Mine Plan and Mine Closure Plan

(First Modification/Revision)

For

MARKI MANGLI II COAL MINE

WARDHA VALLEY Coal Field
(Under Rule 22E of MCR 1960)
Yavatmal
Maharashtra

Project area 339.467 ha

Targeted Capacity 0.30 MTPA
Peak Rated Capacity -0.4500MTPA

Prepared By

INDIAN MINE PLANNERS AND CONSULTANTS

Contact No. - 7909060885
Email ID - impcon.kolkata@gmail.com

APPLICANT

YAZDANI INTERNATIONAL PRIVATE LIMITED

Yezdani International Pvt Ltd
7th Floor, C-Wing, Fortune Towers, Chandrasekhpur
Bhubneswar-Odisha 751023

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CHECKLIST

Details		Status
Chapter-1	Project Information	✓
Chapter-2	Exploration,Geology, Seam Sequence, Coal Quality and Reserve	✓
Chapter-3	Mining	✓
Chapter-4	Safety Management	✓
Chapter-5	Infrastructure Facilities proposed and their Location	✓
Chapter-6	Land Requirement	✓
Chapter-7	Environment Management	✓
Chapter-8	Progressive & Final Mine Closure Plan	✓
Annexure	Copy of allotment order /Vesting order.	✓
Annexure	Certificate of Qualified person/ Accredited Mining Plan preparing agency (MPPA)if the project area is confined within the vested/allotted block boundary/existing mining lease and Where the project area extends beyond the block boundary, a certificate of Qualified person/ Accredited Mining Plan preparing agency (MPPA)should be supported with a certificate of State Government mines and Geology department must be attached, which should specify (a) intent of the state government for grant of lease beyond the vested geological boundary/existing mining lease (b)non-existence of Coal/ Lignite in the area beyond the vested/allotted geological block boundary/existing mining lease to rule out the issue of encroachment and use of coal bearing area (beyond the vested/allotted block boundary/existing mining lease) in the mining plan	✓
Annexure	Approval of the Company Board	✓
Annexure	Copy of earlier approval of mining plan.	✓
Annexure	Plan / chart showing schedule of Implementation of Mine closure activities (progressive and final closure) with duration of important activities	✓
Annexure	Expert-Review Report carried out be an Accredited Mining Plan Preparing Agency (MPPA)	✓
Annexure	Other document (if any)	✓
Plates	Location plan	✓
Plates	Plan certified by Qualified person/ Accredited Mining Plan preparing agency (MPPA)if the project area is confined within the vested/allotted block boundary/existing mining lease and where the project area extends beyond the block boundary, a Plan certified by Qualified person/ Accredited Mining Plan preparing agency (MPPA)should be supported with a plan with cardinal co-ordinates duly certified by theMines and Geology Department of the concerned State Government. Plan in support of Annexure - II	✓
Plates	Printed copy of the KML file superimposed in the recent (not older than one year from the base date) dated satellite Image duly certified by Accredited Agency should also be attached. Note: The soft copy of the KML file shall also be part of the Soft copy of the mining Plan.	✓
Plates	Cadastralplan showing approved block boundary vis-A-vis proposed/existing mining lease & Mine boundary superimposed over it in distinct color, showing land use and infrastructure etc.	✓
Plates	Geological plan showing all the boreholes drilled and proposed to be drilled showing allotted block boundary and required lease area.	✓
Plates	Representative Graphic Litholog	✓
Plates	Surface Plan showing drainage system, Contour, preferably at 3m interval, location of BH (borehole)	✓
Plates	Conceptual plan showing infrastructure facilities including colony, boundary of mining area, mine entries, roads including road diversion alignment etc.	✓

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Plates	Tentative land use plan showing land type (Govt., forest and tenancy land) with its data source.	✓
Plates	Floor contour plan and seam folio plan, iso-grade plan	✓
Plates	Cross-section showing coal/lignite seam(s)	✓
Plates	Plan showing existing and proposed surface layout(s)	✓
Plates	Plan showing total coal thickness and overburden thickness and stripping ratio (in case of opencast (OC) Mines)	✓
Plates	Final stage quarry plan showing haul road alignment (in case of OC Mines)	✓
Plates	Plan showing mode and location of entries and surface layouts (in case of underground (UG) Mines)	✗
Plates	Layout of the panel for each system (like Longwall, Continuous Miner, Bord & Pillar, road header etc.) should be given (in case of UG Mines)	✗
Plates	Layout of pillar extraction (in case of UG Mines)	✗
Plates	Support system (in case of UG Mines)	✗
Plates	Haulage and transport system (in case of UG Mines)	✗
Plates	Post mining land use plan	✓
Plates	Progressive mine closure plan/ stage plans	✓
Plates	Reclamation plan	✓

Chapter-1: Project Information

1.1 Introduction

S.No	Parameters	Details
1.1.1	Name of the Coal/Lignite Block	MARKI MANGLI II COAL MINE
1.1.2	Name of the Coalfield/ Lignite Field.	WARDHA VALLEY Coal Field
1.1.3	Base date of Mining Plan/ Mine Closure Plan.	04/07/2022
1.1.4	Linked End Use Plant.	For the purpose of Sale of Coal, including sale to Affiliates and related parties, utilization of coal for any purpose including but not limited to captive consumption, Coal Gasification, Coal Liquefaction and Export of coal.
1.1.5	Distance of End Use Plant from the pit head of the project in âkmâ.	Being a Commercial coal Block , the distance of end use will depend on the various location of the customer.
1.1.6	Mode of Coal Transport	By Rail or Road

1.2 Location, Topography & Communication:

S.No	Parameters	Details
1.2.1	Location of coal deposit.	Marki-Mangli-II coal block is located 3 km NW of Mukutban village 35 km south of Wani town in Tehsil Jhari-Jammi, Dist Yavatmal, Maharastra State. It lies in Wardha Valley Coal field and falling in Toposheet No 56I/13 (E44A13). (Plate-1)
	State	Maharashtra
	District	Yavatmal
1.2.2	Communication	The mining block can be accessed through the all-weather tar top road leading to village sawali and before reaching village sawali taking a diversion through a cart track to the east passing through the forest .The block can also be approached from Mukutban after travelling a distance of 3 km on Wani Patan State Highway no. 234 and then accessing the mine through a cart track covering a distance of about 1.5 km.
1.2.3	Availability of power supply & water etc.	Power supply will be available from 11kVA substation of Maharashtra State Electricity Development Corporation Ltd (MSEDCL), located nearly 1.2 kms from project site .Water from the reservoir and nalla and mine water can completely cater to the water requirement. However, if required the drinking/domestic water supply can also be arranged through the existing borewell.
1.2.4	Prominent physiographic features, drainage pattern, natural water courses, rainfall data, highest flood level.	Marki Mangli-II block is in the slopping terrain of Vithal-Rukmai (Highest elevation 301m above MSL) which marks the NW fringe of the block and slopes towards SE (RL of lowest elevation is 225m). The block is drained by a seasonal stream (nala) which flows North to South. The upstream portion of the stream has been blocked by an embankment to form a water tank for the purpose of irrigation and recharge of underground aquifers. Average annual rainfall is 1135.7 mm. Monsoon season lasts from mid June to mid September. During summer, temperature rises to a maximum of 46Deg C and humidity falls to a minimum of 10 percent. Winter is mild between November to January and temperature generally does not fall below 10DegC.
1.2.5	Important surface features within the project area and major diversion or shifting involved.	A small seasonal nala flowing from north to south shall be diverted all along the northern boundary of the block and shall meet at the southern part of the block. This nala may be used as garland drain during the mining operation.

1.3 Details of the Allotment Agreement:

S.No	Parameters	Details
1.3.1	Name of the Allottee	YAZDANI INTERNATIONAL PRIVATE LIMITED
1.3.2	Details of allotment/vesting Order.	NA-104/3/20-NA
1.3.2(B)	Allocation/Vesting Order Date	2021-03-03
1.3.3	Name and address of the Applicant	Yezdani International Pvt Ltd 7th Floor, C-Wing, Fortune Towers, Chandrasekhpur Bhubneswar-Odisha 751023
1.3.4	Name of the previous Allottee of the Block.	Ms VIRANGANA STEELS Ltd
1.3.5	Starting date of the Mine as per CMDPA/CBDPA	06/06/2026

1.3.6	Rated capacity as per CMDPA/CBDPA	0.30
1.3.7	Production Schedule as per opening permission (meeting provisions of CMDPA if any).	Opening permission form CCO and DGMS shall be obtained a fresh in due course, after approval of MP-MCP, lease, EC, and other statutory approvals , clearances and permissions . The Production schedule -- Year-1 -0.10 Mty coal, Year-2 - 0.20 Mty coal , Year 3- 0.30 Mty coal form 4th year to 32 years 0.30 Mty coal , year -33 - 0.20 Mty coal, Year 34 0.08 Mty coal .
1.3.8	End Use of Coal/ Lignite as per allotment order if any	For the purpose of Sale of Coal, including sale to Affiliates and related parties, utilization of coal for any purpose including but not limited to captive consumption, Coal Gasification, Coal Liquefaction and Export of coal.
1.3.9	Cardinal points coordinates of the Block Boundary	Cardinal Points files data shown below

Cardinal Points co-ordinates of the Block boundary :

Points	Longitude (WGS84)	Latitude (WGS84)
A	78°48'56.00"E	19°49'2.00"N
B	78°48'56.00"E	19°50'31.00"N
C	78°50'32.00"E	19°50'31.00"N
D	78°50'32.00"E	19°49'2.00"N
ID	WGS84 Logitude	WGS84 Latitude
BP-1	78°50'22.44158"E	19°49'02.17812"N
BP-2	78°50'20.84824"E	19°49'02.71673"N
BP-3	78°50'19.18051"E	19°49'03.33199"N
BP-4	78°50'17.56788"E	19°49'03.86044"N
BP-5	78°50'15.96069"E	19°49'04.35098"N
BP-6	78°50'14.30872"E	19°49'04.89431"N
BP-7	78°50'12.68041"E	19°49'05.37911"N
BP-8	78°50'11.29696"E	19°49'05.86080"N
BP-9	78°50'09.68702"E	19°49'06.33155"N
BP-10	78°50'08.20180"E	19°49'07.16873"N
BP-11	78°50'06.73473"E	19°49'07.98046"N
BP-12	78°50'05.29908"E	19°49'08.83228"N
BP-13	78°50'03.72256"E	19°49'09.66452"N
BP-14	78°50'02.28290"E	19°49'10.53789"N
BP-15	78°50'00.87418"E	19°49'11.37602"N
BP-16	78°49'59.42288"E	19°49'12.20811"N
BP-17	78°49'57.96266"E	19°49'13.07335"N
BP-18	78°49'56.26104"E	19°49'14.04311"N
BP-19	78°49'54.89470"E	19°49'15.04303"N
BP-20	78°49'53.55614"E	19°49'15.99963"N
BP-21	78°49'52.17269"E	19°49'16.99190"N
BP-22	78°49'50.80926"E	19°49'17.99298"N
BP-23	78°49'49.41188"E	19°49'18.94747"N
BP-24	78°49'48.03724"E	19°49'19.98392"N
BP-25	78°49'46.47097"E	19°49'21.05896"N
BP-26	78°49'45.33330"E	19°49'21.88776"N
BP-27	78°49'43.92729"E	19°49'22.86153"N
BP-28	78°49'41.95390"E	19°49'24.33881"N
BP-29	78°49'40.50876"E	19°49'25.22968"N
BP-30	78°49'39.05586"E	19°49'26.09563"N
BP-31	78°49'37.61077"E	19°49'26.96956"N
BP-32	78°49'36.19510"E	19°49'27.81745"N
BP-33	78°49'34.76190"E	19°49'28.69941"N
BP-34	78°49'33.30458"E	19°49'29.54954"N
BP-35	78°49'31.84750"E	19°49'30.45537"N
BP-36	78°49'30.43705"E	19°49'31.32794"N
BP-37	78°49'28.89699"E	19°49'32.24046"N
BP-38	78°49'27.45068"E	19°49'33.12378"N
BP-39	78°49'25.99036"E	19°49'34.01573"N
BP-40	78°49'24.58323"E	19°49'34.92717"N
BP-41	78°49'23.20797"E	19°49'35.71496"N
BP-42	78°49'21.75272"E	19°49'36.52100"N
BP-43	78°49'20.33783"E	19°49'37.39987"N
BP-44	78°49'18.85180"E	19°49'38.25672"N
BP-45	78°49'17.38226"E	19°49'39.16938"N
BP-46	78°49'15.83269"E	19°49'40.03811"N
BP-47	78°49'14.46645"E	19°49'40.88482"N
BP-48	78°49'13.00624"E	19°49'41.91160"N
BP-49	78°49'11.58855"E	19°49'42.75220"N

Points	Longitude (WGS84)	Latitude (WGS84)
BP-50	78°49'10.39532"E	19°49'43.43629"N
BP-51	78°49'08.98799"E	19°49'44.36478"N
BP-52	78°49'07.65194"E	19°49'45.22563"N
BP-53	78°49'06.23943"E	19°49'46.13618"N
BP-54	78°49'04.77672"E	19°49'47.11034"N
BP-55	78°49'03.43862"E	19°49'47.97688"N
BP-56	78°49'02.00897"E	19°49'48.91739"N
BP-57	78°49'00.60130"E	19°49'49.81616"N
BP-58	78°48'59.17200"E	19°49'50.77366"N
BP-59	78°48'57.75234"E	19°49'51.66171"N
BP-60	78°48'56.61658"E	19°49'52.45892"N
BP-61	78°48'57.75941"E	19°49'53.67155"N
BP-62	78°48'58.88125"E	19°49'54.92761"N
BP-63	78°49'00.01134"E	19°49'56.15417"N
BP-64	78°49'00.89113"E	19°49'57.15467"N
BP-65	78°49'01.48934"E	19°49'57.82924"N
BP-66	78°49'02.25396"E	19°49'59.26160"N
BP-67	78°49'02.93216"E	19°50'00.55791"N
BP-68	78°49'03.52336"E	19°50'02.38068"N
BP-69	78°49'03.64572"E	19°50'03.45508"N
BP-70	78°49'03.77311"E	19°50'05.13874"N
BP-71	78°49'03.21194"E	19°50'06.64777"N
BP-72	78°49'02.96841"E	19°50'07.44058"N
BP-73	78°49'02.22749"E	19°50'09.99267"N
BP-74	78°49'02.86890"E	19°50'12.43967"N
BP-75	78°49'04.02208"E	19°50'14.12858"N
BP-76	78°49'05.18893"E	19°50'14.91012"N
BP-77	78°49'06.09083"E	19°50'15.15788"N
BP-78	78°49'07.77360"E	19°50'15.66080"N
BP-79	78°49'10.29653"E	19°50'16.09799"N
BP-80	78°49'11.85776"E	19°50'16.70181"N
BP-81	78°49'14.50747"E	19°50'17.53346"N
BP-82	78°49'16.22052"E	19°50'17.91017"N
BP-83	78°49'17.91529"E	19°50'18.21564"N
BP-84	78°49'19.67704"E	19°50'18.53320"N
BP-85	78°49'21.46621"E	19°50'18.78474"N
BP-86	78°49'22.28188"E	19°50'20.27218"N
BP-87	78°49'23.16345"E	19°50'21.73044"N
BP-88	78°49'24.03731"E	19°50'22.89597"N
BP-89	78°49'25.25949"E	19°50'24.44989"N
BP-90	78°49'25.51021"E	19°50'26.05991"N
BP-91	78°49'25.66172"E	19°50'27.58018"N
BP-92	78°49'26.26177"E	19°50'29.21805"N
BP-93	78°49'26.81726"E	19°50'30.82991"N
BP-94	78°49'27.55353"E	19°50'30.41364"N
BP-95	78°49'28.88520"E	19°50'29.45064"N
BP-96	78°49'30.14270"E	19°50'28.33444"N
BP-97	78°49'31.41722"E	19°50'27.26454"N
BP-98	78°49'33.23545"E	19°50'25.83891"N
BP-99	78°49'34.43222"E	19°50'24.73469"N
BP-100	78°49'35.58659"E	19°50'23.67131"N
BP-101	78°49'36.92334"E	19°50'22.47700"N
BP-102	78°49'38.11969"E	19°50'21.45990"N
BP-103	78°49'39.33885"E	19°50'20.34293"N
BP-104	78°49'40.11029"E	19°50'19.62522"N
BP-105	78°49'41.45504"E	19°50'18.60692"N
BP-106	78°49'42.83323"E	19°50'17.54799"N
BP-107	78°49'44.14722"E	19°50'16.53622"N
BP-108	78°49'45.48386"E	19°50'15.50965"N
BP-109	78°49'46.86487"E	19°50'14.47971"N
BP-110	78°49'48.26606"E	19°50'13.36649"N
BP-111	78°49'49.57085"E	19°50'12.36023"N
BP-112	78°49'50.89725"E	19°50'11.37433"N
BP-113	78°49'52.23522"E	19°50'10.35569"N
BP-114	78°49'53.57138"E	19°50'09.38951"N
BP-115	78°49'55.17122"E	19°50'08.22662"N
BP-116	78°49'56.10302"E	19°50'07.42868"N
BP-117	78°49'57.02719"E	19°50'06.73814"N

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Points	Longitude (WGS84)	Latitude (WGS84)
BP-118	78°49'58.02731"E	19°50'05.30781"N
BP-119	78°49'58.98282"E	19°50'04.01377"N
BP-120	78°50'00.01041"E	19°50'02.69917"N
BP-121	78°50'01.01347"E	19°50'01.35641"N
BP-122	78°50'02.01498"E	19°49'59.98879"N
BP-123	78°50'03.41815"E	19°49'58.13983"N
BP-124	78°50'04.48300"E	19°49'56.89850"N
BP-125	78°50'05.57807"E	19°49'55.64762"N
BP-126	78°50'06.63833"E	19°49'54.39360"N
BP-127	78°50'07.37908"E	19°49'53.50036"N
BP-128	78°50'08.88519"E	19°49'51.82602"N
BP-129	78°50'10.40376"E	19°49'50.04787"N
BP-130	78°50'11.26186"E	19°49'48.71834"N
BP-131	78°50'12.25153"E	19°49'47.26923"N
BP-132	78°50'13.14279"E	19°49'45.92176"N
BP-133	78°50'13.80171"E	19°49'44.38453"N
BP-134	78°50'14.48797"E	19°49'42.91881"N
BP-135	78°50'15.08597"E	19°49'41.53088"N
BP-136	78°50'15.85264"E	19°49'39.88420"N
BP-137	78°50'16.44889"E	19°49'38.46273"N
BP-138	78°50'17.13668"E	19°49'36.92090"N
BP-139	78°50'17.63632"E	19°49'35.77593"N
BP-140	78°50'18.46811"E	19°49'34.44267"N
BP-141	78°50'19.33374"E	19°49'33.02101"N
BP-142	78°50'20.15733"E	19°49'31.62286"N
BP-143	78°50'21.03121"E	19°49'30.24202"N
BP-144	78°50'22.38445"E	19°49'28.00625"N
BP-145	78°50'23.28435"E	19°49'26.57285"N
BP-146	78°50'24.14622"E	19°49'25.16817"N
BP-147	78°50'25.06664"E	19°49'23.74780"N
BP-148	78°50'25.93622"E	19°49'22.35058"N
BP-149	78°50'26.85202"E	19°49'20.88447"N
BP-150	78°50'27.74250"E	19°49'19.50013"N
BP-151	78°50'28.81851"E	19°49'17.76541"N
BP-152	78°50'29.52644"E	19°49'16.25255"N
BP-153	78°50'30.25463"E	19°49'14.81084"N
BP-154	78°50'31.34346"E	19°49'12.54062"N
BP-155	78°50'31.40772"E	19°49'10.99402"N
BP-156	78°50'31.54299"E	19°49'09.63526"N
BP-157	78°50'30.95518"E	19°49'07.05644"N
BP-158	78°50'30.17125"E	19°49'06.03261"N
BP-159	78°50'28.61152"E	19°49'04.85802"N
BP-160	78°50'27.08866"E	19°49'03.93322"N
BP-161	78°50'25.73048"E	19°49'03.02563"N
BP-162	78°50'24.11737"E	19°49'02.62934"N

1.4 Details of the Previous Approval of Mining Plan:

S.No	Parameters	Details
1.4.1	Date of approval :	05/02/2008
	Copy of earlier approval of mining plan Upload document	Annexure 4 : Document shown in annexure section.

