as the mine is in operation since 1985-86.  Sanctioned manpower for the project is 2827 and the existing manpower as on 01.04.2019 is 2353  This project over the mine life, will further create primary and secondary employment opportunities and people may migrate to this area.
1.29	Introduction of alien species?	No	--
1.30	Loss of native species or genetic diversity?	No	--
1.31	Any other actions?	No	--

**2. Use of Natural resources for construction or operation of the Project (such as land, water, materials or energy, especially any resources which are non-renewable or in short supply) :**

Sl.No.	Information/Checklist Confirmation	Yes/ No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data (Source: Mining Plan(21.00Mtpa)/ Project Report/EIA-EMP/ NCL& Project Authority)
2.1	Land especially undeveloped or agricultural land (Ha)	Yes	This is an existing project. The land details are as follows : Forest land : 1280.517 Ha (Includes 38.517 Ha Revenue forest) Govt. land : 209.000 Ha Tenancy land : 1528.883Ha <b>Total land : 3018.400 Ha</b> There is no increase in land requirement in the present proposal of increase in production capacity from 18.75 Mtpa to 21.00 Mtpa.
2.2	Water (expected source & competing users) unit : (m <sup>3</sup> /d)	Yes	<b>Requirement of Water : (Av.demand)</b>  Domestic water : 2688 m <sup>3</sup> /day (0.71 MGD) Industrial water: 11546 m <sup>3</sup> /day (3.05 MGD) <b>Total : 14234 m<sup>3</sup>/day (3.76 MGD)</b> Firefighting : 1817 m <sup>3</sup> /day (0.48 MGD) (occasional use)  There is no increase in domestic water requirement as no increase in manpower as per mining plan. This will be met by integrated water supply scheme (IWSS) at Khadia Project. The industrial water requirement are being met also by mine water and

Sl.No.	Information/Checklist Confirmation	Yes/ No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data (Source: Mining Plan(21.00Mtpa)/ Project Report/EIA-EMP/ NCL& Project Authority)															
			reuse of treated water. The Mine water and treated water from ETP and STP are being used for haul road dust suppression, Horticulture and other industrial use.															
2.3	Minerals (Million Tonnes) MT	Yes	<b>Coal reserve:</b>  Gross (Geological) 561.71 Mt  Extractable (Mineable) 483.01 Mt  <b>Mineable coal reserve : (in Mt)</b> <table border="1"><tr><td>Coal Seam</td><td>Total reserve</td><td>Coal produced up to 31.03.2019</td></tr><tr><td>Purewa Top</td><td>29.76</td><td rowspan="4"><b>258.94</b></td></tr><tr><td>Purewa Bottom</td><td>82.39</td></tr><tr><td>Purewa Merged</td><td>130.11</td></tr><tr><td>Turra</td><td>243.22</td></tr><tr><td colspan="2">Total</td><td><b>483.01</b></td></tr></table> Balance coal reserve - <b>224.07</b> as on 01.04.2019	Coal Seam	Total reserve	Coal produced up to 31.03.2019	Purewa Top	29.76	<b>258.94</b>	Purewa Bottom	82.39	Purewa Merged	130.11	Turra	243.22	Total		<b>483.01</b>
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Turra	243.22																	
Total		<b>483.01</b>																
2.4	Construction material – stone aggregates, sand/soil (expected source (MT)	No	No new construction proposed.															
2.5	Forests and timber (source MT)	No	No use of timber for operation of Open cast mine.															
2.6	Energy including electricity and fuels (source, competing users)unit : fuel (MT), energy (MW)	Yes	<b><u>Electricity :</u></b> Source : MPEB. (Through 132/33 KV Madhauri Sub-station of NCL)  Consumption 11.5 MW for the project  3.5 MW for the colony  <b>Total = 15 MW</b>  <b><u>Fuel:</u></b>  <b><u>Present Consumption</u></b> Diesel, Oil and Lubricant : 85 KL/day															
2.7	Any other natural resources (use appropriate standard units)	No	--															

**3. Use, storage, transport, handling or production of substances or materials, which could be harmful to human health or the environment or raise concerns about actual or perceived risks to human health.**