<table>
<tr><td>1.4.2</td><td>Conditions, if any</td><td>
<table>
<tr><th>S.No.</th><th>Conditions</th><th>Compliance Status</th></tr>
<tr><td>1</td><td>Mining company shall take all necessary precautions regarding safety of mine workings, persons deployed therewith.</td><td>Shall be Compiled</td></tr>
<tr><td>2</td><td>The approval of the mining plan is without prejudice to the requirement of approvals from competent / prescribed authority under the relevant rules/ regulations etc.</td><td>Noted shall be complied</td></tr>
<tr><td>3</td><td>Mining company shall take all necessary precautions regarding safety of mine workings, persons deployed therewith.</td><td>Shall be Complied</td></tr>
<tr><td>4</td><td>The approval of the mining plan is without prejudice to the requirement of approvals from competent / prescribed authority under the relevant rules/ regulations etc.</td><td>Noted</td></tr>
<tr><td>5</td><td>Mining company shall take all necessary precautions regarding safety of mine workings, persons deployed therewith.</td><td>Shall be Complied</td></tr>
<tr><td>6</td><td>The approval of the mining plan is without prejudice to the requirement of approvals from competent / prescribed authority under the relevant rules/ regulations etc.</td><td>Noted</td></tr>
</table>
</td></tr>
<tr><td>1.4.3</td><td>Scheduled year of start of production.</td><td>2012-13</td></tr>
<tr><td>1.4.4</td><td>Proposed year of achieving the targeted production</td><td>4th Year 2016</td></tr>
<tr><td>1.4.5</td><td>Date of actual commencement of mining operations, if operations already started.</td><td>02/04/2013</td></tr>
<tr><td>1.4.6</td><td>Likely date of mining operations, if operations not yet started & reasons for non-commencement of operations.</td><td>Non Operational

The mine was operational till 2014 prior to deallocation of the block . Coal produced by prior allottee is 99775 metric Tonne coal and total waste (OB , top soil) excavated volume is 421661cum. The Coal block is now allocated as a commercial block and now categorized in Schedule-III coal block as per MoC letter dated 07.03.2022 (enclosed as Annexure-VIII) and 51 months time allowed for complying the efficiency parameters. please refer compliance report of Scrutiny Committee Annexure-12.</td></tr>
<tr><td>1.4.8</td><td>Statutory obligations vis-à-vis compliance status in a tabular form</td><td>
<table>
<tr><th>S.No</th><th>Clearance Type (Mining Plan, Mining Lease Environment, Forest, CTO etc)</th><th>Conditions</th><th>Compliance Status</th></tr>
<tr><td>1</td><td>Coal Mines Act and Mines Regulation 2017</td><td>Mining company shall take all necessary precautions regarding safety of mine workings, persons deployed therewith</td><td>Shall be Complied</td></tr>
<tr><td>2</td><td>Mining Plan -Mine Closure Plan</td><td>The approval of the mining plan is without prejudice to the requirement of approvals from competent / prescribed authority under the relevant rules/ regulations etc.</td><td>Shall be followed and complied</td></tr>
<tr><td>3</td><td>Others</td><td>All conditions of approving and statutory bodies as applicable for making the mine block operation .</td><td>Shall be complied</td></tr>
</table>
</td></tr>
<tr><td>1.4.9</td><td>Reasons for difference between the planned and actual production levels</td><td>Only one year coal has been produced during the year 2013-14 to the tune of 99775 metric tonne. Subsequently ,the coal block deallocated form prior allottee.</td></tr>
</table>

1.5 PARAMETERS OF APPROVED MINING PLAN VIS-Ã-VIS PROPOSED MINING PLAN :

S.No	Block Area	Approved Mining Plan	Proposed Mining Plan
1.5.1	Geological Block Area HA	330.70	339.4670
1.5.2	Geological Block Area Projectised HA	273.00	339.467
1.5.3	Lease area HA	261.00	339.4670
1.5.4	Project area HA	273	339.4670
1.5.5	Life of the Project Yrs.	24	34
1.5.6	Minimum and Maximum Depth of working	Min 10m Max 70m	Min 11.85 Max 125
1.5.7	Geological Block Area yet to be projectised “Ha”	330.70	0.00
1.5.8	Production Target MTP	0.30	0.3000
1.5.9	Seams Available As per GR	Seam Top and Bottom	Seam -Top,Seam-Bott

1.5.10	Seams not considered for Mining with Reasons		<table><tr><th>S. No</th><th>Seams</th><th>Reason</th></tr><tr><td>1</td><td>Seam-Bott</td><td>Seam Bottom not considered as it has not developed and impersistent in major part of the area.</td></tr></table>
1.5.11	Gross Geological Reserve Mte	12.82	12.82
1.5.12	Net Geological Reserve Mte	11.54	11.5400
1.5.13	Blocked Reserve Mte		1.3500
1.5.14	Minable Reserve Mte		10.1900
1.5.15	Extractable Reserve Mte	6.73	9.6800
1.5.16	% of Extraction/ recovery	58.32%	83.8820%
1.5.17	Reserve Depleted (till the base date) Reserves Mte	0.10	0.1000
1.5.18	Balance Extractable Reserve Mte	6.63	9.5800
1.5.19	Average Grade	E F	4707.0000
1.5.20	OB in MM3	50.78	87.0600
1.5.21	SR M3/te	7.55	9.0877
1.5.22	Mining Technology	OC mining with Shovel Dumper for OBR Shovel Dumper for coal	OC mining with Shovel Dumper for OBR Shovel Dumper Surface miner for coal
1.5.23	Coal Beneficiation envisaged		
1.5.24	Handling of Rejects	NIL	Not Applicable
1.5.25	Land use pattern “ Ha“		
1	Excavation Area	145.00	215.2100
2	Top Soil Dump	21.50	0.0000
3	External Dump	73.50	52.0000
4	Safety Zone		6.0600
5	Other Use	12.50	53.9970
6	Infrastructure area	20.50	12.2000
7	Green Belt		0.0000
8	Undisturbed Area		0.0000
Total		273.0000	339.4670
1.5.26	Reasons for revision		i) Change in ML area from 261Ha to 339.467 Ha ii) Change in extractable reserves due to change in depth of working (from 70m to 125m) for higher percentage of extraction 58.32 to 83.88 by adopting scientific mining. [(MoC guidelines dated 29.5.2020, item no 1.3 (A)(c) (d)]iii)Environment Clearance was obtained for Marki Mangli-II,III IV blocks combinedly as cluster of mines. As per directives, fresh Environment Clearance to be accorded based on Revised Mining Plan Mine Closure Plan.(Revision-01)iv)No forest clearance was obtained for 146.966 Ha of Forest land. v) No Mine Closure Plan was prepared as per Guidelines of MoC dated 2009/2013.

Chapter-2: Exploration,Geology, Seam Sequence, Coal Quality and Reserve

2.1 Details of the block

S.No	Parameters	Details	
2.1.1	Particulars of adjacent blocks: North, South, East, West	North	Fault F1-F1/Talchir Formation
		East	Fault F4-F4,F2-F2 and Incrop of coal seam.
		South	Incrop of coal seam
		West	Lease Boundary and Lameta Formation
2.1.2	Location of the Block	Marki-Mangli-II coal block is located 3 kms NW of Mukutban village 35 Kms south of Wani town in Tehsil Jhari-Jammi, Dist Yavatmal, Maharastra State. It lies in Wardha Valley Coal field and falling in Toposheet No 56I/13 (E44A13).	
	State	Maharashtra	
	District	Yavatmal	
2.1.3	Area of the Block “Ha”	339.467	
2.1.4	Area of the geological block projectized in “Ha” (Area of the geological block considered for liquidation of coal reserve)	339.467	
2.1.5	Balance area yet to be projectized “Ha”	0.00	
2.1.6	Likely Reserve in the area yet to be projectized “Mte”	0.00	
2.1.7	Cardinal Point Co-ordinates of the non-coal/lignite bearing area/existing mining lease outside the allotted Geological Coal/Lignite block	No out side lease area is proposed	
	(Duly certified in line with para 1.9 of the Guideline, if fresh minning lease required)	Cardinal Points files data shown below	
2.1.8	Certificate of Qualified person/ Accredited Mining Plan preparing agency (MPPA)if the project area is confined within the vested/allotted block boundary/existing mining lease and Cardinal Points Co-ordinates of the Proposed area outside the non-coal/lignite bearing area outside the allotted Geological Coal/Lignite block	Annexure 2A	Document shown in annexure section.
		Annexure 2B	Document shown in annexure section.
		The Project area, Lease area and geological block area in Ha shall also be envisaged.	Certificate attached as Annexure-II (Plate-II) . The project area is confined within the vested/allotted block boundary as notified by Ministry of Coal, Govt of India vide its vesting order No NA-104/3/2020-NA dated 03.03.2021.The cardinal point co-ordinates considered for preparation of the Mining Plan Mine Closure Plan (1stRevision) of MarkiMangli-II. Coal Mine are in line with the vesting /allotment order and does not encroach any other adjacent block. Geological Block Area- 339.467 ha Project Area- 339.467 ha
2.1.9	KML file of the Proposed lease area, Project Area and geological block.	File attached in Plates section below.	
2.1.10	Whether the proposed project area is confined within the allotted block boundary/existing mining lease, if not, the reason for deviation from allotted block boundary, may be given.	Yes	
2.1.11	If the project area extends outside the allotted block boundary/existing mining lease, confirmation about non-occurrence of coal/lignite in the area under reference needs to be furnished	Not applicable. Project area does not extend outside the allotted block boundary.	
2.1.12(1)	Year of Starting.	2022	
2.1.12(2)	Type of the Project.	Under Implementation. Coal production to start from 06.06.2026 considering base date of proposed revision of mining plan as per MoC letter dated 07.03.2022 (Annexure-VIII)	

(Duly certified in line with para 1.9 of the Guideline, if fresh minning lease required) :

BOUNDARY AS PER VESTING ORDER				
Pints	Longitude (WGS84)	Latitude (WGS84)		
	78°48'56.00"E	19°49'2.0		
	78°48'56.00"E	19°50'31.		

BOUNDARY AS PER VESTING ORDER				
C	78°50'32.00"E	19°50'31.00"N		
D	78°50'32.00"E	19°49'2.00"N		
Point No.	Ground Easting (m)	Ground Northing (m)	WGS84 Logitude	WGS84 Latitude
BP-1/162	273706.215	2192707.681	78°50'22.44158"E	19°49'02.17812"N
BP-2/162	273660.051	2192724.839	78°50'20.84824"E	19°49'02.71673"N
BP-3/162	273611.751	2192744.383	78°50'19.18051"E	19°49'03.33199"N
BP-4/162	273565.021	2192761.236	78°50'17.56788"E	19°49'03.86044"N
BP-5/162	273518.435	2192776.921	78°50'15.96069"E	19°49'04.35098"N
BP-6/162	273470.566	2192794.247	78°50'14.30872"E	19°49'04.89431"N
BP-7/162	273423.363	2192809.764	78°50'12.68041"E	19°49'05.37911"N
BP-8/162	273383.286	2192825.094	78°50'11.29696"E	19°49'05.86080"N
BP-9/162	273336.612	2192840.173	78°50'09.68702"E	19°49'06.33155"N
BP-10/162	273293.712	2192866.474	78°50'08.20180"E	19°49'07.16873"N
BP-11/162	273251.331	2192891.986	78°50'06.73473"E	19°49'07.98046"N
BP-12/162	273209.881	2192918.72	78°50'05.29908"E	19°49'08.83228"N
BP-13/162	273164.323	2192944.904	78°50'03.72256"E	19°49'09.66452"N
BP-14/162	273122.764	2192972.302	78°50'02.28290"E	19°49'10.53789"N
BP-15/162	273082.092	2192998.605	78°50'00.87418"E	19°49'11.37602"N
BP-16/162	273040.179	2193024.738	78°49'59.42288"E	19°49'12.20811"N
BP-17/162	272998.019	2193051.894	78°49'57.96266"E	19°49'13.07335"N
BP-18/162	272948.875	2193082.355	78°49'56.26104"E	19°49'14.04311"N
BP-19/162	272909.501	2193113.618	78°49'54.89470"E	19°49'15.04303"N
BP-20/162	272870.919	2193143.539	78°49'53.55614"E	19°49'15.99963"N
BP-21/162	272831.044	2193174.573	78°49'52.17269"E	19°49'16.99190"N
BP-22/162	272791.756	2193205.872	78°49'50.80926"E	19°49'17.99298"N
BP-23/162	272751.461	2193235.75	78°49'49.41188"E	19°49'18.94747"N
BP-24/162	272711.861	2193268.14	78°49'48.03724"E	19°49'19.98392"N
BP-25/162	272666.698	2193301.789	78°49'46.47097"E	19°49'21.05896"N
BP-26/162	272633.913	2193327.705	78°49'45.33330"E	19°49'21.88776"N
BP-27/162	272593.376	2193358.18	78°49'43.92729"E	19°49'22.86153"N
BP-28/162	272536.523	2193404.353	78°49'41.95390"E	19°49'24.33881"N
BP-29/162	272494.814	2193432.293	78°49'40.50876"E	19°49'25.22968"N
BP-30/162	272452.87	2193459.469	78°49'39.05586"E	19°49'26.09563"N
BP-31/162	272411.156	2193486.888	78°49'37.61077"E	19°49'26.96956"N
BP-32/162	272370.288	2193513.496	78°49'36.19510"E	19°49'27.81745"N
BP-33/162	272328.923	2193541.158	78°49'34.76190"E	19°49'28.69941"N
BP-34/162	272286.844	2193567.85	78°49'33.30458"E	19°49'29.54954"N
BP-35/162	272244.794	2193596.255	78°49'31.84750"E	19°49'30.45537"N
BP-36/162	272204.089	2193623.62	78°49'30.43705"E	19°49'31.32794"N
BP-37/162	272159.626	2193652.263	78°49'28.89699"E	19°49'32.24046"N
BP-38/162	272117.881	2193679.972	78°49'27.45068"E	19°49'33.12378"N
BP-39/162	272075.732	2193707.952	78°49'25.99036"E	19°49'34.01573"N
BP-40/162	272035.139	2193736.512	78°49'24.58323"E	19°49'34.92717"N
BP-41/162	271995.424	2193761.257	78°49'23.20797"E	19°49'35.71496"N
BP-42/162	271953.389	2193786.593	78°49'21.75272"E	19°49'36.52100"N
BP-43/162	271912.557	2193814.154	78°49'20.33783"E	19°49'37.39987"N
BP-44/162	271869.646	2193841.065	78°49'18.85180"E	19°49'38.25672"N
BP-45/162	271827.238	2193869.686	78°49'17.38226"E	19°49'39.16938"N
BP-46/162	271782.483	2193896.986	78°49'15.83269"E	19°49'40.03811"N
BP-47/162	271743.055	2193923.541	78°49'14.46645"E	19°49'40.88482"N
BP-48/162	271700.963	2193955.668	78°49'13.00624"E	19°49'41.91160"N
BP-49/162	271660.036	2193982.054	78°49'11.58855"E	19°49'42.75220"N
BP-50/162	271625.579	2194003.542	78°49'10.39532"E	19°49'43.43629"N
BP-51/162	271584.988	2194032.628	78°49'08.98799"E	19°49'44.36478"N
BP-52/162	271546.445	2194059.606	78°49'07.65194"E	19°49'45.22563"N
BP-53/162	271505.696	2194088.141	78°49'06.23943"E	19°49'46.13618"N
BP-54/162	271463.512	2194118.653	78°49'04.77672"E	19°49'47.11034"N
BP-55/162	271424.912	2194145.807	78°49'03.43862"E	19°49'47.97688"N
BP-56/162	271383.677	2194175.271	78°49'02.00897"E	19°49'48.91739"N
BP-57/162	271343.065	2194203.443	78°49'00.60130"E	19°49'49.81616"N
BP-58/162	271301.847	2194233.429	78°48'59.17200"E	19°49'50.77366"N
BP-59/162	271260.882	2194261.276	78°48'57.75234"E	19°49'51.66171"N
BP-60/162	271228.144	2194286.223	78°48'56.61658"E	19°49'52.45892"N
BP-61/162	271261.887	2194323.088	78°48'57.75941"E	19°49'53.67155"N
BP-62/162	271295.037	2194361.296	78°48'58.88125"E	19°49'54.92761"N
BP-63/162	271328.416	2194398.594	78°49'00.01134"E	19°49'56.15417"N
4/162	271354.419	2194429.0	78°49'00.89113"E	19°49'57.15467"N
5/162	271372.097	2194449.5	78°49'01.48934"E	19°49'57.82924"N

Prepared By INDIAN MINE PLANNERS AND CONSULTANTS On 05/07/2022

BOUNDARY AS PER VESTING ORDER				
BP-66/162	271394.921	2194493.321	78°49'02.25396"E	19°49'59.26160"N
BP-67/162	271415.174	2194532.935	78°49'02.93216"E	19°50'00.55791"N
BP-68/162	271433.105	2194588.772	78°49'03.52336"E	19°50'02.38068"N
BP-69/162	271437.094	2194621.77	78°49'03.64572"E	19°50'03.45508"N
BP-70/162	271441.471	2194673.504	78°49'03.77311"E	19°50'05.13874"N
BP-71/162	271425.739	2194720.127	78°49'03.21194"E	19°50'06.64777"N
BP-72/162	271418.967	2194744.602	78°49'02.96841"E	19°50'07.44058"N
BP-73/162	271398.418	2194823.372	78°49'02.22749"E	19°50'09.99267"N
BP-74/162	271418.059	2194898.389	78°49'02.86890"E	19°50'12.43967"N
BP-75/162	271452.292	2194949.899	78°49'04.02208"E	19°50'14.12858"N
BP-76/162	271486.557	2194973.557	78°49'05.18893"E	19°50'14.91012"N
BP-77/162	271512.908	2194980.777	78°49'06.09083"E	19°50'15.15788"N
BP-78/162	271562.077	2194995.672	78°49'07.77360"E	19°50'15.66080"N
BP-79/162	271635.681	2195008.109	78°49'10.29653"E	19°50'16.09799"N
BP-80/162	271681.352	2195026.153	78°49'11.85776"E	19°50'16.70181"N
BP-81/162	271758.801	2195050.674	78°49'14.50747"E	19°50'17.53346"N
BP-82/162	271808.801	2195061.677	78°49'16.22052"E	19°50'17.91017"N
BP-83/162	271858.245	2195070.435	78°49'17.91529"E	19°50'18.21564"N
BP-84/162	271909.643	2195079.54	78°49'19.67704"E	19°50'18.53320"N
BP-85/162	271961.817	2195086.544	78°49'21.46621"E	19°50'18.78474"N
BP-86/162	271986.141	2195132.045	78°49'22.28188"E	19°50'20.27218"N
BP-87/162	272012.381	2195176.503	78°49'23.16345"E	19°50'21.73044"N
BP-88/162	272038.27	2195212.082	78°49'24.03731"E	19°50'22.89597"N
BP-89/162	272074.46	2195259.354	78°49'25.25949"E	19°50'24.44989"N
BP-90/162	272082.39	2195308.838	78°49'25.51021"E	19°50'26.05991"N
BP-91/162	272087.407	2195355.477	78°49'25.66172"E	19°50'27.58018"N
BP-92/162	272105.515	2195405.686	78°49'26.26177"E	19°50'29.21805"N
BP-93/162	272122.325	2195454.991	78°49'26.81726"E	19°50'30.82991"N
BP-94/162	272143.587	2195441.912	78°49'27.55353"E	19°50'30.41364"N
BP-95/162	272181.955	2195411.855	78°49'28.88520"E	19°50'29.45064"N
BP-96/162	272218.113	2195376.993	78°49'30.14270"E	19°50'28.33444"N
BP-97/162	272254.78	2195343.61	78°49'31.41722"E	19°50'27.26454"N
BP-98/162	272307.13	2195299.082	78°49'33.23545"E	19°50'25.83891"N
BP-99/162	272341.521	2195264.673	78°49'34.43222"E	19°50'24.73469"N
BP-100/162	272374.695	2195231.535	78°49'35.58659"E	19°50'23.67131"N
BP-101/162	272413.125	2195194.302	78°49'36.92334"E	19°50'22.47700"N
BP-102/162	272447.539	2195162.573	78°49'38.11969"E	19°50'21.45990"N
BP-103/162	272482.577	2195127.763	78°49'39.33885"E	19°50'20.34293"N
BP-104/162	272504.744	2195105.4	78°49'40.11029"E	19°50'19.62522"N
BP-105/162	272543.477	2195073.578	78°49'41.45504"E	19°50'18.60692"N
BP-106/162	272583.167	2195040.494	78°49'42.83323"E	19°50'17.54799"N
BP-107/162	272621.007	2195008.885	78°49'44.14722"E	19°50'16.53622"N
BP-108/162	272659.501	2194976.812	78°49'45.48386"E	19°50'15.50965"N
BP-109/162	272699.285	2194944.619	78°49'46.86487"E	19°50'14.47971"N
BP-110/162	272739.624	2194909.857	78°49'48.26606"E	19°50'13.36649"N
BP-111/162	272777.199	2194878.421	78°49'49.57085"E	19°50'12.36023"N
BP-112/162	272815.412	2194847.602	78°49'50.89725"E	19°50'11.37433"N
BP-113/162	272853.948	2194815.773	78°49'52.23522"E	19°50'10.35569"N
BP-114/162	272892.453	2194785.558	78°49'53.57138"E	19°50'09.38951"N
BP-115/162	272938.553	2194749.195	78°49'55.17122"E	19°50'08.22662"N
BP-116/162	272965.357	2194724.306	78°49'56.10302"E	19°50'07.42868"N
BP-117/162	272991.98	2194702.723	78°49'57.02719"E	19°50'06.73814"N
BP-118/162	273020.522	2194658.359	78°49'58.02731"E	19°50'05.30781"N
BP-119/162	273047.82	2194618.203	78°49'58.98282"E	19°50'04.01377"N
BP-120/162	273077.207	2194577.388	78°50'00.01041"E	19°50'02.69917"N
BP-121/162	273105.869	2194535.716	78°50'01.01347"E	19°50'01.35641"N
BP-122/162	273134.477	2194493.281	78°50'02.01498"E	19°49'59.98879"N
BP-123/162	273174.585	2194435.891	78°50'03.41815"E	19°49'58.13983"N
BP-124/162	273205.086	2194397.316	78°50'04.48300"E	19°49'56.89850"N
BP-125/162	273236.463	2194358.436	78°50'05.57807"E	19°49'55.64762"N
BP-126/162	273266.826	2194319.472	78°50'06.63833"E	19°49'54.39360"N
BP-127/162	273288.033	2194291.724	78°50'07.37908"E	19°49'53.50036"N
BP-128/162	273331.206	2194239.667	78°50'08.88519"E	19°49'51.82602"N
BP-129/162	273374.701	2194184.413	78°50'10.40376"E	19°49'50.04787"N
BP-130/162	273399.152	2194143.203	78°50'11.26186"E	19°49'48.71834"N
BP-131/162	273427.384	2194098.266	78°50'12.25153"E	19°49'47.26923"N
32/162	273452.792	2194056.4	78°50'13.14279"E	19°49'45.92176"N
33/162	273471.364	2194008.9	78°50'13.80171"E	19°49'44.38453"N

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BOUNDARY AS PER VESTING ORDER				
BP-134/162	273490.76	2193963.633	78°50'14.48797"E	19°49'42.91881"N
BP-135/162	273507.618	2193920.725	78°50'15.08597"E	19°49'41.53088"N
BP-136/162	273529.283	2193869.794	78°50'15.85264"E	19°49'39.88420"N
BP-137/162	273546.076	2193825.855	78°50'16.44889"E	19°49'38.46273"N
BP-138/162	273565.487	2193778.179	78°50'17.13668"E	19°49'36.92090"N
BP-139/162	273579.578	2193742.779	78°50'17.63632"E	19°49'35.77593"N
BP-140/162	273603.262	2193701.464	78°50'18.46811"E	19°49'34.44267"N
BP-141/162	273627.896	2193657.418	78°50'19.33374"E	19°49'33.02101"N
BP-142/162	273651.316	2193614.111	78°50'20.15733"E	19°49'31.62286"N
BP-143/162	273676.207	2193571.317	78°50'21.03121"E	19°49'30.24202"N
BP-144/162	273714.713	2193502.052	78°50'22.38445"E	19°49'28.00625"N
BP-145/162	273740.341	2193457.632	78°50'23.28435"E	19°49'26.57285"N
BP-146/162	273764.874	2193414.11	78°50'24.14622"E	19°49'25.16817"N
BP-147/162	273791.104	2193370.084	78°50'25.06664"E	19°49'23.74780"N
BP-148/162	273815.864	2193326.788	78°50'25.93622"E	19°49'22.35058"N
BP-149/162	273841.942	2193281.357	78°50'26.85202"E	19°49'20.88447"N
BP-150/162	273867.316	2193238.45	78°50'27.74250"E	19°49'19.50013"N
BP-151/162	273897.951	2193184.698	78°50'28.81851"E	19°49'17.76541"N
BP-152/162	273917.962	2193137.906	78°50'29.52644"E	19°49'16.25255"N
BP-153/162	273938.59	2193093.295	78°50'30.25463"E	19°49'14.81084"N
BP-154/162	273969.389	2193023.069	78°50'31.34346"E	19°49'12.54062"N
BP-155/162	273970.651	2192975.479	78°50'31.40772"E	19°49'10.99402"N
BP-156/162	273974.055	2192933.64	78°50'31.54299"E	19°49'09.63526"N
BP-157/162	273955.932	2192854.547	78°50'30.95518"E	19°49'07.05644"N
BP-158/162	273932.713	2192823.35	78°50'30.17125"E	19°49'06.03261"N
BP-159/162	273886.853	2192787.806	78°50'28.61152"E	19°49'04.85802"N
BP-160/162	273842.165	2192759.93	78°50'27.08866"E	19°49'03.93322"N
BP-161/162	273802.277	2192732.522	78°50'25.73048"E	19°49'03.02563"N
BP-162/162	273755.169	2192720.934	78°50'24.11737"E	19°49'02.62934"N

2.2 EXPLORATION, GEOLOGY AND ASSESSMENT OF RESERVE

S.No	Parameters	Details
2.2.1	Regional geological set up of the area, local geology, structure, stratigraphic sequence, characteristics of the litho-logical units (coal seams /partings/overburden).	

The stratigraphic sequence in the block as worked out from borehole intersection and the thickness range of different formations are given below:

	Formation	Thickness Range (m)		Lithology
		Minimum	Maximum	
Recent to Sub Recent	Soil/Alluvium	0.00	9.15	Soil is black cotton soil derived from lava flows. Soil derived from Talchir is greenish and earthy.
Lameta Group (Middle cretaceous)	Infra-trappean	0.00	15.25	Variegated clay, siltstones, limestone and subordinate calcareous sandstone. Sandstone is fine to medium grained and calcareous
Up Permian to Lower Traiassic	Kamthi	Not Encountered		Coarse gritty pinkish, reddish sandstone and red shales
Uncorformity				
Middle Permian	Motur	Not Encountered		Brown reddish and greenish clay, siltstone and lenticular sandstone bands
Lower Permian	Barakar	21.35	150.55	White to grey, fine to coarse grained sandstone with inter-banded grey shale carb shale and coal seams.
Up carboniferous to Lower Permian	Talchir	0.30	12.20	Khaki green shale and boulder bed
Uncorformity				
Pre-Cambrian	Pengang a Group	Not Encountered		Purple shale, limestone , calc-dolomite, dolomite

2.2.2	Local geology, Structure, Stratigraphic sequence, Cha	stics of the litho-logical units (coal seams /partings/overburd

Local Geology:
In the MarkiMangli-II Coal block, the Barakars are resting on the uneven eroded surface of the Talchirs observed from the two boreholes In MK-17 & MK-14. The area is significantly free from igneous intrusions.

Structure:

Strike & Dip:
The strike of the coal seams is WNW-ESE to NW-SE direction. The gradient is 1 in 7.5 to 1 in 9 due North to NE. Four Faults have been deciphered as per the revalidated geological structure prepared from sub surface information of boreholes by Minex Software . Fault F1-F1 brings Barakar sandstone in direct contact with Talchir and causes steep dip.

Fault:
Structurally the block is complex. Nine faults F1- F9 have been interpreted as per Geological Report prepared by DGM, Maharastra (1991-92). The trend of faults is NW-SE and southerly/south westerly throw. The throw varies between 5 to 40 m and are shown in Floor contour of Seam and Geological plan.

Sequence of Coal seams/Parting
A prominent and persistent coal seam ranges from 0.40m (MK-19) to 8.35 m (MK-17) exist within the block. The seam is divisible into top and bottom section with a parting of carb shale, sandstone, sandy shale . The thickness range of top section and bottom section and parting are as under:

Coal Seams / Parting / OB	Seam Thickness (m)		No. of Borehole Intersection
	Minimum	Maximum	
Top	0.40(MK-19)	8.35(MK-17)	33
Parting / OB	6.72(MK-40)	43.50(MK-5)	
Bottom	0.15(MK-5)	0.50(MK-40)	3

Seam Bootom is impersistent no reserves has been estimated.

2.2.3	Geological Block Area “Ha”	339.467 Ha
2.2.4	Status of Exploration of the block	
The block has been fully explored with 39 BH and 3389.5 m by DGM Maharashtra .		
2.2.5	Area covered by “detailed” exploration within the block (sq. km)	3.39467
2.2.6	Whether entire area has been covered by a detailed exploration.	Yes The area is fully explored
2.2.7	No. of boreholes drilled within the block	39
2.2.8	Whether any further exploration/study is required or suggested and time frame in which it is to be completed	No,
2.2.9	Year wise future programme of exploration	NA
2.2.10	Overall borehole density within the block (no./ sq. km) approx	11
2.2.11	No of Seams available as per GR (Geological Report)	Seam -Top,Seam-Bott
2.2.12	Seams not considered for Mining with Reasons	Bottom Seam, not considered due to non-persistence nature in major part of the area and intersection in three boreholes only.
2.2.13	Dip of the Seam	6 Deg. to 7 Deg. (I in 7.5 to 1 in 9) towards North and NE

2.2.14 Seam wise thickness, depth and reserve

Seamm	Thickness Range 'm'	Depth Range 'm	Net Geological Res “Mte”	Block Reserve Below “Mte”					Min Res “Mte”		Mining Losses	Ext Res “Mte”			As on base date “Mte”							Reason (For seams not considered for mining)
				High wall/ Batter	Nala/ River /Road	Barrier	Un-economic	Total Blocked	UG	OC		UG	OC	High wall	Depletion of Reserve			Balance Reserve				
															UG	OC	High wall	UG	OC	High wall	Total	
Seam - Top	0.40-8.35	11.85-120.45	11.54	1.20	0.00	0.15	0.00	1.35000	0.00	10.19	0.51	0.00	9.68	0.00	0.00	0.1	0.00	0.00	9.58			
Parting	6.72-43.50							0.00000										0.00	0.00			

Seam-Bott	0.15-0.50		0.00					0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Seam Bottom not considered as it has not developed and impersistent in major part of the area.
Total			11.5400	1.2000		0.1500		1.3500	10.1900		0.5100		9.6800			0.1000			9.5800		9.5800	

S.No	Parameters	Details
2.2.15	Methodology of reserves estimation (also mention if any software package has been used).	
Geological Reserves was estimated by DGM, Maharastra using polygon method with Digital Planimeter (Planix-7). GCV values were calculated by Majumder formula (GCV= 7115.197 - 123.971*M - 81.3121*A + 20.7421*FC) and seam wise borehole wise GCV was plotted and grade wise reserves estimated.. The reserves of Seam Bottom has not been estimated at it has been intersected in only three Boreholes. Seam Folio and Seam Floor Contour plan has also not been given in GR.		
2.2.16	Average GCV “KCal/kg”	

4707, Grade- G-9

Coal Seam/ Section	Thickness range (m)	Type of Sample	Depth Range (m)	At 60% RH & 40°C			Grade	Average GCV & Grade
				M %	Ash %	GCV (K.cal. / kg.)		
Top Seam	1.80-7.35	BCS	11.85-120.45	3.9-12.8	18.7-40.8	3816-6057	G5-G12	4707(G9)
	1.80-7.35	I30	11.85-120.45	3.7-12.8	18.7-42.4	3694-6057	G5-G13	
	1.80-7.35	I100	11.85-120.45	3.7-12.8	18.7-42.4	3694-6057	G5-G13	

2.2.17	Gross Geological Reserve of the block “Mte”	12.82
2.2.18	Net Geological Reserve of the block “Mte”	11.5400
2.2.19	Minable Reserve of the block “Mte”	10.19
2.2.20	Blocked Reserve “Mte”	1.3500
2.2.21	Corresponding extractable reserve of the block “Mte”	9.68
2.2.22	Percentage of Extraction	83.882
2.2.23	Reserve already depleted (Base date of Mining Plan)	0.1
2.2.24	Balance Reserve (as on Base Date))	9.5800

Chapter-3: Mining

3.1 Mining Method

S.No	Parameters	Details
3.1.1	Existing method of mining if the mine is under operation	The coal block was in operational for a very short period during 2013-14 and OC mining was in practice. After deallocation of block the is no mining operation is carried out till date. The present mine owner shall carry out the mine operation as per directives of allocation and complying statutory approvals as applicable through this revised mine plan.
3.1.2	Proposed method of mining with justification on suitability of method of mining	

Existing Method of Mining

Approved mining plan of Marki Mangli-II(2006) envisaged three isolated quarries as East, Central and West quarry leaving barriers in between considering geological structure of the block as per GR prepared by DGM, Maharashtra State.

The opencast was earlier planned upto a depth of 70m with an extractable reserves of 6.73 Mt and overburden removal of 50.78 Mm3 with a rated production of 0.30Mtpa at an average stripping ratio of 7.55 m3/te. The mine was planned for a life of 24 years

Shovel-Dumper with blasting was envisaged for winning of coal and overburden removal.

Mine is an operational mine and Prior allottee extracted 99775 metric tonnes of coal (0.1Mt) and overburden removed to the tune of 421661 cum (OB +Top Soil) up to 2014.

However, the mine closure plan which is an integral part of mining plan as per Guidelines 2013 was not prepared and Environment Clearance was obtained for Marki Mangli-II/III & IV blocks combinedly. No Forest Clearance was obtained for 146.996 Ha of forest land. MoC, vide letter dated 7.3.2022, communicated that since the statutory clearances are needed to be obtained afresh by the allocattee, the efficiency parameter for coal mines other than schedule -II coal mines would be applicable for Marki Mangli-II coal mine and 51 months for Milestones MS-2 to MS-5 have been agreed to. (Annexure-VIII). Production start envisaged in 2026-27 and base year as 2025-26 or 2026.

for Pre–Mining activities to complete validation of Geological Report, Preparation, Submission and Approval of Revised Mining Plan & Mine closure Plan, Environment Clearance, Forest Clearance Stage-I & stage-II, Land Acquisition and Grant of Mining Lease etc.

Proposed Method of Mining

Considering the favorable geo-mining characteristics of the block like 1 No. of Coal Horizons of varying thickness, 2.30 km strike length, moderate gradient of about 60-120, and for conservation of resource, it is proposed to extract the coal reserves within the block using open cast mining technology. The entire block is found suitable for exploitation by opencast mining method.

Coal will be mined using Combination of Surface Miner and payloader combination for coal winning and wherever the geo-mining condition does not permit application of surface miner , Shovel – Dumper method with drilling and blasting may also be used for coal winning. The OBR would be removed using conventional shovel dumper method with drilling & blasting. Drilling & blasting shall be conducted in scientific way using environment friendly technology.

Strategy of Mining Quarriable areas

Strike length of the block is about 2.3 km. A non-coal bearing patch of 52.00 Ha in the southern and eastern corner beyond incrop of seam-ST, is proposed to have the external dump which will be utilized till 10 years.

The external dump shall be merged with internal back filling dump from 1st year onwards taking the advantage of shallow depth of de-coaling (less than 30 meter).

Mine Boundaries

It is proposed to mine maximum area leaving a barrier of 7.5 m on surface from block boundary, which is a statutory requirement.

The diversion of road is not required and left as it is in the area named as undisturbed area. Nala diversion is proposed from northern side of block with maintaining 45-meter safety distance as per CMR (119)., 2017

The mine boundaries of the OC mine are as follows: -

North: Fault F1-F1/Talchir Formation.

East: Fault F4-F4,F2-F2 and Incrop of coal seam.

South: Talchir Formation and Savali & Mukutban Villages.

West: Lease Boundary and Lameta Formation

Life of Mine

The rated capacity of the mine is 0.30Mty with a life of the mine being estimated as 34 years.

Mining System

The geo-mining condition as given below :

Sl No	Particulars	Unit	Value
1	Average Gradient of coal seams.	Degree	6 to 12
2	No of coal seam (workable)	No	One
3	Coal seam thickness	m	1.80-7.35
4	Thickness of OB	m	11.85-120.45
5	Faults.	No	Nine
6	Throw of Faults	m	10-40
7	Quarry Perimeter		
i)	Perimeter along Surface	m	7344
ii)	Perimeter along Floor	m	6918
8	Excavation area at Surface	Ha	215.21
9	Excavation area at floor	Ha	180.61
10	Mineable Reserves	Mt	10.39
11	Extractable Reserves	Mt	9.58
12	Overburden	Mm3	87.06
13	Stripping Ratio	m3/te	9.09
14	Capacity	Mtpa	0.30 (Rated capacity)
15	Life of the mine	Yrs	34
16	Strike length(Along Floor)	m	
i)	Maximum	m	2250
ii)	Minimum	m	600
17	Strike length(Along Surface)	m	
i)	Maximum	m	2300
ii)	Minimum	m	650
18	Dip-Rise Length	m	
	Along Floor	m	985

ii)	Along surface	m	1100
19	Quarry depth		
i)	Maximum	m	125
ii)	Minimum	m	11.85
20	Haul Road/Access Trench		
i)	Total Length	m	1860
ii)	Total Width (Dumper Movement 35Te+Drain both side +Berm both side)	m	20

Coal Winning & OB Removal

Coal will be mined using Combination of Surface Miner and payloader combination for coal winning and wherever the geo-mining condition does not permit application of surface miner, Shovel – Dumper method with drilling and blasting may also be used for coal winning. The OBR would be removed using conventional shovel dumper method with drilling & blasting. Drilling & blasting shall be conducted in scientific way using environment friendly technology.