Sl. No.	Information/Checklist Confirmation	Yes/ No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data (Source: Mining Plan(21.00Mtpa)/ Project Report/EIA-EMP/ NCL& Project Authority)
3.1	Use of substance or materials, which are hazardous (as per MSIHC rules) to human health or the environment (flora, fauna and water supplies)	Yes	<p>The hazardous substances like spent / burnt oil and oil soaked filters, old batteries etc. are taken care of as per Hazardous and Other Waste (Management and Transboundary movement) Rules, 2016 and e-Waste (Management) Rules, 2016. Such wastes sent to stores for disposal through authorized Recyclers and to TSDF site for M.P.</p> <p><b><u>Used Battery</u></b> Used Battery are being disposed off to authorized Battery manufacturer/repairer for recycling.</p> <p><b><u>Used oil</u></b> Used oil is collected in drums &amp; disposed off for recycling to Registered Recyclers.</p>
3.2	Changes in occurrence of diseases or affect disease vectors (e.g. insect or water borne disease)	No	There is no such risk involved.
3.3	Affects the welfare of people e.g. by changing living conditions?	No	<p>This is an operating mine .The standard of living has already improved. The project will have positive impact on the welfare of people and result into overall development of the area in and around the mine.</p> <p>Peripheral development is being taken up as CSR program. There will be further improvement during life of the mine.</p>
3.4	Vulnerable groups of people who could be affected by the projects e.g. hospital patients, children, the elderly etc.	No	--
3.5	Any other causes	No	--

#### 4. Production of solid wastes during construction or operations or decommissioning (MT/month)

Sl. No.	Information/Checklist Confirmation	Yes/No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data (Source: Mining Plan(21.00Mtpa)/ Project Report/EIA-EMP/ NCL& Project Authority)
4.1	Spoil, overburden or mine wastes	Yes	<p>Solid waste in the form of OB to the extent of 1776.75 million m<sup>3</sup> is likely to be generated during the life of the mine. The OB will be placed internally in the mine voids as well as at external sites. The OB dumps will be physically and biologically reclaimed.</p> <p>Overburden consisting of Alluvium shale and sandstone. The total OB over the life of the mine will remain the same.</p>
4.2	Municipal waste (domestic and or commercial wastes )	Yes	The domestic wastes generated are being disposed off as per provisions of Municipal Solid Waste (Management & Handling) Rules. No commercial waste is getting generated.
4.3	Hazardous wastes (as per Hazardous Waste Management Rules)	Yes	<p>The hazardous substances like spent / burnt oil and oil soaked filters, old batteries etc. are taken care of as per Hazardous and Other Waste (Management and Trans-boundary movement) Rules, 2016 and e-Waste (Management) Rules, 2016. Such wastes sent to stores for disposal through authorized Recyclers and to TSDF site for M.P.</p> <p><b><u>Used Battery</u></b> Used Battery are being disposed off to authorized Battery manufacturer/repairer for recycling.</p> <p><b><u>Used oil</u></b> Used oil is collected in drums &amp; disposed off for recycling to Registered Recyclers.</p>
4.4	Other industrial process wastes	No	--



Sl. No.	Information/Checklist Confirmation	Yes/No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data (Source: Mining Plan(21.00Mtpa)/ Project Report/EIA-EMP/ NCL& Project Authority)
4.5	Surplus product	No	--
4.6	Sewage sludge or other sludge from effluent treatment	Yes	<p>As there is no increase in manpower and number of quarters for proposed increase in production capacity, there will be no increase in domestic effluent. The STP Sludge will be used as manure in horticulture.</p> <p>Sludge from ETP will be mixed with the dump material and will be back filled. Also, the Industrial buildings are having facilities of septic tank and soak pit.</p>
4.7	Construction or demolition wastes	No	No new construction & demolition due to mine capacity expansion. Demolition waste will be generated during mine closure. The construction / demolition waste will be used for filling up of low lying areas or put to other suitable uses.
4.8	Redundant machinery or equipment	Yes	The redundant machineries or equipment during later period of mine operation will be transferred to other projects where required. If outlived their working life, they will be surveyed off and disposed as per Company's Rule.
4.9	Contaminated soils or other materials	No	--
4.10	Agricultural wastes	No	--
4.11	Other solid wastes	No	--