Bench Height

OBR (2.5 m3 Hyd. Shovel) 8-10 m
Top Soil/Alluvium (0.9 m3 Backhoe/Pay Loader) 3-6m
Coal As per thickness

Proposed Bench Width

1. Working Bench Width (for 2.5 m3 Hyd. Shovel) 30m
2. Non-Working Bench Width (for 1.7 m3 Hyd. Shovel) 15m
3. Width of the permanent haul road 30m
4. Width of the temporary transport ramp 20m
5. Usual height of the Top soil dump bench 3m
6. Usual height of the Hard Rock dump bench 30m
7. Bench Slope
   a) OB Bench 70 Deg
   b) Coal Bench 60 Deg
   c) Dump bench 37 Deg
8. Overall (Ultimate) pit slope 40 Deg

Mining Sequence

Marki Mangala II opencast is proposed to be developed by the access trench of 20 m width. The access trench is to be graded from 233 m R.L.
at 1 in 16 to the mine floor of about 225 m R.L. This would also facilitate extension of coal and OB bench for full development of mine. The mine will advance towards dip direction exposing the floor of Seam-ST. After creation of sufficient de-coaled area of about 100m, internal backfilling of OB will be started.
For better accessibility and to Optimize the lead, the quarry has been divided into two parts (western side and eastern side) by a central access named as Haul road. Both Western side and Eastern side part will be worked simultaneously. During working of the quarry, permanent haul road
along the floor of the quarry will be developed at 1 in 16 gradient.

Mineable Reserves

Only One seam, namely, Top seam to be worked in this OC mine. The mineable and extractable reserves are 10.19 Mte and 9.68 Mte respectively.
The total volume of external dump has been estimated as 9.95 Mm3 . Rest of the OB will be placed as internal dumps(76.99 Mm3)
and a small volume shall be used in embankment along nala diversion (0.12Mm3).
The year wise dump volume is shown below.

Yr	Calendar year	External Dump		Internal Dump		Total OB	
		Prog (Mcum)	Cum (Mcum)	Prog (Mcum)	Cum (Mcum)	Prog (Mcum)	Cum (Mcum)
upto base year 2026		0.42	0.42	0.00	0.00	0.42	0.42
1	2026-27	1.55	1.55	0.52	0.52	2.07	2.07
2	2027-28	1.16	2.71	0.39	0.91	1.55	3.62
3	2028-29	1.24	3.95	0.41	1.32	1.65	5.27
4	2029-30	1.40	5.35	0.25	1.57	1.65	6.92
5	2030-31	1.39	6.74	0.24	1.81	1.63	8.55
6	2031-32	1.30	8.04	0.23	2.04	1.53	10.08
7	2032-33	1.16	9.20	0.21	2.24	1.37	11.45
8	2033-34	0.25	9.46	1.43	3.67	1.68	13.13
9	2034-35	0.30	9.76	1.71	5.38	2.01	15.14
10	2035-36	0.32	10.07	1.79	7.17	2.10	17.24
11	2036-37	-	10.07	2.18	9.35	2.18	19.42
12	2037-38	-	10.07	2.26	11.61	2.26	21.68
13	2038-39	-	10.07	2.34	13.95	2.34	24.02
14	2039-40	-	10.07	2.43	16.38	2.43	26.45
15	2040-41	-	10.07	2.51	18.89	2.51	28.96
16	2041-42	-	10.07	2.60	21.49	2.60	31.56
17	2042-43	-	10.07	2.67	24.16	2.67	34.23
18	2043-44	-	10.07	2.76	26.92	2.76	36.99
	2044-45	-	10.07	2.84	29.76	2.84	39.83

20	2045-46	-	10.07	3.13	32.89	3.13	42.96
21	2046-47	-	10.07	3.40	36.29	3.40	46.36
22	2047-48	-	10.07	3.40	39.69	3.40	49.76
23	2048-49	-	10.07	3.40	43.09	3.40	53.16
24	2049-50	-	10.07	3.40	46.49	3.40	56.56
25	2050-51	-	10.07	3.40	49.89	3.40	59.96
26	2051-52	-	10.07	3.40	53.29	3.40	63.36
27	2052-53	-	10.07	3.40	56.69	3.40	66.76
28	2053-54	-	10.07	3.40	60.09	3.40	70.16
29	2054-55	-	10.07	3.40	63.49	3.40	73.56
30	2055-56	-	10.07	3.40	66.89	3.40	76.96
31	2056-57	-	10.07	3.30	70.19	3.30	80.26
32	2057-58	-	10.07	3.30	73.49	3.30	83.56
33	2058-59	-	10.07	2.50	75.99	2.50	86.06
34	2059-60	-	10.07	1.00	76.99	1.00	87.06
Total		**10.07**		**76.99**		**87.06**	

Note: A small volume of 0.12Mm3 shall be utilized for Earthen Embankment along Nala diversion and is included in External Dump Volume

of 10.07 Mm3 Overburden waste to be removed from Marki Mangli-II coal mine may produce about 70-75% of Fine , medium and coarse grained sandstone which may be crushed to sand particle by setting up a suitable crushing plant nearby places .
This shall have following advantages :

1.Infrastructure and road construction besides other use.
2.This shall meet the statutory requirement of sand production from overburden material as generally stipulated in Environment Clearance Conditions.
3.The height of external and internal dumps may be maintained at ground level so that major mart of the area may be converted to agricultural land.
4.Production of sand from sandstone by crushing as the amount of sand likely to be produced shall not be used for backfilling.

Top Soil Management

Top soil will be excavated and segregated separately. Top soil will be scrapped by dozer before the ground preparation for drilling and blasting.

Topsoil details:

1. Height of Topsoil dump : 3-6 meters.
2. Year of reclamation : After 6th year of mine operation.

3.1.3	Coal production capacity proposed MTPA	0.3000
3.1.4	Justification for optimization Coal production capacity	
Considering the strike length of about 2.30 km and Dip-rise width of about 1km and single seam working, the rated capacity of 0.30 Mty is considered to be optimum.		
3.1.5	Calendar year from which the production will start	2026-27
3.1.6	Year of Achieving rated production	2028-29

3.1.7 Tentative Coal production Plan MT

Year		Coal Production Schedule			OB MM3	SR
Year of Operation	Calendar Year	UG	OC	Total		
1	2026-27	0.00	0.10	0.1000	2.07	20.7000
2	2027-28	0.00	0.20	0.2000	1.55	7.7500
3	2028-29	0.00	0.30	0.3000	1.65	5.5000
4	2029-30	0.00	0.30	0.3000	1.65	5.5000
5	2030-31	0.00	0.30	0.3000	1.63	5.4333
6	2031-32	0.00	0.30	0.3000	1.53	5.1000
7	2032-33	0.00	0.30	0.3000	1.37	4.5667
8	2033-34	0.00	0.30	0.3000	1.68	5.6000
9	2034-35	0.00	0.30	0.3000	2.01	6.7000
10	2035-36	0.00	0.30	0.3000	2.10	7.0000
11	2036-37	0.00	0.30	0.3000	2.18	7.2667
12	2037-38	0.00	0.30	0.3000	2.26	7.5333
13	2038-39	0.00	0.30	0.3000	2.34	7.8000
14	2039-40	0.00	0.30	0.3000	2.43	8.1000
15	2040-41	0.00	0.30	0.3000	2.51	8.3667
16	2041-42	0.00	0.30	0.3000	2.60	8.6667
17	2042-43	0.00		0.3000	2.67	8.9(

18	3043-44	0.00	0.30	0.3000	2.76	9.2000
19	2044-45	0.00	0.30	0.3000	2.84	9.4667
20	2045-46	0.00	0.30	0.3000	3.13	10.4333
21	2046-47	0.00	0.30	0.3000	3.40	11.3333
22	2047-48	0.00	0.30	0.3000	3.40	11.3333
23	2048-49	0.00	0.30	0.3000	3.40	11.3333
24	2049-50	0.00	0.30	0.3000	3.40	11.3333
25	2050-51	0.00	0.30	0.3000	3.40	11.3333
26	2051-52	0.00	0.30	0.3000	3.40	11.3333
27	2052-53	0.00	0.30	0.3000	3.40	11.3333
28	2053-54	0.00	0.30	0.3000	3.40	11.3333
29	2054-55	0.00	0.30	0.3000	3.40	11.3333
30	2055-56	0.00	0.30	0.3000	3.40	11.3333
31	2056-57	0.00	0.30	0.3000	3.30	11.0000
32	2057-58	0.00	0.30	0.3000	3.30	11.0000
33	2058-59	0.00	0.20	0.2000	2.50	12.5000
34	2059-60	0.00	0.08	0.0800	1.00	12.5000
Note: Calendar Plan/Production Plan for the entire life of the mine.						

3.1.8	Rated Capacity Mtpa	By OC : 0.30 By UG : 0 Overall : 0.3000
3.1.9	Life of the mine: Years	By OC : 34 By UG : 0.00 Overall : 34
3.1.10	Whether the proposed external OB dump site is coal/ lignite bearing: If so, whether coal/lignite below waste disposal area is extractable	No
3.1.11	Whether the proposed external OB dump site is coal/ lignite bearing: If so, whether coal/lignite below waste disposal area is extractable	Yes, OB dumping has has been propose in the non coal bearing area and falls within the allocated block area lying beyond the incrop of the workable seam. four boreholes (MK-13,14,25 36) has been drilled beyond the incrop of the bottom most base seam Bottom proving the area to be non-coal bearing. Moreover ,exposures of lameta beds in the west, also confirm the non-coal bearing nature of the zone. The Geological Report has been prepaed by Directorate of Geology and Mining Maharashtra State and conforming the non coal bearing in the block. With reference to the Geological Plan (Plate-5) and Conceptual Plan (Plate- VIII), it can be seen that the proposed OB dump and infrastructure area are falling in non-coal bearing zone, beyond the incrops of both the coal seams.The lithologs of all the above four boreholes are provided in plate no- 6A, 6B. It is further proposed that during actual mine operation and making access to the seam few shallow bore holes shall be drilled for exact delineation of coal seam incrop.
3.1.12	Results of any investigation carried out for scientific mining, conservation of minerals and protection of environment; future proposals	No
3.1.13	Type of Equipment/ HEMM proposed	
3.1.14	Upload Require Document	OC : OC files data shown below UG : NA

S.No.	Type of Equipment	Capacity	Unit	Population
1	Diesel Blackhoe	0.93	Cubic Meter	3
2	Tipping Truck	8	tonn	2
3	Diesel Shovel	2.5	Cu. M	5
4	Diesel Drill	250	mm	3
5	Dozer	320	HP	6
6	Rear Discharge Dumper	25	tonn	4
7	Diesel Drill	100	mm	2
8	Wheel Dozer	180	HP	2
9	Motor Grader	145	HP	1
10	Mobile Crane	10	tonn	1
11	Explosive Van	3	tonn	1
12	Dump Truck	15	tonn	6

OC Document :

Type of Equipment/HEMM proposed

	Coal(M.tes)	0.3		
	Lead for Coal(Km)	0.9 to 2.30		
	OBR(Mm3)	1.29 to 3.27		
	Lead for OBR(Km)	1.65 to 1.80		
Sl. No	**Type of HEMM**	**Size/Cap**	**Total Provision**	
	A. For Soil			
1	Diesel Backhoe	0.9 m^3	1	
2	Tipping Truck	8 t	2	
	B For Overburden Rock			
1	Diesel Backhoe	0.9 m^3	1	
2	Diesel Shovel	2.5 m^3	5	
3	Diesel Drill 250mm	250mm	3	
4	Dozer	320 HP	6	
5	Rear Discharge Dumper	35 t	23	
	C. For Coal			SM option
	Surface Miner	SM2200		1
	Diesel Backhoe	0.9 m^3	1	
	FE Loader	2-3 m^3		1
2	Rear Dis Charge Dumper	25 t	4	4
3	Diesel Drill 100mm dia	100mm	2	-
4	Wheel Dozer	180 HP	2	2
	D. For Common			
1	Motor Grader	145 HP	1	
2	Front End loader	2.5 m3	1	
3	Tractor with trailor		2	
4	Mobile Crane	10T	1	
5	Mobile Crane	5 T	1	
6	Explosive Van	3T	1	
7	Water Sprinkler	10 Kl	2	
8	Water Sprinkler mist spray	28 Kl	1	
9	Wheel Dozer	180 HP	2	
10	Dump Truck	12-15T	6	
11	Diesel Browser	16 Kl	2	
12	Fire Tender		2	
13	Hyd. Rock Breaker		1	
14	Cable Handler		2	
15	Tyre Handler		2	
	E. For Reclamation			
1	F E Loader	2.5 cum	1	
2	Dozer	180 HP	1	
3	Grader	145 HP	1	
4	Water sprinkler 28 kl	28 Kl	2	
5	Dumper	35T	3	

Note: Since coal winning is proposed to be done by Shovel and expected size of coal shall be +1200, which will be down sized to (-)250mm size for which surface crushing arrangement is required may be by Feeder breaker with hopper system. After crushing, the coal will be loaded on to trucks through hoppers for transportation to nearest Railway siding/ consuming point.

As the area for infrastructure being less, CHP with Feeder Breaker arrangement may be avoided by deploying Surface Miner which shall be more beneficial as it is a environment friendly,
and may be deployed by contractual means

However, this option may be explored if a less productive Surface Miner is made available in next 4-5 years when mining operation is likely to be commenced.

Chapter-4: Safety Management

4.1 Safety Management

S.No	Parameters	Details
4.1.1	Major Risks and uncertainties to the project viz. Proximity to river, adjacent working, geo-mining disturbances, slope stability and remedial measures suggested. It should also include proposed overall slope of the quarry and OB dump, dump height, strata control, fire and spontaneous heating, gas monitoring, disaster management, danger from inrush of water etc.	

Nala Diversion :

A seasonal nala originates in the north central part of the block and is flowing from north to south in the eastern part of the block. This nala needs to be diverted and may be utilized as garland drain all along the quarry in the north and east .A safety zone of 45m from the diverted nala/garland drain has been kept as per Reg. 119 of CMR 2017.

In addition , in view of flood protection from this nala (converted into garland drain of 5m wide) an adequate earthen embankment has been proposed to be constructed along the nala/garland drain to prevent any possible inundation.

The earthen embankment shall be made/designed at least 3m height above HFL of 5m width in the top and 25m width at the base all along the diversion length of 3679 m of nala as per Regulation 149(2) of CMR 2017.The said embankment shall be constructed under supervision of a civil engineer considered expert in this regard. The design of embankment is illustrated as given below:

HFL of nala is to be determined by detailed survey during high flood session all along the route length of nala diversion.
This is a seasonal nala originating from north out side of block where no HFL is available. During the mine opening
in 2026 and topographical survey of mine area by the project proponent mark/extend and cooperate the authority
for such determination of HFL in diverted route . All statutory precautions as required under CMR'2017 and other
statutory provisions shall be complied.
The position of original nala and diverted nala /garland drain route have been shown in the relevant plans.

Adjacent Working

There is no adjacent operational mine.

Geo-mining Disturbances:

Geo-mining parameters are favorable. Gradient of seams are 1 in 5 to 1 in 10 (60-120), Strike length along floor is 600m to 2250 m. Quarry depth is varying from 11.85 m to 125 m. Dip rise length along floor is 985m to 1100 m.
Block is traversed by four nos of major strike and oblique faults of varying magnitude of throw from 10 to 50m. Mine block is divided into two mining sectors initially upto 5th year such that uniform targeted coal production as well as maintaining smooth coal: OB ratio during the life of the
mine is attained. Geo Mining Parameters is given in Chapter-3.

Slope stability& remedial measures:

i) Scientific study on optimum slope angle for stability of quarry benches, highwalls/ slope batter and spoil dumps along with hydro-geological study shall be done.

ii)During actual mining operations systematic observations of the conditions of benches, highwall slopes and spoil dumps should be carried out and the dimensions
as given in Chapter-3 (Mining) be modified if necessary to suit the conditions.

iii) Other provisions as laid down in Reg106 & 108 of CMR 2017 shall be strictly adhered.

iv) As the gradient of floor of quarry is gentle (8-120) As such floor blasting is not necessary.

Overall slope of the quarry & OB dumps. Height of OB dumps

i) External dump height is 60 m above surface level with an individual bench slope angle of 37deg. and overall dump slope angle of 27 deg or less. After 5 years
, this external dump will be merged with internal dump with top RL being maintained as same.

ii) Overall Slope of the quarry at the final stage is maintained at 40 deg with individual OB & Coal bench at 70 deg & 60 deg respectively.

iii) Height of External dump upto 4 years shall be maintained at 40m height. This external dump shall be merged with internal dump which shall be maintained
at maximum 60m height from actual ground surface.

Strata control
All strata control measures shall be taken up. If needed a slope stability study shall be carried out by an authorized scientific organization.

Generation of fines and spontaneous heating, gas monitoring.

No blasting is proposed within 100m of the Vithal Rukmani Temple situated at the hilltop in the west of the block area. Controlled blasting will be done within a range of 300m from the temple so that the intensity of vibration is reduced to the minimum permissible limit..

No crushing and sizing are required. Generation of fines if any beyond -100mm size shall be sprinkled by water in the enclosed CHP upto railway loading site. No spontaneous heating is expected to occur.

Disaster management

i)Fencing of mine workings, landslides & cracks between benches to be monitored at close intervals.

ii) No working or construction is proposed within 100m toe of OB dump.

)OB is proposed to be stacked in Internal Dump and external Dump (Upto 5 years) with a total maximum height of 60m. in three ti

iii) Slope of the backfilled dump is dynamic. Dump Slope shall be properly maintained with Grass beds for stability. iv) Slope stability analysis shall be done for any slope failure along high walls, External Dumps and Internal Dumps. v) Adequate fire-fighting arrangements to be made. vi)Sufficient pumping arrangements to be made for preventing mine inundation. vi)Garland drain have been proposed around the mine pit to intercept surface run off.		
4.1.2	A Commitment from the Company Board that entire mining operation will be carried out as per the Statutory provision given under Mines Act 1952, Coal Mine Regulation 2017 and & wherever specific permission will be required the company will approach the concerned authorities	Commitment from the company board is attached as Annexure- 3A1

Chapter-5: Infrastructure Facilities proposed and their Location

5. Infrastructure Facilities

<table>
<tr><th>S.No</th><th>Parameters</th><th colspan="3">Details</th></tr>
<tr><td rowspan="9">5.1</td><td rowspan="9">Mine infrastructure required</td><td>S.No</td><td>Infrastructure to be reatin to be public use</td><td>Infrastructure to be dismantle/reclaimed</td></tr>
<tr><td>1</td><td>Approach roads</td><td>Sub Station,</td></tr>
<tr><td>2</td><td>Settling Pond</td><td>Coal Handling arrangement</td></tr>
<tr><td>3</td><td>Garland Drain</td><td>HEMM , E&M workshop</td></tr>
<tr><td>4</td><td>Diverted Nalla</td><td>Project Store, All service buildings like PO office, VTC, First Aid Centre, Canteen Rest shelter etc.</td></tr>
<tr><td>5</td><td>Garland Drain</td><td>HEMM , E&M workshop</td></tr>
<tr><td>6</td><td>Diverted Nalla</td><td>Project Store, All service buildings like PO office, VTC, First Aid Centre, Canteen Rest shelter etc.</td></tr>
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<tr><td>8</td><td>Settling Pond</td><td>Coal Handling arrangement</td></tr>
<tr><td>5.2</td><td colspan="4">Power supply & illumination</td></tr>
</table>

Source of Power

Power shall be drawn to the proposed 33kV Sub Station located at the project site from nearest sub station of Maharastra State Electricity Development Corporation
located at a distance of 1.2 kM by 33 kV over head line for meeting the power requirement of the project. It is also proposed a solar park to be installed in the stabilized
dump area to draw power for its internal use.

Proposed Power Supply & Distribution Arrangement

Connected load & maximum demand of OCP are as follows
Connected Load = 1770 kW
Maximum Demand = 1280 kW / 1300 kVA
The demand for the project comes to 1300 KVA after improving the power factor to 0.98 by 2 nos. of delta connected capacitor bank of (3 x 105) kVAr.
Two nos. 1600 kVA, 33/6.6KV outdoor type transformers have been selected to cater to the demand. Proper earthing system shall be provided to
keep the earth resistance below 1 ohm. Transformer secondary should be earhed through Neutral Grounding Resistor with fail safe relay to restrict
the earth current below 50 A as per statute. Sub statation shall be earthed by earthing grid. Proper lightning protection shall be provided.

6.6 KV Indoor type Switch Boards :

One number 6.6 KV In door type switchboard energized from the secondary of the transformer would feed the power supply to all the power consumers
of the project. 2 nos 500 kVA DG sets with 6.6 kV switch panel as per requirement shall be provided for meeting up emergency requirements.
The Annual Energy Consumption of the project for the targeted year of production is 7.19 Mkwh and the specific Energy Consumption is 23.98Kwh/Te.
(Annexure-IX)
The supply voltages are as under :

Incoming supply voltage	-	33 KV
Supply voltage to workshop	-	6.6 KV
Quarry power supply	-	6.6 kV

Power factor Improvement
In order to improve power factor to a value of 0.98, two delta connected capacitor bank of 3 x 105kVAr at 6.6 KV have been provided in the sub-station.

Power Supply to CHP & Workshop :
CHP will be fed from OCP Sub Station at 6.6kV by cable feeder where power shall be stepped down as per requirement to feed the CHP and miscellaneous surface loads. The workshop will be fed power at 6.6kV from OCP sub station by cable feeder. At the workshop power
at 3.3KV would be stepped down to 0.415KV by 1 no. 315kVA 6.6/0.415kV transformer for further distribution to different power receivers.

Illumination
250W HPSV lamps with all accessories at suitable intervals has been provided for Haul road lighting. High mast lighting with adequate light fittings and all accessories has been provided for flood lighting of entire quarry area. One no. 250kVA 6.6/0.230 kV (L-L) lighting transformer shall feed the lighting loads of the OCP.

Proposed Communication System :
The proposed communication system should cater to the need of voice communication among personnel related to mine operation, administration
and equipment maintenance. The system also takes into account the data communication requirement for mine operation and planning along with
the latest office automation facilities.

While preparing the system, due consideration has been given to the state-of-art networking architecture involving the communication of voice, data
and multimedia over the same network path, so as to avoid duplicated investment in network and proper conservation of bandwidth.

Surface / Administrative Communication :
To meet all the requirements of data and voice communication, 100 lines of IP Enable Exchange is proposed having the following main features :

IP Enable Exchange :
A 100 line automatic telephone exchange has been envisaged for the effective communication between the various units on the surface.

BSNL Communication :
It is proposed to provide 20 nos. BSNL telephone extensions to the mine office in order to facilitate external communication and to link the mine with the BSNL's national telephone network. The BSNL telephones shall be provided at the offices and residences of important officials.

Other facilities:
Mobile Telephone sets with internet facility shall be provided to important project personnel. Personal computers shall be provided in the administrative building at important locations with Wi Fi connection. Walkie Talkiies shall be provided to key personnel for operational purposes.

5.3	Drainage & Pumping : Assessment of Volume of Water for Pumping, Pumping Capacity and Pump Selection

Assessment of Volume of water for pumping

BASIC DATA

- Water level in adjacent Marki Mangli-I mine is shallow in pre monsoon 4.0m to 11.0m below GL (Source : Secondary data from Approved EIA report of Marki Mangli-III/III/IV Coal Mine, Yavatmal District, Maharashtra)
- Water level in adjacent Marki Mangli-I mine is shallow in post monsoon 1.5m to 10.5m below GL (Source : Secondary data from Approved EIA report of Marki Mangli-III/III/IV Coal Mine, Yavatmal District, Maharashtra)
- Fluid potential fluctuation between the two extreme climate is around 2.5m
- Average annual rainfall based on rainfall data recorded at Yavatmal for last 10 years has been observed as 1135.7 mm. Maximum Rainfall in a month: 305mm (July)
- Maximum rainfall in a day: 12.30 mm (5.8.2021)
- Maximum depth of proposed mine: 120m
- Run off coefficient: (i) Mined out area= 0.5, (ii) Internal dump=0.10, (iii) Beyond excavation=0.10
- Inflow of water to the quarry due to seepage and UG precipitation: 10% of probable water accumulation in Nala
- Source of rainfall data: IMD, Yavatmal District.
- Recharge of aquifers: 15 % of annual rainfall
- Mode of occurrence of ground water: unconfined, semi-confined and confined condition.

CALCULATION AND ASSESSMENT OF VOLUME OF WATER TO BE PUMPED

As per Meteorological data, annual average rainfall in the region is 1135.7 mm and monsoon period is between Mid-June and Mid-October. An attempt has been made to estimate volume of water to be pumped out of the OC mine, on the basis of surface precipitation, Volume of rain water entering the mine and accumulating in the quarry (make of water) may be assessed on the basis of the following formula:

Q = A x H x m3 /day
where, A = Catchment area in m2
H = Maximum daily precipitation in m
= Run-off co-efficient

Run-off co-efficient () has been adopted as below:

i. For mined out area : 0.50
ii. For internal dump area : 0.10
iii. For area beyond excavation : 0.10
iv. Normally external dump area is considered as the area beyond excavation. Further, garland drains around the quarry excavation will perclude entry of rain water from area beyond excavation entering the mine.

Rainfall Data, Mine Parameters and Excavated Area

i.	Average annual rainfall	1135.7 mm
ii.	Rainy season [mid-June to Mid-October]	120 days
iii.	Maximum rainfall in 24 Hrs. [rainy season]	12.30 mm

Year	Cumulative area for pumping		
	Pit Area (Ha)	Void Area(Ha)	Backfill Area(Ha)
1	14.10	13.13	0.97
2	20.06	16.85	3.21
3	28.26	23.29	4.97
4	30.35	24.00	6.35
5	44.87	37.76	7.11
6	66.08	55.86	10.22
7	73.92	40.93	32.99
8	89.60	51.60	38.00
9	96.46	51.73	44.73
10	103.32	51.85	51.47
11	110.18	51.98	58.20
12	117.04	52.11	64.93
13	123.90	52.23	71.67
14	130.76	52.36	78.40
15	137.62	52.49	85.13
16	144.48	52.61	91.87
17	151.34	52.74	98.60
18	158.20	52.87	105.33
19	165.06	52.99	112.07
20	171.92	53.12	118.80

21	178.78	53.25	125.53
22	185.64	53.37	132.27
23	192.50	53.50	139.00
24	192.50	53.50	139.00
25	196.67	50.11	146.56
26	200.83	46.72	154.11
27	205.00	43.33	161.67
28	209.17	45.74	163.43
29	210.11	46.68	163.43
30	211.12	47.69	163.43
31	213.24	49.81	163.43
32	214.28	50.85	163.43
33	215.21	51.78	163.43
34	215.21	51.78	163.43

Water ingress in the mine during rainy season is estimated, considering the stage of the mine when maximum void has been created.

(A) Quarry Excavation

Water ingress**(A)** = 0.0123 m x [(max void in Ha x 0.50) + (back-filled area in Ha x 0.10)] x 104

= 0.0123 X [215.21 X 0.50 +(163.43+52) X 0.10] X 104 m3 / day

= 15885 m3 / day

Sump Capacity

Capacity of sump will be decided to accommodate rain water corresponding to maximum daily rainfall at 10% probability (once in every 10 years). It is assumed that sump will accommodate 70% of maximum rainfall in 24 Hrs (12.30 mm) plus 15% seepage:

(B)Sump Capacity [70 % of maximum rainfall in 24 Hrs.]	
Quarry	15885 x 0.70 =11120 m3

Pumping Capacity

Daily capacity of pumping has been kept as difference between ingress of water in the mine in a day and holding capacity of sump. Pump will work for 20Hrs /day.

(C)	Pumping duty
Quarry	[A – B] ÷ 20 m3 /Hr = (15885-11120) ÷20 m3/Hr = 4765/20 m3/Hr = 238.25 **m3/Hr or say 240 m3/Hr**

External Dump area is considered as the area beyond excavation. In this case, external dumps is merged with internal backfilled dump.

Selection of Pumps

Excavation operation of a quarry is a dynamic process. Gradually the depth of working increases. The duty of the pumps particularly the static head increases as the quarry goes deeper and deeper. Following stages are stated here:

1. When advance stripping of weathered mantle is to be done, water will accumulate on the lowest bench of OB, max 25 m below surface,
2. which will be drained to quarry floor sump.
3. Up to a depth of about 120 m, pumps will directly deliver to surface (80 lps x 150m head,.
   Details pumps are given below

Quarry (Peak pumping duty ; pumping load assumed 50 % of max. pumping duty)	KW	Nos.
Slurry Pumps (Face) Pumps : 80 lps x 60 m	60	2
Main Pumps 80 lps x 120 m 6.6 KV electrical	150	2
Main Pumps 80 lps x 120 m 6.6 KV electrical(Spare Pump)	150	1

5.4	Coal Handling Arrangement: Brief detail of the CHP/ Mode of Dispatch, Coal quality and Coal staking and handling arrangement	Brief details of CHP/Mode of DispatchCoals from the face shall be transported by the central haul road of both the sectors and will be directly collected at the receiving hopper of the CHP complex. Coal from the Top Seam shall be transported through the horizontal flank road to quarry floor of same level along strike to reach central haul road laid on the quarry floor and carried to surface along the main haul road. Coal from the central part of the property shall be transported through flank road to surface. Since coal winning is proposed to be done by Shovel and expected size of coal shall be 1200, which will be down sized to (-)250mm size for which surface crushing arrangement is required may be by Feeder breaker with hopper system. After crushing, the coal will be loaded on to trucks through hoppers for transportation to nearest Railway siding/ consuming point.If Surface Miner option is adapted, no crushing arrangement is required as coal produced will (-) 100 mm size with average G-9 grade coal . However, no stacking of coal is suggested for spontaneous heating of coal. Coal shall be directly fed into the one no hopper/bunker of 300 TPH capacities. As the peak rated production is kept at 0.3 0Million tonnes per year, expected coal production per day is about 900 tonnes per day. Two days of coal production i.e 1800 te shall be kept on ground stock for emergency transportation directly by road.
5.5	Coal washing and the proposed handling/ disposal of rejects	Coal washing is envisaged to reduce the sulphur content of coal and to improve quality of coal Rejects shall be dealt as per Govt policy and rules

Chapter-6: Land Requirement

6.1 Land requirement

S.No	Parameters	Details
6.1.1	Total Land requirement for the mine in “Ha”. Indicative source of data.	

The Land details required for the block 339.467 Ha ,is given as below:

Land Type		**Area (Ha)**
Private/Tenancy	Agricultural	185.041
(185.041 Ha)	Township/Village	-
	Grazing	-
	Barren	-
	Water bodies	-
	Road	-
	Community /Other use	-
Govt Non Forest	Agricultural	-
(7.43 Ha)	Township	-
	Grazing (Govt Land)	7.430
	Road	-
	Water bodies	0.000
	Barren/Other use	-
Forest	Jungle Jhari	27.918
(146.996Ha)	Reserve	119.078
	Protected	-
Freehold		-
Total (Vested Block)		**339.467**

(Source: RS Map from District Authorities, Forest Survey Map & DGPS survey by Project proponent)

Break up of pre-mining land type (indicative) and source of data.

S.No.	Land Type	Exisiting/pre-Mining Use	Area
1	Forest	Jangle Jhari	27.918
2	Forest	Reserve	119.078
3	Pvt/Tenancy land	Agricultural	185.041
4	Govt Non Forest	Grazing	7.43

6.1.2 During mining Land use details:

Type	Land use (Proposed)	Land Use (End of Life)	Land Use (Post Closure)						
			Agricultural land	Plantation	Water Body	Public/Company Use	Forest Land (Returned)	Undisturbed	Total
Excavation Area	215.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Backfilled Area	0.00	163.43	126.370	0.00	0.00	0.00	37.06	0.00	163.4300
Excavated Void	0.00	51.78	0.00	0.00	51.78	0.00	0.00	0.00	51.7800
Without Plantation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Top Soil Dump	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
External Dump	52.00	52.00	0.00	0.00	0.00	0.00	52.00	0.00	52.0000
Safety Zone	6.06	6.06	0.00	0.00	0.00	0.00	6.06	0.00	6.0600
Haul Road between arries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Road diversion	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Diversion Or Below River Or Nala Or Canal	0.669	0.669	0.00	0.00	0.669	0.00	0.00	0.00	0.6690
Settling Pond	2.00	2.00	0.00	0.00	2.00	0.00	0.00	0.00	2.0000
Road And Infrastructure Area	12.20	12.20	0.00	0.00	0.00	0.00	12.20	0.00	12.2000
Rationalization Area	42.797	42.797	3.121	0.00	0.00	0.00	39.676	0.00	42.7970
Garland Drains	3.011	3.011	0.00	0.00	3.011	0.00	0.00	0.00	3.0110
Embankment	5.52	5.52	0.00	0.00	0.00	5.52	0.00	0.00	5.5200
Green Belt	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Water Reservoir Near Pit	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
UG Entry	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Undisturbed OR Mining Right For UG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Resettlement	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Pit Head Power Plant	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Water Harvesting	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Agricultural Land,Undisturbed OR Mining Right For UG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Total	339.47	339.47	129.49	0.00	57.46	5.52	147.00	0.00	339.47

S.No	Parameters	Details
6.1.3	Surface features over the block area	The block is free from habitation, a seasonal nala flows form north to south .
6.1.4	No. of villages/Houses to be shifted	NIL
6.1.5	Population to be affected by the project	NIL
6.1.6	Proposed Rehabilitation programme	No rehabilitation is involved ,

6.2 DETAILS OF LEASE

S.No	Parameters	Details
6.2.1	Status of Lease	
Lease to be applied		
6.2.2	Existing Lease Area “Ha”	Nil
6.2.3	Period for which Mining Lease has been granted/is to be renewed/ is to be applied. for.	34 years and to be renewed as per requirement applicable in MMDR Act 1957.
6.2.4	Date of expiry of earlier Mining Lease, if any .	NA
6.2.5	Whether the lease boundary/ required boundary is same as mentioned in the allotment order.	Yes
6.2.6	Lease Area (applied/ required) as per the Mining Plan under consideration (Ha)	339.467 includes forest land of 146.996 ha.
6.2.7	Whether the applied lease area falls within the allotted block.	Yes

6.2.8	Area (Ha) of lease which falls outside the delineated Block Boundary/Existing Mining Lease.	Nil
6.2.8	Area (Ha) of lease which falls outside the delineated Block Boundary/Existing Mining Lease.	Nil
6.2.9	Details of outside area	Not Applicable
	Whether forms part of any other coal block	NA
	Whether it contains any coal/lignite reserves.	Nil
	Purpose for which it is required, e.g. roads/ OB dumps/ service buildings/ colony/ safety zone/ others (specify).	Not applicable
6.2.10	Whether some part(s) of the allotted block has not been applied for mining lease	Not Applicable
	Total area in Ha of such part(s).	Nil
	Total reserves in such part(s). (Mt).	Nil
	Brief reasoning for leaving such part(s).	Not applicable

Chapter-7: Environment Mangement

7. Environment Mangement

S.No	Parameters	Details
7.1	Commitment from the project proponent that the company will comply Environment and Forest Condition stipulated in the respective clearances	The Commitment from the Company Board for compliance of the Environmental and Forest conditions and all prevalent statutory provisions as applicable has been be made and appended as Annexure 3A1. May please refer item 5 of the resolution.

Chapter-8: Progressive & Final Mine Closure Plan

8.1.1 Land Degradation and restoration Schedule

Tentative Land Degradation and Technical Reclamation (Commutative Area Ha)									
Year/Stage		Land Degraded				Technically Reclaimed Area			
(Life of the mine plus post closure period)		Excav	Dump (Extn + Top Soil)	Infra/others	Total	Backfill	Dump (Extn + Top Soil)	Others	Total
Up to Base year	2026	7.37	6.65	0	14.0200	0.00	0.00	0.00	0.0000
Y-1	2026-27	14.10	21.17	29.459	64.7290	0.97	0.00	0.00	0.9700
Y-3	2028-29	28.26	33.74	72.257	134.2570	4.97	0.00	0.00	4.9700
Y-5	2030-31	44.87	37.17	72.257	154.2970	7.11	0.00	6.06	13.1700
Y-10	2034-35	103.32	52.00	72.257	227.5770	51.47	40.05	11.58	103.1000
Y-15	2040-41	137.62	52.00	72.257	261.8770	85.13	52.00	11.58	148.7100
Y-20	2045-46	171.92	52.00	72.257	296.1770	118.80	52.00	11.58	182.3800
Y-25	2050-51	196.67	52.00	72.257	320.9270	146.56	52.00	11.58	210.1400
Y-30	2055-56	211.12	52.00	72.257	335.3770	163.43	52.00	11.58	227.0100
Y-34	2059-60	215.21	52.00	72.257	339.4670	163.43	52.00	11.58	227.0100
Post Closure									
Y-39	2064-65	215.21	52.00	72.257	339.467	163.43	52.00	124.037	339.467

8.1.2 TentativeBiological Reclamation (Cumulative in “Ha”)

Year/Stage		Biologically Reclaimed Area					Forest land (Return)	Un Disturbed/ To be left for Public/com Use	Total
(Life of the mine plus post closure period)		Agriculture	Plantation	Water Body	Public/ Company Use	Total			
Up to Base year	2026	0.00	0.00	0.00	0.00	0.0000	0.00	0.00	0.0000
Y-1	2026-27	0.00	0.00	0.00	0.00	0.0000	0.00	0.00	0.0000
Y-3	2028-29	0.00	0.00	2.00	0.00	2.0000	0.00	0.00	2.0000
Y-5	2030-31	0.00	6.059	5.680	0.000	11.7390	0.00	0.00	11.7390
Y-10	2034-35	0.00	54.714	5.680	0.00	60.3940	0.00	0.00	60.3940
Y-15	2040-41	0.00	85.00	5.68	5.52	96.2000	0.00	0.00	96.2000
Y-20	2045-46	0.00	101.00	5.68	5.52	112.2000	0.00	0.00	112.2000
Y-25	2050-51	0.00	110.00	5.68	5.52	121.2000	0.00	0.00	121.2000
Y-30	2055-56	0.00	129.491	5.68	5.52	140.6910	0.00	0.00	140.6910
Y-34	2059-60	0.00	129.491	5.68	5.52	140.6910	0.00	0.00	140.6910
Post Closure									
Y-39	2064-65	0.00	129.491	57.460	5.52	192.471	146.996	0.00	339.467

S.No	Parameters	Details

8.2	Post Closure Water Quality management (Existing water bodies available in the lease hold area; Measures to be taken for protection of the same including control of erosion, sedimentation, siltation, water.	A seasonal nala originates in the north central part of the block and is flowing from north to south in the eastern part of the block. This nala needs to be diverted and may be utilized as garland drain all along the quarry in the north and east .A safety zone of 45m from the diverted nala/garland drain has been kept as per Reg. 119 of CMR 2017. In addition, in view of flood protection from this nala (converted into garland drain of 5m wide) an adequate earthen embankment has been proposed to be constructed in the last ten years of mine operation along the nala/garland drain to prevent any possible inundation.The earthen embankment shall be made/designed at least 3m height in the top and 25m at the base, height not less than 1.5m of HFL all along the diversion length of 3679 m of nala as per Regulation 149(2) of CMR 2017.The said embankment shall be constructed under supervision of a civil engineer considered expert in this regard. Measures to be taken for protection of the same including control of erosion, sedimentation, siltation, water treatment, diversion of water course if any Nala needs to be diverted in the form of a suitable garland drain and is proposed to arrest the rainwater entering into the mine. Nala diversion is proposed at the originating point in the Northern part of block boundary maintaining 45m safety distance from the quarry boundary as per CMR (119). Diversion dams/bunding arrangement as part of water course diversions to prevent water entering into mine.Cross drainage structures where haul roads and access roads cross diversions Various inlet, outlet and erosion protection structures.The box cut is developed in such a manner so as to facilitate the proper drainage of water towards the sump Garland drain shall be developed in advance for each mine stage such that water is collected in these garland drains and discharged properly outside the pit.Working faces would be laid such that the water from the working areas will flow into the sump by gravity from where it would be pumped out to settling/sedimentation pond.From sedimentation pond/settling tank the overflown water shall be discharged to garland drains All along the external dump a suitable toe wall shall be constructed to arrest the fall of loose OB waste during rainy season. Slurry pumps shall be used to deal with the slurry formed during rainy season.Regular monitoring of water quality of mine discharges and ground water shall be done to observe any contamination of ground water.Additionally, there exists a number of ponds in the area. Care shall be taken so that no waste material from overflow from sedimentation pond or garland drain are admixed into the surface ponds.All measures shall be maintained to improve the quality of mine discharge water as per statute by provision of WETP, SETP and sludge cleaning in Settling Tank and by lime charging from time to time.
8.3	Post Closure Air Quality management.	Management of Air Quality during post closure of mineMine closure activities proposed for the project is oriented to Net Zero emission of the Govt of India. In addition to plantation development and biological and technical reclamation of degraded land, a Solar Park is envisaged in the reclaimed land. Floating Solar Park has also been envisaged for the final mine excavated area over reclaimed land. PPA and other formalities as per the requirement of Ministry of Power, MoEFCC with respect to Solar park shall be taken care of at the time of development of Solar Park. After cessation of mining and its related activities, there will be no effect on ambient air quality due to this project. All the proper mitigatory measures for air pollution control shall be taken in the mines so that there will be no effect on the ambient air quality. However, it is proposed that air quality and dust level is to be monitored at regular intervals. Necessary actions to check the air pollution from the closed mine in respect of air is to be taken after examining the local conditions then prevailing.