**5. Release of pollutants or any hazardous, toxic or noxious substances to air (Kg/hr)**

<b>Sl. No.</b>	<b>Information/ Checklist Confirmation</b>	<b>Yes/ No</b>	<b>Details thereof (with approximate quantities/ rates, wherever possible) with source of information data</b> (Source: Mining Plan(21.00 Mtpa)/ Project Report/EIA-EMP/ NCL& Project Authority)
5.1	Emissions from combustion of fossil fuels from stationary or mobile sources	Yes	Source - Operation of HEMMs. Individual transport equipment will be maintained to comply with the prescribed emission norms. The emissions of SO <sub>2</sub> & NO <sub>x</sub> from diesel operated HEMMs, trucks, tippers will be insignificant. The quantum of SO <sub>2</sub> & NO <sub>x</sub> is measured through ambient air quality monitoring in the mine area every fortnight as per Environment Protection Amended Rules 2000. The quantity is insignificant as per previous and present records. The ambient air quality data are given in <b>Annexure No.-I (Table No.1)</b> .
5.2	Emissions from production processes	Yes	SPM, Particulate Matter (PM10) and Fine PM2.5 are being taken care of with water sprinkling at required locations to keep the level within permissible limit. The monitored ambient air quality data are given in <b>Annexure No.-I (Table No.1)</b> .
5.3	Emissions from materials handling including storage or transport	Yes	SPM, Particulate Matter (PM10) and Fine PM2.5 are generated from coal transportation, handling and storage. These are being taken care of by water sprinkling on the transport routes and transfer points. The ambient air quality data are given in <b>Annexure No.-I (Table No.1)</b> .
5.4	Emissions from construction activities including plant and equipment	Yes	SPM, Particulate Matter (PM10) and Fine PM2.5 will get generated during construction activities. Water sprinkling will be done to prevent the dust becoming air borne. The emission from plant and equipment will be within permissible limits.  However, in the present expansion proposal, no new construction proposed. The quantity of Emission from plant and Machinery is insignificant after taking mitigation measures.
5.5	Dust or odours from handling of materials including construction materials, sewage and waste.	Yes	Dust will be generated during transportation, loading,unloading etc. Water sprinkling will be done to prevent the dust from becoming air borne.
5.6	Emissions from incineration of waste	No	Not Applicable
5.7	Emissions from burning of waste in open air (e.g. slash materials, construction debris)	No	Not Applicable
5.8	Emissions from any other sources	No	Not Applicable

## 6. Generation of Noise and Vibration, and Emissions of Light and Heat:

Sl. No.	Information/Checklist Confirmation	Yes/ No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data (Source: Mining Plan(21.00Mtpa)/ Project Report/EIA-EMP/ NCL& Project Authority)
6.1	From operation of equipment e.g. engines, ventilation plant, crushers	Yes	Noise generation due to operation of HEMM/Machineries/ crushers.  Generation of noise level is found within acceptable limits which is measured through ambient noise quality monitoring in the mine activity area every fortnight as per MOEFCC Gazette Notification No. GSR 742(E) dt.25.09.2000 standards for coal Mines. The vibration from operation of equipment is being kept within permissible limits by maintenance of HEMMs and CHPs at schedule intervals. Noise levels measured are given in Table No.3 of summarized EIA/EMP at <b>Annexure No.-I.</b>
6.2	From industrial or similar processes	No	Not Applicable
6.3	From construction or demolition	No	No new construction or demolition in this proposal.
6.4	From blasting or piling	Yes	The blasting do generate noise and vibration, but the operation is being restricted within the shift changeover period for its minimum impact. Further, use of NONELs and electronic delay detonators are being done as a precaution to maintain the level within prescribed standards. Blasting vibration are instantaneous & restricted to once or twice in a day. It is maintained within the permissible limits specified by DGMS.
6.5	From construction or operational traffic	Yes	Noise generation is due to movement of dumpers for transportation of coal & OB. Generation of noise level are found within acceptable limits which are measured through ambient noise quality monitoring in the mine activity area every fortnight as per Environment Protection Amended Rules 2000. Noise levels measured are given in Table No. 3 of summarized EIA/EMP at <b>Annexure No.-I.</b>
6.6	From lighting or cooling systems	No	Not applicable
6.7	From any other sources	No	--

**7. Risks of contamination of land or water from release of pollutants into the ground or into sewers, surface waters, ground water, coastal waters or the sea :**