8.4 Waste Management (Figures in MM3) (Tentative)

Year/Stage		OB Removal			External Dump		Internal Backfilling		Embankment	
(Life of the mine plus post closure period)		(Cumulative)			(Cumulative)		(Cumulative)		(Cumulative)	
		Top Soil	OB	Total	Top Soil	OB	Top Soil	OB	Top Soil	OB
Up to Base year	2026	0.07	0.35	0.42	0.07	0.35	0.00	0.00	0.00	0.00
Y-1	2026-27	0.22	1.85	2.07	0.22	1.33	0.00	0.52	0.00	0.00
Y-3	2028-29	0.54	4.73	5.27	0.54	3.41	0.00	1.32	0.00	0.00
Y-5	2030-31	1.03	7.52	8.55	0.54	5.71	0.49	1.81	0.00	0.00
Y-10	2035-36	1.38	15.86	17.24	0.54	9.41	0.84	6.33	0.00	0.12
Y-15	2034-35	1.72	27.24	28.96	0.54	9.41	1.18	17.71	0.00	0.12
Y-20	2045-46	1.97	40.99	42.96	0.54	9.41	1.43	31.46	0.00	0.12
Y-25	2050-51	2.00	56.71	58.71	0.54	9.41	1.46	47.18	0.00	0.12
Y-30	2055-56	2.05	72.41	74.46	0.54	9.41	1.51	62.88	0.00	0.12
Y-34	2059-60	2.15	84.91	87.06	0.54	9.41	1.61	75.38	0.00	0.12
Post Closure										
Y-39	2064-65	2.15	84.91	87.06	0.54	9.41	1.61	75.38	0.00	0.12

8.5 Top Soil Management – (Including Action plan for Top Soil management) (Tentative)

Year/Stage		Top Soil Removal Plan	Top Soil Used				
(Life of the mine plus post closure period)			Spreading Over Embankment	Spreading Over Backfill area	Spreading Over External OB Dump area	Used in Green Belt area	Total Utilised
Up to Base year	2026	0.07	0.00	0.00	0.00	0.00	0.00
Y-1	2026-27	0.22	0.00	0.00	0.00	0.00	0.00
Y-3	2028-29	0.54	0.00	0.00	0.00	0.00	0.00
Y-5	2030-31	1.03	0.00	0.49	0.54	0.00	1.03
Y-10	2035-36	1.38	0.00	0.84	0.54	0.00	1.38
Y-15	2034-35	1.72	0.00	1.18	0.54	0.00	1.72
Y-20	2045-46	1.97	0.00	1.43	0.54	0.00	1.97
Y-25	2050-51	2.00	0.00	1.46	0.54	0.00	2.00
	2055-56	2.05	0.00		0.54	0.00	2.05
	2059-60	2.15	0.00		0.54	0.00	2.15

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Post Closure							
Y-39	2064-65	2.15	0.00	1.61	0.54	0.00	2.15

S.No	Parameters	Details
8.6	Management of Coal Rejects.	Not Applicable
8.7	Restoration of Land used for Infrastructure.	Infrastructure to be retained and to be dismantled envisaging measures to be taken for their physical stability and maintenance for the retained infrastructure facilitiesMarkiMangli-II Coal mine shall develop lot of infrastructure for sustaining their mining operations. These include Workshop, CHP, Office Complex, Roads, Pipe lines and Transmission line, decommissioning of the infrastructure shall be planned in such a way that the land occupied by these infrastructure is released. Moreover, as the block area covers 146.996Ha of forest land which needs to be returned to forest authorities , most of the service structures are to be dismantled as under1. HEMM workshop2.E M workshop3.Project Store4.All Service Buildings5. Office , VTC, First Aid Centre6. Canteen, Rest Shelter etc7. Sub station8. CHP However, the following infrastructures are proposed to be retained for the public use for the neighboring common people in future.1. Garland Drain around dumps2. Diverted Nala and embankment after beautification3.Approach roads and connecting roads4.Settling tanksAll other service structures are to be dismantled.
8.8	Disposal of Mining Machinery.	The mine development and mining operation shall be done by engaging Mine Developer Operator (MDO). After the mine closure, all mining machinery shall be shifted to elsewhere by the mine developer.
8.9	Safety & Security.	After attaining the final stage dump, the remaining portion between dump toe and final stage Quarry floor should be fenced properly so that no human or stray animals should be trapped within as stipulated in CMR 108(6)2017. Internal dumps are proposed to be suitably re-graded to avoid deep trenches. Toe wall of all spoil dumps shall not be extended to any point within 100m of mine opening and public roads or building or other permanent structure not belonging to owner of mine as per CMR 108(5) 2017.

8.10 Abandonment Cost and Financial Assurance.

8.10.1 Abandonment Cost: Cost of Activities to be taken up for closure of the mine

Head	Activities	Unit	Quantity	Rate RS/Unit	Amount RS Cr
Progressive Closure	Water quality management	Ls	34	150000	0.51
	Air quality management	Ls	34	300000	1.02
	Waste Management	M CUM	30	2500000	7.50
	Barbed wire fencing around dump	m	7165	250	1.79125
	Barbed wire fencing around the pit	m	7805	250	1.95125
	Filling of Void - Rehanding of Crown dump	MM3			
	Top Soil Management	MM3	2.1	1000000	0.21
	Technical And Biological Reclamation of Mined out of land and OB Dump	Ha	215	250000	5.375
	Plantation over virgin area including green belt	Ha	129.50	250000	3.2375
	Manpower Cost and Supervision	Month	1020	50000	5.10
	Total wall around the dump	m	7165	250	0.1791
	Garland drain	m	16482	300	0.4945
	Garland drain around the dump	m	7175	300	0.2153
	Any other Activity	LS			0.20
	Any other Activity - 2				
	Any other Activity - 3				
	Any other Activity - 4				
	Any other Activity - 5				
Dismentaling of infrastrucure & Disposal/ rehabilitation of mining Machinery	Dismentaling of workshop	Ls			0.15
	Rehabilitation of the dismentaled fascilities	Ls	0.00		0.10
	Dismentaling of pump and pipes/ other fascilities.	Ls	0.00		0.15
	Dismentaling of stowing bunker, provisioning of pumps for borewell pumping arrangement.	Ls	0.00		0.00
	Dismentaling of UG equipment	Ls			0.0

	Rearranging water pipeline to dump top park/Agriculture land	Ls			0.10
	Dismentaling of power lines.	Ls			0.15
	Any other Activity	LS			0.10
Safety and Security	Barbed wire fencing around dump	Ls			0.35
	Barbed wire fencing around the pit	m	0.00	0.00	0.35
	Barbed wire fencing with Masonalry piller	Ls	0.00		0.50
	Concrete wall with Masonalry pillers around the pit	m	7500	1000	0.75
	Securing air shaft and installation of borewall pump	Ls			0.00
	Securing of incline	Cr			0.00
	Concrete wall fencing around the water body	m	7500	1000	0.750
	Boundary wall around the water body	m			0.00
	Stabilisation (viz benching, pitching etc) of side walls of the water body	Ls			0.40
	Toe wall around the dump	Ls			0.30
	Garland Drain	Ls	0.00	0.00	0.25
	Garland Drain around the dump	Ls			0.00
	Drainage channel from main Ob dump	Ls			0.00
	Any other Activity				0.00
Technical and Biological Reclamation of mined out of land and OB Dump	Filling of Void	Ha			0.50
	Top soil management	MM3	2.1	7000000	1.505
	OB Rehandling for backfilling	MM3	9.41	5000000	4.705
	Terracing, blanketing with soil and vegetation of External OB Dump	Ha	52	250000	1.30
	Paripharel road, gates, view point, cemented steps on bank	Cr			1.0
	Expenditure on development of Agriculture land	Ha	140	600000	8.40
	Landscaping and Plantation	Ls			0.75
	Any other Activity				0.00
Post Closure management and supervision	Power Cost	Ls	5	200000	0.10
	Post mining water quality management	Ls	5	75000	0.0375
	Post mining air quality management	Ls	5	100000	0.050
	Subsidence monitoring for 5 years	Ls	5	660000	0.33
	Waste management	Ls	50	2500000	12.50
	Manpower Cost and supervision	Ls	350	60000	2.10
	Manpower Cost and supervision	Misc			1.50
	Any other Activity - 2				
Others	Enterprenuership development(vocational/skill development training for sustainable income of affected people)	LS			2.5
	Golden Handshake/Retrenchment benefits to 100 employees of OC	LS			2.5
	Golden Handshake/Retrenchment benefits to 200 employees of UG	Cr			0.00
	Onetime financial grant to societies/ institutions/ organisations which is dependent upon the project	Ls			1.75
	Provide Jobs in other mines of company	LS			1.5

	Continuation of other services like running of school etc.	LS			2.25
	Any other Activity	Miscellaneous			2.5
Total					79.98

8.10.2 Financial Assurance : Amount to be deposited in Escrow account as a security against the mine activities to be carried out for the closure of the mine

WPI as on	Apr-19	121.10
WPI as on base date	July2022 provn.	153.80
Escalation rate of Closure cost		1.27
	UG	OC
Base Cost "Rs. Crs/Ha	0	0.09
Closure Cost "Rs. Crs/Ha"	0	0.114
Project Area "Ha"	0	339.467
Amount to be depostied into Escrow Account "Rs. in Crs	0	38.699
Amount already deposited into Escrow Account "Rs. in Crs	0	0
Net Amount to be depositied into Escrow Account "Rs. in Crs	0	38.699
Rate of componding of Annual Closure Cost		5.00%
Balance Life of the project "in Yrs	0	34
Annual Closure Cost "Rs. in Crs"	0	1.138
Amount to be deposited into Escrow Account after compounding @ of 5% "Rs. in Crs"		96.804

Amount to be deposited into Escrow

Year	OC	Year	UG	Total
1	1.138			1.138
2	1.195			1.195
3	1.255			1.255
4	1.317			1.317
5	1.383			1.383
6	1.452			1.452
7	1.525			1.525
8	1.601			1.601
9	1.681			1.681
10	1.765			1.765
11	1.854			1.854
12	1.946			1.946
13	2.044			2.044
14	2.146			2.146
15	2.253			2.253
16	2.366			2.366
17	2.484			2.484
18	2.608			2.608
19	2.739			2.739
20	2.876			2.876
21	3.019			3.019
22	3.17			3.17
23	3.329			3.329
24	3.495			3.495
25	3.67			3.67
26	3.854			3.854
27	4.046			4.046
28	4.249			4.249
29	4.461			4.461
30	4.684			4.684
31	4.918			4.918
32	5.164			5.164
33	5.423			5.423
34	5.694			5.694
Total	96.804		0.000	96.804

Annexures

Annexure 1A1

GOVERNMENT OF INDIA

MINISTRY OF COAL

OFFICE OF THE NOMINATED AUTHORITY

(Constituted under Section 6 of The Coal Mines (Special Provisions) Act, 2015)

Shastri Bhawan, New Delhi

VESTING ORDER

(under clause (b) of sub-rule (2) of rule 7 and sub-rule (1) of rule 13 of the Coal Mines (Special Provisions) Rules 2014 read with clause (b) of sub-section (3) of Section 6 and sub-section (3) of Section 8 of the Coal Mines (Special Provisions) Act, 2015)

In re:	**Marki Mangli II Coal Mine** (the "mine") particulars of which is specified in **Annexure 1**
Order no.:	NA-104/3/2020-NA
Date:	March 03, 2021
In favour of:	**Yazdani International Private Limited,** incorporated in India under the Companies Act, 1956 with corporate identity number U13209OR2006PTC009009, whose registered office and principal place of business is at 7th Floor, C-Wing, Fortune Towers, Chandrasekharpur, Bhubaneswar, Odisha 751023, India(the "successful bidder")
For the purpose of:	Sale of coal, including sale to Affiliates and related parties, utilisation of coal for any purpose including but not limited to captive consumption, Coal Gasification, Coal Liquefaction and export of coal.

WHEREAS, the nominated authority has, in accordance with provisions of the Coal Mines (Special Provisions) Act, 2015 (the "Act") and the Coal Mines (Special Provisions) Rules 2014 (the "Rules") conducted the auction of the mine;

AND WHEREAS the successful bidder is eligible to receive this vesting order with respect to the mine including, inter-alia, -

(a) the coal bearing land acquired by the prior allottee and the lands, in or adjacent to the coal mines used for coal mining operations acquired by the prior allottee; and

(b) any existing mine infrastructure as defined in clause (j) of sub-section (1) of section 3 of the Act;

AND WHEREAS the successful bidder has furnished a performance bank guarantee dated February 18, 2021 for an amount equal to INR 20,17,06,066.40 (Indian Rupees Twenty Crore Seventeen Lakh Six Thousand Sixty Six and Forty Paise) issued by Punjab National Bank in accordance with the tender document and in accordance with the provisions of sub-section (6) of section 8 of the Act and sub-rule (4) of rule 13 of the rules.

AND WHEREAS the successful bidder has entered into a Coal Mine Development and Production Agreement dated January 11, 2021("CMDPA") (as amended) with the nominated authority in accordance with the provisions of sub-rule (5) of rule 13.

NOW, THE NOMINATED AUTHORITY DOES ORDER:

1. On and from March 03, 2021 ("vesting date") and in accordance with the provisions of sub-section (4) of section 8 of the Act, with respect to the mine, the following shall stand fully and absolutely transferred and vested in the successful bidder, namely: -

(a) all the rights, title and interest of the prior allottee in and over the land and mine infrastructure free from all encumbrances;

(b) entitlement to a prospecting license, mining lease or prospecting license-cum-mining lease to be granted by the State Government with the terms and conditions of CMDPA forming a part of it on making an application;

(c) all statutory licences, permits, permissions, approvals or consents as per rules, required to undertake coal mining operations in the mine, if already issued by the Central Government, to the prior allottee on the same terms and conditions as were applicable to the prior allottee, as listed in the **Annexure 2**;

(d) entitlement to any statutory licence, permit, permission, approval or consent required to undertake coal mining operations in the mine, if already issued by the Central Government, to the prior allottee on making an application on the same terms and conditions as were applicable to the prior allottee, as listed in the **Annexure 3**;

(e) entitlement to any statutory licence, permit, permission, approval or consent required to undertake coal mining operations in the mine, if already issued by the State Government, to

the prior allottee on making an application on the same terms and conditions as were applicable to the prior allottee, as listed in the **Annexure 4;**

(f) rights appurtenant to the approved mining plan of the prior allottee;

(g) any subsisting contract in relation to coal mining operations, to which the prior allottee was a party and which is assumed, adopted and continued by the successful bidder and listed in the **Annexure 5** shall stand novated (by virtue of a deemed consent from the relevant party(ies)), in accordance with the provisions of sub-section (1) of section 11 of the Act in favour of the successful bidder for the residual term or residual performance of such contract;

2. The successful bidder may seek any change in the terms and conditions attached to such licence, permit, permission, approval or consent by making an application in accordance with applicable laws;

3. Hereinafter, the successful bidder shall be entitled to take possession of the mine as specified in **Annexure 1** without let or hindrance;

4. This vesting order is liable to be cancelled in accordance with the provisions of sub-rule (6) of rule 13.

.....

(By the nominated authority)

Annexures:

Annexure 1: Particulars of the mine

Part A – Description of the mine

Name of Coal Mine	**Marki Mangli-II**
Coal Field	Wardha Valley
Latitude	19°49'2"N to 19°50'31"N (Provisional)
Longitude	78°48'56"E to 78°50'32"E (Provisional)
Villages	Ruikot, Savli
Tehsil/ Taluka	Jhari-Jamni
District	Yavatmal
State	Maharashtra

Part B – Description of Land in relation to the mine

Sl	**Mouza**	**Survey No**	**Area as in deed (hectares)**	**Deed No**	**Date of agreement**
	1. Sale Deeds of Land within ML Area of MM-II				
1	Ruikot	5/1	2.680	193/2013	16-03-2013
2	Ruikot	5/2	1.340	78/2013	14-02-2013
3	Ruikot	9/1	3.100	108/2013	08-06-2012
4	Ruikot	9/1	1.240	780/2009	30-11-2009
5	Ruikot	9/2	2.850	781/2009	30-11-2009
6	Ruikot	28/3	1.510	474/2008	23-09-2005
7	Ruikot	28/3	1.210	475/2008	23-09-2008
8	Ruikot	28/3	1.210	476/2008	23-09-2008
9	Ruikot	56/1	1.620	692/2013	01-10-2013
10	Ruikot	60/1	2.460	290/2008	26-05-2008
11	Ruikot	60/2	1.250	382/2013	17-05-2013
12	Ruikot	60/3	1.230	291/2013	23-04-2013
13	Ruikot	60/4	1.230	289/2013	23-04-2013
14	Ruikot	61/2	1.620	748/2010	27-10-2010
15	Ruikot	61/2	1.620	747/2010	27-10-2010
16	Ruikot	61/3	2.030	156/2010	25-02-2010
17	Ruikot	61/3	2.020	155/2010	25-02-2010
18	Ruikot	61/4-A	2.330	693/2013	01-10-2013
19	Ruikot	61/4-B	2.320	261/2013	09-04-2013
20	Ruikot	63	1.820	585/2012	26-07-2012
21	Ruikot	64/1	1.630	538/2008	12-11-2008
22	Ruikot	64/1	1.630	537/2008	12-11-2008
23	Ruikot	64/2	1.610	195/2009	26-03-2009
24	Ruikot	65/2	2.810	536/2008	26-03-2008
	2. Sale Deeds of Land outside ML Area of MM-II				
25	Ruikot	10/1	2.480	94/2014	05-02-2014

Govt. of India M/o Coal Nominated Authority

Sl	Mouza	Survey No	Area as in deed (hectares)	Deed No	Date of agreement
26	Ruikot	10/1-B	1.240	217/2014	12-03-2014
27	Ruikot	10/2-A	1.250	98/2014	06-02-2014
28	Ruikot	11/1	2.770	631/2009	02-09-2009
29	Ruikot	13/1	2.020	573/2009	29-07-2009
30	Ruikot	13/2	2.020	514/2009	03-06-2009
31	Ruikot	13/3-A	1.760	99/2014	06-02-2014
32	Ruikot	20/2	1.210	689/2014	09-12-2014
	3. Agreement to Purchase - within ML Area of MM-II				
33	Ruikot	3	5.990	Agreement to purchase	09-04-2009
34	Ruikot	5/2	1.340	Agreement to purchase	27-11-2011
35	Ruikot	28	1.250	Agreement to purchase	05-01-2011
36	Ruikot	28	1.250	Agreement to purchase	05-01-2011
37	Ruikot	28	1.250	Agreement to purchase	05-01-2011
38	Ruikot	28	1.900	Agreement to purchase	05-01-2011
39	Ruikot	28	1.900	Agreement to purchase	05-01-2011
40	Ruikot	32	7.000	Agreement to purchase	15-07-2009
41	Ruikot	64/3	1.610	Agreement to purchase	22-07-2011
	4. Agreement to Purchase - outside ML Area of MM-II				
42	Ruikot	10/1-A	1.240	Agreement to purchase	06-03-2014
43	Ruikot	10/2-K	1.500	Agreement to purchase	13-05-2014
44	Ruikot	10/2-B	1.500	Agreement to purchase	13-05-2014
45	Ruikot	10/2	1.500	Agreement to purchase	13-05-2014
46	Ruikot	14/1-B	2.020	Agreement to purchase	29-12-2012
47	Ruikot	14/1-K	2.020	Agreement to purchase	28-12-2012
48	Ruikot	20/1	2.770	Agreement to purchase	29-12-2012
49	Ruikot	20/1-A	1.620	Agreement to purchase	28-12-2012
50	Ruikot	23/2	1.260	Agreement to purchase	29-12-2012
51	Ruikot	23/3	1.260	Agreement to purchase	29-12-2012
52	Ruikot	23/1-A	1.310	Agreement to purchase	28-12-2012
			100.61		

Part C – Description of Mine Infrastructure in relation to the mine

C1- Mine Infrastructure: Immovable Assets

S. No.	Head of Assets	Description (Nature of Assets)
1.	Buildings, Approach & Internal Roads	Approach & Internal Roads
2.	Buildings, Approach & Internal Roads	Approach & Internal Road (Hume Pipes)
3.	Buildings, Approach & Internal Roads	Fencing
4.	Buildings, Approach & Internal Roads	Access Trench
5.	Buildings, Approach & Internal Roads	Security Check Post
6.	Electrical Installation	High Mast Towers - 2 nos. – 10 metres height each

Annexure 2: Particulars of statutory licences, permits, permissions, approvals or consents issued by the Central Government which are being transferred along with this vesting order.

S. No	Statutory Clearance	Ministry/ Agency	Letter No.	Date
1.	Approval of Mining Plan and Mine Closure Plan	Ministry of Coal	13016/9/2004-CA-I	31.01.2008 /05.02.2008
2.	Mining Lease – Administrative Approval of the Central Government under Section 5 (1) and/ or Section 6 (1) of MMDR Act, 1957	Ministry of Coal	13016/9/2004-CA-I (Vol-III)	16.12.2009

Annexure 3: Particulars of statutory licences, permits, permissions, approvals or consents issued by the Central Government to be obtained on application by the successful bidder.

S. No	Statutory Clearance	Ministry/ Agency	Letter No.	Date
1.	Environment Clearance	Ministry of Environment and Forests	J-11015/425/2007-IA.II (M)	27.01.2011
2.	Mine opening permission	Ministry of Coal – CCO	CC/Tech/Open. Perm/Marki Mangli II OC/ '11-'12	28.11.2011
3.	Permission from DGMS for Mine Opening	Ministry of Labour – DGMS	Kshetra Sankhya - II/010980/C/B/08/ 2013 /730	24.05.2013

Annexure 4: Particulars of statutory licences, permits, permissions, approvals or consents issued by the State Government to be obtained on application by the successful bidder.

S. No	Statutory Clearance	Ministry/ Agency	Letter No.	Date
1.	Consent to Operate	State Pollution Control Board	BO/RO (P&P)/EIC No. CH-0166-09/E/CC-444	24.11.2009
2.	Grant of Mining Lease	Government of Maharashtra	MMN-1008/C.R.2431/IND-9	04.03.2010
3.	Land Ownership - Permission to purchase Agriculture Land for Mining Operation was granted by State Government under Mumbai Tenancy and Agriculture Land (BTAL) Act, 1958 for combined for Marki Mangli – II, III & IV Coal Blocks. Land purchased through Sale Deed by direct negotiation with land owners	Government of Maharashtra	DI/Land/Permission/68(2011)/2012/C-6069	06.07.2012

Annexure 5: Particulars of the contracts adopted by the successful bidder

The Successful Bidder does not intend to adopt and continue with any of the contracts of the Prior Allottee.

Annexure 2A

BOUNDARY AS PER VESTING ORDER				
Pints	Longitude (WGS84)	Latitude (WGS84)		
A	78°48'56.00"E	19°49'2.00"N		
B	78°48'56.00"E	19°50'31.00"N		
C	78°50'32.00"E	19°50'31.00"N		
D	78°50'32.00"E	19°49'2.00"N		
Point No.	Ground Easting (m)	Ground Northing (m)	WGS84 Logitude	WGS84 Latitude
BP-1/162	273706.215	2192707.681	78°50'22.44158"E	19°49'02.17812"N
BP-2/162	273660.051	2192724.839	78°50'20.84824"E	19°49'02.71673"N
BP-3/162	273611.751	2192744.383	78°50'19.18051"E	19°49'03.33199"N
BP-4/162	273565.021	2192761.236	78°50'17.56788"E	19°49'03.86044"N
BP-5/162	273518.435	2192776.921	78°50'15.96069"E	19°49'04.35098"N
BP-6/162	273470.566	2192794.247	78°50'14.30872"E	19°49'04.89431"N
BP-7/162	273423.363	2192809.764	78°50'12.68041"E	19°49'05.37911"N
BP-8/162	273383.286	2192825.094	78°50'11.29696"E	19°49'05.86080"N
BP-9/162	273336.612	2192840.173	78°50'09.68702"E	19°49'06.33155"N
BP-10/162	273293.712	2192866.474	78°50'08.20180"E	19°49'07.16873"N
BP-11/162	273251.331	2192891.986	78°50'06.73473"E	19°49'07.98046"N
BP-12/162	273209.881	2192918.72	78°50'05.29908"E	19°49'08.83228"N
BP-13/162	273164.323	2192944.904	78°50'03.72256"E	19°49'09.66452"N
BP-14/162	273122.764	2192972.302	78°50'02.28290"E	19°49'10.53789"N
BP-15/162	273082.092	2192998.605	78°50'00.87418"E	19°49'11.37602"N
BP-16/162	273040.179	2193024.738	78°49'59.42288"E	19°49'12.20811"N
BP-17/162	272998.019	2193051.894	78°49'57.96266"E	19°49'13.07335"N
BP-18/162	272948.875	2193082.355	78°49'56.26104"E	19°49'14.04311"N
BP-19/162	272909.501	2193113.618	78°49'54.89470"E	19°49'15.04303"N
BP-20/162	272870.919	2193143.539	78°49'53.55614"E	19°49'15.99963"N
BP-21/162	272831.044	2193174.573	78°49'52.17269"E	19°49'16.99190"N
BP-22/162	272791.756	2193205.872	78°49'50.80926"E	19°49'17.99298"N
BP-23/162	272751.461	2193235.75	78°49'49.41188"E	19°49'18.94747"N
BP-24/162	272711.861	2193268.14	78°49'48.03724"E	19°49'19.98392"N
BP-25/162	272666.698	2193301.789	78°49'46.47097"E	19°49'21.05896"N
BP-26/162	272633.913	2193327.705	78°49'45.33330"E	19°49'21.88776"N
BP-27/162	272593.376	2193358.18	78°49'43.92729"E	19°49'22.86153"N
BP-28/162	272536.523	2193404.353	78°49'41.95390"E	19°49'24.33881"N
BP-29/162	272494.814	2193432.293	78°49'40.50876"E	19°49'25.22968"N
BP-30/162	272452.87	2193459.469	78°49'39.05586"E	19°49'26.09563"N
BP-31/162	272411.156	2193486.888	78°49'37.61077"E	19°49'26.96956"N
BP-32/162	272370.288	2193513.496	78°49'36.19510"E	19°49'27.81745"N
BP-33/162	272328.923	2193541.158	78°49'34.76190"E	19°49'28.69941"N
BP-34/162	272286.844	2193567.85	78°49'33.30458"E	19°49'29.54954"N
BP-35/162	272244.794	2193596.255	78°49'31.84750"E	19°49'30.45537"N
BP-36/162	272204.089	2193623.62	78°49'30.43705"E	19°49'31.32794"N
BP-37/162	272159.626	2193652.263	78°49'28.89699"E	19°49'32.24046"N
BP-38/162	272117.881	2193679.972	78°49'27.45068"E	19°49'33.12378"N
BP-39/162	272075.732	2193707.952	78°49'25.99036"E	19°49'34.01573"N
BP-40/162	272035.139	2193736.512	78°49'24.58323"E	19°49'34.92717"N
BP-41/162	271995.424	2193761.257	78°49'23.20797"E	19°49'35.71496"N
BP-42/162	271953.389	2193786.593	78°49'21.75272"E	19°49'36.52100"N
BP-43/162	271912.557	2193814.154	78°49'20.33783"E	19°49'37.39987"N
BP-44/162	271869.646	2193841.065	78°49'18.85180"E	19°49'38.25672"N
BP-45/162	271827.238	2193869.686	78°49'17.38226"E	19°49'39.16938"N
BP-46/162	271782.483	2193896.986	78°49'15.83269"E	19°49'40.03811"N
BP-47/162	271743.055	2193923.541	78°49'14.46645"E	19°49'40.88482"N
BP-48/162	271700.963	2193955.668	78°49'13.00624"E	19°49'41.91160"N
BP-49/162	271660.036	2193982.054	78°49'11.58855"E	19°49'42.75220"N
BP-50/162	271625.579	2194003.542	78°49'10.39532"E	19°49'43.43629"N
BP-51/162	271584.988	2194032.628	78°49'08.98799"E	19°49'44.36478"N
BP-52/162	271546.445	2194059.606	78°49'07.65194"E	19°49'45.22563"N
BP-53/162	271505.696	2194088.141	78°49'06.23943"E	19°49'46.13618"N
BP-54/162	271463.512	2194118.653	78°49'04.77672"E	19°49'47.11034"N
BP-55/162	271424.912	2194145.807	78°49'03.43862"E	19°49'47.97688"N
BP-56/162	271383.677	2194175.271	78°49'02.00897"E	19°49'48.91739"N
BP-57/162	271343.065	2194203.443	78°49'00.60130"E	19°49'49.81616"N
8/162	271301.847	2194233.4	78°48'59.17200"E	19°49'50.77366"N

Prepared By INDIAN MINE PLANNERS AND CONSULTANTS On 05/07/2022

BOUNDARY AS PER VESTING ORDER				
BP-59/162	271260.882	2194261.276	78°48'57.75234"E	19°49'51.66171"N
BP-60/162	271228.144	2194286.223	78°48'56.61658"E	19°49'52.45892"N
BP-61/162	271261.887	2194323.088	78°48'57.75941"E	19°49'53.67155"N
BP-62/162	271295.037	2194361.296	78°48'58.88125"E	19°49'54.92761"N
BP-63/162	271328.416	2194398.594	78°49'00.01134"E	19°49'56.15417"N
BP-64/162	271354.419	2194429.034	78°49'00.89113"E	19°49'57.15467"N
BP-65/162	271372.097	2194449.556	78°49'01.48934"E	19°49'57.82924"N
BP-66/162	271394.921	2194493.321	78°49'02.25396"E	19°49'59.26160"N
BP-67/162	271415.174	2194532.935	78°49'02.93216"E	19°50'00.55791"N
BP-68/162	271433.105	2194588.772	78°49'03.52336"E	19°50'02.38068"N
BP-69/162	271437.094	2194621.77	78°49'03.64572"E	19°50'03.45508"N
BP-70/162	271441.471	2194673.504	78°49'03.77311"E	19°50'05.13874"N
BP-71/162	271425.739	2194720.127	78°49'03.21194"E	19°50'06.64777"N
BP-72/162	271418.967	2194744.602	78°49'02.96841"E	19°50'07.44058"N
BP-73/162	271398.418	2194823.372	78°49'02.22749"E	19°50'09.99267"N
BP-74/162	271418.059	2194898.389	78°49'02.86890"E	19°50'12.43967"N
BP-75/162	271452.292	2194949.899	78°49'04.02208"E	19°50'14.12858"N
BP-76/162	271486.557	2194973.557	78°49'05.18893"E	19°50'14.91012"N
BP-77/162	271512.908	2194980.777	78°49'06.09083"E	19°50'15.15788"N
BP-78/162	271562.077	2194995.672	78°49'07.77360"E	19°50'15.66080"N
BP-79/162	271635.681	2195008.109	78°49'10.29653"E	19°50'16.09799"N
BP-80/162	271681.352	2195026.153	78°49'11.85776"E	19°50'16.70181"N
BP-81/162	271758.801	2195050.674	78°49'14.50747"E	19°50'17.53346"N
BP-82/162	271808.801	2195061.677	78°49'16.22052"E	19°50'17.91017"N
BP-83/162	271858.245	2195070.435	78°49'17.91529"E	19°50'18.21564"N
BP-84/162	271909.643	2195079.54	78°49'19.67704"E	19°50'18.53320"N
BP-85/162	271961.817	2195086.544	78°49'21.46621"E	19°50'18.78474"N
BP-86/162	271986.141	2195132.045	78°49'22.28188"E	19°50'20.27218"N
BP-87/162	272012.381	2195176.503	78°49'23.16345"E	19°50'21.73044"N
BP-88/162	272038.27	2195212.082	78°49'24.03731"E	19°50'22.89597"N
BP-89/162	272074.46	2195259.354	78°49'25.25949"E	19°50'24.44989"N
BP-90/162	272082.39	2195308.838	78°49'25.51021"E	19°50'26.05991"N
BP-91/162	272087.407	2195355.477	78°49'25.66172"E	19°50'27.58018"N
BP-92/162	272105.515	2195405.686	78°49'26.26177"E	19°50'29.21805"N
BP-93/162	272122.325	2195454.991	78°49'26.81726"E	19°50'30.82991"N
BP-94/162	272143.587	2195441.912	78°49'27.55353"E	19°50'30.41364"N
BP-95/162	272181.955	2195411.855	78°49'28.88520"E	19°50'29.45064"N
BP-96/162	272218.113	2195376.993	78°49'30.14270"E	19°50'28.33444"N
BP-97/162	272254.78	2195343.61	78°49'31.41722"E	19°50'27.26454"N
BP-98/162	272307.13	2195299.082	78°49'33.23545"E	19°50'25.83891"N
BP-99/162	272341.521	2195264.673	78°49'34.43222"E	19°50'24.73469"N
BP-100/162	272374.695	2195231.535	78°49'35.58659"E	19°50'23.67131"N
BP-101/162	272413.125	2195194.302	78°49'36.92334"E	19°50'22.47700"N
BP-102/162	272447.539	2195162.573	78°49'38.11969"E	19°50'21.45990"N
BP-103/162	272482.577	2195127.763	78°49'39.33885"E	19°50'20.34293"N
BP-104/162	272504.744	2195105.4	78°49'40.11029"E	19°50'19.62522"N
BP-105/162	272543.477	2195073.578	78°49'41.45504"E	19°50'18.60692"N
BP-106/162	272583.167	2195040.494	78°49'42.83323"E	19°50'17.54799"N
BP-107/162	272621.007	2195008.885	78°49'44.14722"E	19°50'16.53622"N
BP-108/162	272659.501	2194976.812	78°49'45.48386"E	19°50'15.50965"N
BP-109/162	272699.285	2194944.619	78°49'46.86487"E	19°50'14.47971"N
BP-110/162	272739.624	2194909.857	78°49'48.26606"E	19°50'13.36649"N
BP-111/162	272777.199	2194878.421	78°49'49.57085"E	19°50'12.36023"N
BP-112/162	272815.412	2194847.602	78°49'50.89725"E	19°50'11.37433"N
BP-113/162	272853.948	2194815.773	78°49'52.23522"E	19°50'10.35569"N
BP-114/162	272892.453	2194785.558	78°49'53.57138"E	19°50'09.38951"N
BP-115/162	272938.553	2194749.195	78°49'55.17122"E	19°50'08.22662"N
BP-116/162	272965.357	2194724.306	78°49'56.10302"E	19°50'07.42868"N
BP-117/162	272991.98	2194702.723	78°49'57.02719"E	19°50'06.73814"N
BP-118/162	273020.522	2194658.359	78°49'58.02731"E	19°50'05.30781"N
BP-119/162	273047.82	2194618.203	78°49'58.98282"E	19°50'04.01377"N
BP-120/162	273077.207	2194577.388	78°50'00.01041"E	19°50'02.69917"N
BP-121/162	273105.869	2194535.716	78°50'01.01347"E	19°50'01.35641"N
BP-122/162	273134.477	2194493.281	78°50'02.01498"E	19°49'59.98879"N
BP-123/162	273174.585	2194435.891	78°50'03.41815"E	19°49'58.13983"N
BP-124/162	273205.086	2194397.316	78°50'04.48300"E	19°49'56.89850"N
25/162	273236.463	2194358.4	78°50'05.57807"E	19°49'55.64762"N
26/162	273266.826	2194319.4	78°50'06.63833"E	19°49'54.39360"N

Prepared By INDIAN MINE PLANNERS AND CONSULTANTS On 05/07/2022

BOUNDARY AS PER VESTING ORDER				
BP-127/162	273288.033	2194291.724	78°50'07.37908"E	19°49'53.50036"N
BP-128/162	273331.206	2194239.667	78°50'08.88519"E	19°49'51.82602"N
BP-129/162	273374.701	2194184.413	78°50'10.40376"E	19°49'50.04787"N
BP-130/162	273399.152	2194143.203	78°50'11.26186"E	19°49'48.71834"N
BP-131/162	273427.384	2194098.266	78°50'12.25153"E	19°49'47.26923"N
BP-132/162	273452.792	2194056.492	78°50'13.14279"E	19°49'45.92176"N
BP-133/162	273471.364	2194008.968	78°50'13.80171"E	19°49'44.38453"N
BP-134/162	273490.76	2193963.633	78°50'14.48797"E	19°49'42.91881"N
BP-135/162	273507.618	2193920.725	78°50'15.08597"E	19°49'41.53088"N
BP-136/162	273529.283	2193869.794	78°50'15.85264"E	19°49'39.88420"N
BP-137/162	273546.076	2193825.855	78°50'16.44889"E	19°49'38.46273"N
BP-138/162	273565.487	2193778.179	78°50'17.13668"E	19°49'36.92090"N
BP-139/162	273579.578	2193742.779	78°50'17.63632"E	19°49'35.77593"N
BP-140/162	273603.262	2193701.464	78°50'18.46811"E	19°49'34.44267"N
BP-141/162	273627.896	2193657.418	78°50'19.33374"E	19°49'33.02101"N
BP-142/162	273651.316	2193614.111	78°50'20.15733"E	19°49'31.62286"N
BP-143/162	273676.207	2193571.317	78°50'21.03121"E	19°49'30.24202"N
BP-144/162	273714.713	2193502.052	78°50'22.38445"E	19°49'28.00625"N
BP-145/162	273740.341	2193457.632	78°50'23.28435"E	19°49'26.57285"N
BP-146/162	273764.874	2193414.11	78°50'24.14622"E	19°49'25.16817"N
BP-147/162	273791.104	2193370.084	78°50'25.06664"E	19°49'23.74780"N
BP-148/162	273815.864	2193326.788	78°50'25.93622"E	19°49'22.35058"N
BP-149/162	273841.942	2193281.357	78°50'26.85202"E	19°49'20.88447"N
BP-150/162	273867.316	2193238.45	78°50'27.74250"E	19°49'19.50013"N
BP-151/162	273897.951	2193184.698	78°50'28.81851"E	19°49'17.76541"N
BP-152/162	273917.962	2193137.906	78°50'29.52644"E	19°49'16.25255"N
BP-153/162	273938.59	2193093.295	78°50'30.25463"E	19°49'14.81084"N
BP-154/162	273969.389	2193023.069	78°50'31.34346"E	19°49'12.54062"N
BP-155/162	273970.651	2192975.479	78°50'31.40772"E	19°49'10.99402"N
BP-156/162	273974.055	2192933.64	78°50'31.54299"E	19°49'09.63526"N
BP-157/162	273955.932	2192854.547	78°50'30.95518"E	19°49'07.05644"N
BP-158/162	273932.713	2192823.35	78°50'30.17125"E	19°49'06.03261"N
BP-159/162	273886.853	2192787.806	78°50'28.61152"E	19°49'04.85802"N
BP-160/162	273842.165	2192759.93	78°50'27.08866"E	19°49'03.93322"N
BP-161/162	273802.277	2192732.522	78°50'25.73048"E	19°49'03.02563"N
BP-162/162	273755.169	2192720.934	78°50'24.11737"E	19°49'02.62934"N