<b>Sl. No.</b>	<b>Information/Checklist Confirmation</b>	<b>Yes/ No</b>	<b>Details thereof (with approximate quantities/ rates, wherever possible) with source of information data</b> (Source: Mining Plan(21.00Mtpa)/ Project Report/EIA-EMP/ NCL& Project Authority)
7.1	From handling, storage, use or spillage of hazardous materials	Yes	<p>The hazardous substances like spent / burnt oil and oil soaked filters, old batteries etc. are taken care of as per Hazardous and Other Waste (Management and Trans-boundary movement) Rules, 2016 and e-Waste (Management) Rules, 2016. Such wastes sent to stores for disposal through authorized Recyclers and to TSDF site for M.P.</p> <p><b><u>Used Battery</u></b> Used Battery are being disposed off to authorized Battery manufacturer/repairer for recycling.</p> <p><b><u>Used oil</u></b> Used oil is collected in drums &amp; disposed off for recycling to Registered Recyclers.</p>
7.2	From discharge of sewage or other effluents to water or the land (expected mode and place of discharge)	Yes	<p>There is no discharge outside the mine premises except in monsoon season. The effluent from Workshop and CHP are being treated in existing ETP of 4.0MLD and 10.5 MLD capacity respectively.</p> <p>The domestic waste water from colony are being treated in STP of 3.0 MLD capacity. Also, the Industrial buildings are having facilities of septic tank and soak pit. The treated water are being utilized for Industrial and Horticulture purpose.</p> <p>The TSS from mine water are being removed at Sump and then at Old Bareja reservoir and then in New Bareja Reservoir. The clear water are being utilized for Industrial purposes.</p>
7.3	By deposition of pollutants emitted to air into the land or into water	No	Release of pollutants mainly dust will be kept within permissible limit by adopting dust suppression techniques and maintenance of Haul roads.
7.4	From any other sources	No	Other source of pollution are Thermal power plants in the area.
7.5	Is there a risk of long term build up of pollutants in the environment from these sources?	No	There is no risk of long term buildup of pollutants in the environment.

**8. Risk of accidents during construction or operation of the Project, which could affect human health or the environment.**

<b>Sl. No.</b>	<b>Information/Checklist Confirmation</b>	<b>Yes/ No</b>	<b>Details thereof (with approximate quantities/ rates, wherever possible) with source of information data</b> (Source: Mining Plan(21.00Mtpa)/ Project Report/EIA-EMP/ NCL& Project Authority)
8.1	From explosions, spillages, fires etc. from storage, handling, use or production of hazardous substances	Yes	Risk exists on account of storage and use of explosives and fuel. Proper safety precautions are being taken to avoid such risks.
8.2	From any other causes	Yes	<p><b>1) Land sliding in OB Dump and mine Pit :</b> This is taken care by proper design of slopes in OB dump and Mine Pit.</p> <p><b>2) Blasting :</b> There are risks of ground vibration and fly rocks, which are taken care by optimum designing and getting approval from DGMS and implementing the same.</p> <p><b>3) Mine Inundation :</b> There is risk of mine inundation due to heavy rain. This risk is taken care by proper design of mine drainage system and pumping.</p> <p><b>4) Fire :</b> There is risk of spontaneous heating/ fire in coal stock yard and accidental fire in buildings and machineries. This is taken care by regular water spraying at coal stockyard and providing adequate numbers of fire extinguisher in buildings &amp; machinery. There is also a Central Fire Station at 05km with adequate numbers of fire fighting vans at Jayant to cater the need for NCL.</p>
8.3	Could the project be affected by natural disasters causing environmental damage (e.g. floods, earthquakes, landslides, cloud burst etc.)?	No	<p>The mine is falling within the seismic Zone-III.</p> <p>Project is not falling under seismically active zone or land slide prone area. The natural disasters due to flooding and landslides, are not likely to affect the project. All safety measures like slope monitoring for stability and adequate pumping capacity are being taken.</p> <p>Besides safety measures, the mine is well equipped to deal with eventuality as enumerated in CMR 2017 and related DGMS circular.</p>

**9. Factors which should be considered (such as consequential development) which could lead to environmental effects or the potential for cumulative impacts with other existing or planned activities in the locality.**

S.No	Information/Checklist Confirmation	Yes/No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data (Source: Mining Plan(21.00Mtpa)/ Project Report/EIA-EMP/ NCL& Project Authority)
9.1	Lead to development of supporting, facilities, ancillary development or development stimulated by the project which could have impact on the environment e.g. : <ul style="list-style-type: none"> <li>• supporting infrastructure (roads, power supply, waste or waste treatment etc.)</li> <li>• housing development</li> <li>• extractive industries</li> <li>• supply industries</li> <li>• others</li> </ul>	Yes	Economic growth associated with coal mining activity leads to semi-urban like development. This will support development of ancillary and supporting. Nigahi OCP is operating since 1985-86. The area has already developed the supporting infrastructure i.e. housing, roads, power supply, etc.  Proposed expansion will lead to the further increase in business which will provide opportunities of indirect employment to local community.
9.2	Lead to after-use of the site, which could have an impact on the environment	Yes	Some of the activity enumerated at 9.1 above could assume permanent residency with appropriate feed sustain growth mechanism. Beyond this the physically and/ or biologically reclaimed land would undergo transformation over time which would have positive impact on environment.
9.3	Set a precedent for later developments	Yes	Activities at 9.1 & 9.2 above do culminate in conjunction with local set up and in a number of cases has set precedence of economic development leading to over socio-economic growth of the area.
9.4	Have cumulative effects due to proximity to other existing or planned projects with similar effects.	Yes	There are Amlohri OCP, Jayant OCP, Dudhichua OCP, Khadia OCP and Block-B OCP, existing coal mining projects in the buffer zone of Nigahi OCP. Associated mining activity with numerous such closely located with other activities like power generation etc could be cumulative impact.

## III) Environmental Sensitivity

Sl. No.	Areas	Name/ Identity	Aerial distance (within 15 Km,) Proposed project location boundary (Source: Mining Plan(21.00Mtpa)/ Project Report/EIA-EMP/ NCL& Project Authority)
1	Areas protected under international conventions, national or local legislation for their ecological, landscape, cultural or other related value.	No	Not Applicable
2	Areas which are important or sensitive for ecological reasons – Wetlands, watercourses or other water bodies, coastal zone, biospheres, mountains, forests.	No	Not Applicable
3	Areas used by protected, important or sensitive species of flora or fauna for breeding, nesting, foraging, resting, over wintering, migration	No	Not Applicable
4	Inland, coastal, marine or underground waters	No	Not Applicable
5	State, National boundaries	No	MP & UP state boundary is at a distance of about 3 km.
6	Routes or facilities used by the public for access to recreation or other tourist, pilgrim areas	No	Not Applicable
7	Defense installations	No	Not Applicable
8	Densely populated or built-up area	No	In the study area, there is no such densely populated area. There are some villages in the study area. Other than residential colony of the coal mines, Vindhyachal STPS and Singrauli STPS of NTPC. There is no other major built up area.
9	Areas occupied by sensitive man-made land uses ( <i>hospitals, schools, places of worship, community facilities</i> )	No	Area has been provided with Central hospital by NCL and NTPC along with dispensaries, DAV, DPS and KV schools aided by NCL, Area also provides for

Sl. No.	Areas	Name/ Identity	Aerial distance (within 15 Km,) Proposed project location boundary (Source: Mining Plan(21.00Mtpa)/ Project Report/EIA-EMP/ NCL& Project Authority)
			other community facilities along with places for worship for all communities.
10	Areas containing important, high quality or scarce resources ( <i>ground water resources, surface resources, forestry, agriculture, fisheries, tourism, minerals</i> )	No	Not Applicable
11	Areas already subjected to pollution or environmental damage. ( <i>those where existing legal environmental standards are exceeded</i> )	No	Not Applicable
12	Areas susceptible to natural hazard which could cause the project to present environmental problems ( <i>earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions</i> )	No	Not Applicable

(IV) **Proposed terms of Reference for EIA studies:** Not Applicable.

This is an application for Environmental Clearance for 2.25 Mtpa increase in production i.e. from 18.75 Mtpa to 21.00 Mtpa under Clause 7(ii) of EIA Notification-2006 vide MoEF&CC OM No.J-11015/224/2015-IA.II dated 15.09.2017

### **Request for grant of Environmental Clearance**

1. A Mining Plan along with mine closure plan for enhanced coal production from Nigahi Opencast Project from 18.75 Mtpa to 21.00 Mtpa has been prepared to meet the increase demand of power grade coal. The Mining Plan has been approved by NCL Board in 241<sup>st</sup> meeting on 23<sup>rd</sup> April, 2019 (**Refer annexure No.- VI**).

As per the mining plan the increase in coal production is by enhancing the utilization of existing HEMM, increasing the no. of working days and by augmenting mine capacity through additional OB outsourcing and deploying Surface Miner for Coal.



There is no change in mining lease area, mining technology, project economics and other project parameters.

2. This is an existing operating Opencast Coal mine having EC for 18.75 Mtpa vide MOEFCC letter No.J-11015/79/2013-.IA.II (M) dated 19.03.2015 and subsequent amendment dated 12.10.2018. The EC letter is enclosed as **Annexure No.-III.**

The increase in production capacity is 2.25 Mtpa which is well within the ceiling of 40% as specified in MOEFCC OM No.J-11015/224/2015-IA.II dated 15.09.2017.

3. Public hearing was conducted for the Environmental Clearance of Nigahi OCP (for 15.00 Mtpa) by State Pollution Control Board of M.P. on 18-12-2005. As per the Public Hearing details there was not any issue related to Environment.

The detail of Public Hearing along with ATR on issues raised during public hearing is enclosed as **Annexure No.-V.**

4. There is no legal case for any violation related to pollution activities in Nigahi Project.
5. There is no Notice given to the project under section 5 of the Environment (Protection) Act, 1986 and section 18 of the Air (Prevention and Control of Pollution) Act, 1981.
6. A summarised EIA-EMP has been prepared on existing environmental scenario, impact assessment & control measures, disaster management due to increased production.

By increasing the capacity of mine from 18.75 Mtpa to 21.00 Mtpa, there will be no increase in the pollution load except sometimes marginal increase of PM10 level due to no. of thermal power plants in the vicinity. The summarised Environmental Impact Assessment (EIA) is given in **Annexure No.-I.**

The Project authority is monitoring the Environmental Quality to determine the pollution level and ensuring that Ambient Air, Water & Noise quality is kept within permissible limit.

7. As the increased coal production will be achieved by deployment of 1 No. of Surface Miner (3800-4000mm), therefore, no. drilling, blasting, crushing etc involved. Therefore, addition coal wining is environmental friendly and there will be no increase in the pollution load except marginal increase of PM10 level which will also within the permissible limit.

No additional land is required for the project. No additional Resettlement and Rehabilitation is required. The EC for 18.75 Mtpa production level already exists.

8. All the statutory environmental requirements are complied with, therefore, it is kindly submitted that approval for environmental clearance as per the MOEFCC OM No.J-11015/224/2015-IA.II dated 15.09.2017 for 21.00 Mtpa (increase in capacity), in respect of Nigahi OCP of NCL may please be granted.

### Declaration

"I hereby given undertaking that the data and information given in the application and enclosures are true to the best of my knowledge and belief and I am aware that if any part of the data and information submitted is found to be false or misleading at any stage, the project will be rejected and clearance given, if any to the project will be revoked at our risk and cost.

Date:

Place:

*General Manager*  
Northern Coalfields Limited  
Nigahi Project, P.O. Nigahi  
Distt - Singrauli, (M.P.)

*[Signature]*  
29/11/19  
Signature of the applicant  
With name and full address  
(Project Proponent / Authorised Signatory)

### NOTE:

1. The projects involving clearance under Coastal Regulation Zone Notification, 1991 shall submit with the application a C.Z. R. map duly demarcated by one of the authorized agencies, showing the project activities, w.r.t. C.Z.R. and the recommendations of the State Coastal Zone Management Authority. Simultaneous action shall also be taken to obtain the requisite Clearance under the provisions of the C.Z.R. Notification, 1991 for the activities located in the C.Z.R.
2. The projects to be located within 10 km of the National Parks, Sanctuaries, Biosphere reserves, Migratory Corridors of Wild Animals, the project proponent shall submit the map duly authenticated by Chief Wildlife Warden showing these features vis-à-vis the project location and the recommendation or comments of the Chief Wildlife Warden there on."
3. All correspondence with Ministry of Environment, Forest & Climate Change including submission of application for TOR/ Environmental clearance, subsequent certification, as may be required from time to time, participation in the EAC Meeting on behalf of the project proponent is made by the authorized signatory only. The authorized signatory should also submit a document in support of his claim of being an authorized signatory for the specific project.

Signature of the applicant  
With name and full address

Date: 29.06.2019

Place: Nigahi

Given under the seal of  
Organisation on behalf of  
whom the applicant is signing

*General Manager*  
Northern Coalfields Limited  
Nigahi Project, P.O. Nigahi  
Distt. - Singrauli, (M.P.)