Annexure 2B

INDIAN MINE PLANNERS & CONSULTANTS

(Geology, Mining and Environment Consultants)
ISO 9001:2015 Certified Company
An Accredited Prospecting Agency (APA), Mining Plan Preparing Agency (MPPA) & EIA Consultant Organisation by QCI-NABET

Annexure-II

Certification of Project Area, Proposed Mining Lease area and Geological Block area

Certified that the Cardinal Points considered for preparation of the Mining Plan and Mine Closure Plan (Revision-01) of Marki Mangli-II Coal Mine situated in Wardha Valley Coalfield, Dist.- Yavatmal, Maharastra State is in line with the vesting order No NA-104/3/2020-NA dated 03.03.2021 and does not encroach any other adjacent block. All proposed mining activities, overburden dumping area and infrastructure locations are within the cardinal point coordinates of vested geological block. The geological block area and the project area of Marki Mangli-II Coal Mine are as under:

1) Geological Block area – 339.467 Ha
2) Project area – 339.467 Ha

Vesting Order Coordinates vide order No NA-104/3/2020-NA dated 03.03.2021 and Cardinal Points Coordinates of the Geological Block Boundary by DGPS WGS_84 system are as under:

BOUNDARY AS PER VESTING ORDER	
Longitude (WGS84)	Latitude (WGS84)
78°48'56.00"E	19°49'2.00"N
78°48'56.00"E	19°50'31.00"N
78°50'32.00"E	19°50'31.00"N
78°50'32.00"E	19°49'2.00"N

Geological Vested Block Boundary Coordinates by DGPS WGS_84 System

Sl. No.	Point No.	Ground Easting (m)	Ground Northing (m)	WGS84 Longitude	WGS84 Latitude
1	BP-1/162	273706.215	2192707.681	78°50'22.44158"E	19°49'02.17812"N
2	BP-2/162	273660.051	2192724.839	78°50'20.84824"E	19°49'02.71673"N

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Phone: (033) 4073 3609; Cell: 09432240491, 09836003124, 07909060885

Website: www.impcon.co.in, E-mail:impcon.kolkata@gmail.com

Geological Vested Block Boundary Coordinates by DGPS WGS_84 System					
Sl. No.	Point No.	Ground Easting (m)	Ground Northing (m)	WGS84 Longitude	WGS84 Latitude
3	BP-3/162	273611.751	2192744.383	78°50'19.18051"E	19°49'03.33199"N
4	BP-4/162	273565.021	2192761.236	78°50'17.56788"E	19°49'03.86044"N
5	BP-5/162	273518.435	2192776.921	78°50'15.96069"E	19°49'04.35098"N
6	BP-6/162	273470.566	2192794.247	78°50'14.30872"E	19°49'04.89431"N
7	BP-7/162	273423.363	2192809.764	78°50'12.68041"E	19°49'05.37911"N
8	BP-8/162	273383.286	2192825.094	78°50'11.29696"E	19°49'05.86080"N
9	BP-9/162	273336.612	2192840.173	78°50'09.68702"E	19°49'06.33155"N
10	BP-10/162	273293.712	2192866.474	78°50'08.20180"E	19°49'07.16873"N
11	BP-11/162	273251.331	2192891.986	78°50'06.73473"E	19°49'07.98046"N
12	BP-12/162	273209.881	2192918.720	78°50'05.29908"E	19°49'08.83228"N
13	BP-13/162	273164.323	2192944.904	78°50'03.72256"E	19°49'09.66452"N
14	BP-14/162	273122.764	2192972.302	78°50'02.28290"E	19°49'10.53789"N
15	BP-15/162	273082.092	2192998.605	78°50'00.87418"E	19°49'11.37602"N
16	BP-16/162	273040.179	2193024.738	78°49'59.42288"E	19°49'12.20811"N
17	BP-17/162	272998.019	2193051.894	78°49'57.96266"E	19°49'13.07335"N
18	BP-18/162	272948.875	2193082.355	78°49'56.26104"E	19°49'14.04311"N
19	BP-19/162	272909.501	2193113.618	78°49'54.89470"E	19°49'15.04303"N
20	BP-20/162	272870.919	2193143.539	78°49'53.55614"E	19°49'15.99963"N
21	BP-21/162	272831.044	2193174.573	78°49'52.17269"E	19°49'16.99190"N

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Geological Vested Block Boundary Coordinates by DGPS WGS_84 System					
Sl. No.	Point No.	Ground Easting (m)	Ground Northing (m)	WGS84 Longitude	WGS84 Latitude
22	BP-22/162	272791.756	2193205.872	78°49'50.80926"E	19°49'17.99298"N
23	BP-23/162	272751.461	2193235.750	78°49'49.41188"E	19°49'18.94747"N
24	BP-24/162	272711.861	2193268.140	78°49'48.03724"E	19°49'19.98392"N
25	BP-25/162	272666.698	2193301.789	78°49'46.47097"E	19°49'21.05896"N
26	BP-26/162	272633.913	2193327.705	78°49'45.33330"E	19°49'21.88776"N
27	BP-27/162	272593.376	2193358.180	78°49'43.92729"E	19°49'22.86153"N
28	BP-28/162	272536.523	2193404.353	78°49'41.95390"E	19°49'24.33881"N
29	BP-29/162	272494.814	2193432.293	78°49'40.50876"E	19°49'25.22968"N
30	BP-30/162	272452.870	2193459.469	78°49'39.05586"E	19°49'26.09563"N
31	BP-31/162	272411.156	2193486.888	78°49'37.61077"E	19°49'26.96956"N
32	BP-32/162	272370.288	2193513.496	78°49'36.19510"E	19°49'27.81745"N
33	BP-33/162	272328.923	2193541.158	78°49'34.76190"E	19°49'28.69941"N
34	BP-34/162	272286.844	2193567.850	78°49'33.30458"E	19°49'29.54954"N
35	BP-35/162	272244.794	2193596.255	78°49'31.84750"E	19°49'30.45537"N
36	BP-36/162	272204.089	2193623.620	78°49'30.43705"E	19°49'31.32794"N
37	BP-37/162	272159.626	2193652.263	78°49'28.89699"E	19°49'32.24046"N
38	BP-38/162	272117.881	2193679.972	78°49'27.45068"E	19°49'33.12378"N
39	BP-39/162	272075.732	2193707.952	78°49'25.99036"E	19°49'34.01573"N
40	BP-40/162	272035.139	2193736.512	78°49'24.58323"E	19°49'34.92717"N

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Geological Vested Block Boundary Coordinates by DGPS WGS_84 System					
Sl. No.	Point No.	Ground Easting (m)	Ground Northing (m)	WGS84 Longitude	WGS84 Latitude
41	BP-41/162	271995.424	2193761.257	78°49'23.20797"E	19°49'35.71496"N
42	BP-42/162	271953.389	2193786.593	78°49'21.75272"E	19°49'36.52100"N
43	BP-43/162	271912.557	2193814.154	78°49'20.33783"E	19°49'37.39987"N
44	BP-44/162	271869.646	2193841.065	78°49'18.85180"E	19°49'38.25672"N
45	BP-45/162	271827.238	2193869.686	78°49'17.38226"E	19°49'39.16938"N
46	BP-46/162	271782.483	2193896.986	78°49'15.83269"E	19°49'40.03811"N
47	BP-47/162	271743.055	2193923.541	78°49'14.46645"E	19°49'40.88482"N
48	BP-48/162	271700.963	2193955.668	78°49'13.00624"E	19°49'41.91160"N
49	BP-49/162	271660.036	2193982.054	78°49'11.58855"E	19°49'42.75220"N
50	BP-50/162	271625.579	2194003.542	78°49'10.39532"E	19°49'43.43629"N
51	BP-51/162	271584.988	2194032.628	78°49'08.98799"E	19°49'44.36478"N
52	BP-52/162	271546.445	2194059.606	78°49'07.65194"E	19°49'45.22563"N
53	BP-53/162	271505.696	2194088.141	78°49'06.23943"E	19°49'46.13618"N
54	BP-54/162	271463.512	2194118.653	78°49'04.77672"E	19°49'47.11034"N
55	BP-55/162	271424.912	2194145.807	78°49'03.43862"E	19°49'47.97688"N
56	BP-56/162	271383.677	2194175.271	78°49'02.00897"E	19°49'48.91739"N
57	BP-57/162	271343.065	2194203.443	78°49'00.60130"E	19°49'49.81616"N
58	BP-58/162	271301.847	2194233.429	78°48'59.17200"E	19°49'50.77366"N
59	BP-59/162	271260.882	2194261.276	78°48'57.75234"E	19°49'51.66171"N

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Geological Vested Block Boundary Coordinates by DGPS WGS_84 System					
Sl. No.	Point No.	Ground Easting (m)	Ground Northing (m)	WGS84 Longitude	WGS84 Latitude
60	BP-60/162	271228.144	2194286.223	78°48'56.61658"E	19°49'52.45892"N
61	BP-61/162	271261.887	2194323.088	78°48'57.75941"E	19°49'53.67155"N
62	BP-62/162	271295.037	2194361.296	78°48'58.88125"E	19°49'54.92761"N
63	BP-63/162	271328.416	2194398.594	78°49'00.01134"E	19°49'56.15417"N
64	BP-64/162	271354.419	2194429.034	78°49'00.89113"E	19°49'57.15467"N
65	BP-65/162	271372.097	2194449.556	78°49'01.48934"E	19°49'57.82924"N
66	BP-66/162	271394.921	2194493.321	78°49'02.25396"E	19°49'59.26160"N
67	BP-67/162	271415.174	2194532.935	78°49'02.93216"E	19°50'00.55791"N
68	BP-68/162	271433.105	2194588.772	78°49'03.52336"E	19°50'02.38068"N
69	BP-69/162	271437.094	2194621.770	78°49'03.64572"E	19°50'03.45508"N
70	BP-70/162	271441.471	2194673.504	78°49'03.77311"E	19°50'05.13874"N
71	BP-71/162	271425.739	2194720.127	78°49'03.21194"E	19°50'06.64777"N
72	BP-72/162	271418.967	2194744.602	78°49'02.96841"E	19°50'07.44058"N
73	BP-73/162	271398.418	2194823.372	78°49'02.22749"E	19°50'09.99267"N
74	BP-74/162	271418.059	2194898.389	78°49'02.86890"E	19°50'12.43967"N
75	BP-75/162	271452.292	2194949.899	78°49'04.02208"E	19°50'14.12858"N
76	BP-76/162	271486.557	2194973.557	78°49'05.18893"E	19°50'14.91012"N
77	BP-77/162	271512.908	2194980.777	78°49'06.09083"E	19°50'15.15788"N
78	BP-78/162	271562.077	2194995.672	78°49'07.77360"E	19°50'15.66080"N

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Sl. No.	Point No.	Ground Easting (m)	Ground Northing (m)	WGS84 Longitude	WGS84 Latitude
79	BP-79/162	271635.681	2195008.109	78°49'10.29653"E	19°50'16.09799"N
80	BP-80/162	271681.352	2195026.153	78°49'11.85776"E	19°50'16.70181"N
81	BP-81/162	271758.801	2195050.674	78°49'14.50747"E	19°50'17.53346"N
82	BP-82/162	271808.801	2195061.677	78°49'16.22052"E	19°50'17.91017"N
83	BP-83/162	271858.245	2195070.435	78°49'17.91529"E	19°50'18.21564"N
84	BP-84/162	271909.643	2195079.540	78°49'19.67704"E	19°50'18.53320"N
85	BP-85/162	271961.817	2195086.544	78°49'21.46621"E	19°50'18.78474"N
86	BP-86/162	271986.141	2195132.045	78°49'22.28188"E	19°50'20.27218"N
87	BP-87/162	272012.381	2195176.503	78°49'23.16345"E	19°50'21.73044"N
88	BP-88/162	272038.270	2195212.082	78°49'24.03731"E	19°50'22.89597"N
89	BP-89/162	272074.460	2195259.354	78°49'25.25949"E	19°50'24.44989"N
90	BP-90/162	272082.390	2195308.838	78°49'25.51021"E	19°50'26.05991"N
91	BP-91/162	272087.407	2195355.477	78°49'25.66172"E	19°50'27.58018"N
92	BP-92/162	272105.515	2195405.686	78°49'26.26177"E	19°50'29.21805"N
93	BP-93/162	272122.325	2195454.991	78°49'26.81726"E	19°50'30.82991"N
94	BP-94/162	272143.587	2195441.912	78°49'27.55353"E	19°50'30.41364"N
95	BP-95/162	272181.955	2195411.855	78°49'28.88520"E	19°50'29.45064"N
96	BP-96/162	272218.113	2195376.993	78°49'30.14270"E	19°50'28.33444"N
97	BP-97/162	272254.780	2195343.610	78°49'31.41722"E	19°50'27.26454"N

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Sl. No.	Point No.	Ground Easting (m)	Ground Northing (m)	WGS84 Longitude	WGS84 Latitude
98	BP-98/162	272307.130	2195299.082	78°49'33.23545"E	19°50'25.83891"N
99	BP-99/162	272341.521	2195264.673	78°49'34.43222"E	19°50'24.73469"N
100	BP-100/162	272374.695	2195231.535	78°49'35.58659"E	19°50'23.67131"N
101	BP-101/162	272413.125	2195194.302	78°49'36.92334"E	19°50'22.47700"N
102	BP-102/162	272447.539	2195162.573	78°49'38.11969"E	19°50'21.45990"N
103	BP-103/162	272482.577	2195127.763	78°49'39.33885"E	19°50'20.34293"N
104	BP-104/162	272504.744	2195105.400	78°49'40.11029"E	19°50'19.62522"N
105	BP-105/162	272543.477	2195073.578	78°49'41.45504"E	19°50'18.60692"N
106	BP-106/162	272583.167	2195040.494	78°49'42.83323"E	19°50'17.54799"N
107	BP-107/162	272621.007	2195008.885	78°49'44.14722"E	19°50'16.53622"N
108	BP-108/162	272659.501	2194976.812	78°49'45.48386"E	19°50'15.50965"N
109	BP-109/162	272699.285	2194944.619	78°49'46.86487"E	19°50'14.47971"N
110	BP-110/162	272739.624	2194909.857	78°49'48.26606"E	19°50'13.36649"N
111	BP-111/162	272777.199	2194878.421	78°49'49.57085"E	19°50'12.36023"N
112	BP-112/162	272815.412	2194847.602	78°49'50.89725"E	19°50'11.37433"N
113	BP-113/162	272853.948	2194815.773	78°49'52.23522"E	19°50'10.35569"N
114	BP-114/162	272892.453	2194785.558	78°49'53.57138"E	19°50'09.38951"N
115	BP-115/162	272938.553	2194749.195	78°49'55.17122"E	19°50'08.22662"N
116	BP-116/162	272965.357	2194724.306	78°49'56.10302"E	19°50'07.42868"N

Corp Office: GE-61, Rajdanga Main Road, Behind Vivanta Hotel, EM Bye Pass, Kolkata-700107

Phone: (033) 4073 3609; Cell: 09432240491, 09836003124, 07909060885

Website: www.impcon.co.in, E-mail:impcon.kolkata@gmail.com

Geological Vested Block Boundary Coordinates by DGPS WGS_84 System					
Sl. No.	Point No.	Ground Easting (m)	Ground Northing (m)	WGS84 Longitude	WGS84 Latitude
117	BP-117/162	272991.980	2194702.723	78°49'57.02719"E	19°50'06.73814"N
118	BP-118/162	273020.522	2194658.359	78°49'58.02731"E	19°50'05.30781"N
119	BP-119/162	273047.820	2194618.203	78°49'58.98282"E	19°50'04.01377"N
120	BP-120/162	273077.207	2194577.388	78°50'00.01041"E	19°50'02.69917"N
121	BP-121/162	273105.869	2194535.716	78°50'01.01347"E	19°50'01.35641"N
122	BP-122/162	273134.477	2194493.281	78°50'02.01498"E	19°49'59.98879"N
123	BP-123/162	273174.585	2194435.891	78°50'03.41815"E	19°49'58.13983"N
124	BP-124/162	273205.086	2194397.316	78°50'04.48300"E	19°49'56.89850"N
125	BP-125/162	273236.463	2194358.436	78°50'05.57807"E	19°49'55.64762"N
126	BP-126/162	273266.826	2194319.472	78°50'06.63833"E	19°49'54.39360"N
127	BP-127/162	273288.033	2194291.724	78°50'07.37908"E	19°49'53.50036"N
128	BP-128/162	273331.206	2194239.667	78°50'08.88519"E	19°49'51.82602"N
129	BP-129/162	273374.701	2194184.413	78°50'10.40376"E	19°49'50.04787"N
130	BP-130/162	273399.152	2194143.203	78°50'11.26186"E	19°49'48.71834"N
131	BP-131/162	273427.384	2194098.266	78°50'12.25153"E	19°49'47.26923"N
132	BP-132/162	273452.792	2194056.492	78°50'13.14279"E	19°49'45.92176"N
133	BP-133/162	273471.364	2194008.968	78°50'13.80171"E	19°49'44.38453"N
134	BP-134/162	273490.760	2193963.633	78°50'14.48797"E	19°49'42.91881"N
135	BP-135/162	273507.618	2193920.725	78°50'15.08597"E	19°49'41.53088"N

INDIAN MINE PLANNERS & CONSULTANTS
QCI-NABET
Mining Plan
Preparing Agency
(MPPA)
ISO 9001 : 2015

Corp Office: GE-61, Rajdanga Main Road, Behind Vivanta Hotel, EM Bye Pass, Kolkata-700107

Phone: (033) 4073 3609; Cell: 09432240491, 09836003124, 07909060885

Website: www.impcon.co.in, E-mail:impcon.kolkata@gmail.com

Geological Vested Block Boundary Coordinates by DGPS WGS_84 System					
Sl. No.	Point No.	Ground Easting (m)	Ground Northing (m)	WGS84 Longitude	WGS84 Latitude
136	BP-136/162	273529.283	2193869.794	78°50'15.85264"E	19°49'39.88420"N
137	BP-137/162	273546.076	2193825.855	78°50'16.44889"E	19°49'38.46273"N
138	BP-138/162	273565.487	2193778.179	78°50'17.13668"E	19°49'36.92090"N
139	BP-139/162	273579.578	2193742.779	78°50'17.63632"E	19°49'35.77593"N
140	BP-140/162	273603.262	2193701.464	78°50'18.46811"E	19°49'34.44267"N
141	BP-141/162	273627.896	2193657.418	78°50'19.33374"E	19°49'33.02101"N
142	BP-142/162	273651.316	2193614.111	78°50'20.15733"E	19°49'31.62286"N
143	BP-143/162	273676.207	2193571.317	78°50'21.03121"E	19°49'30.24202"N
144	BP-144/162	273714.713	2193502.052	78°50'22.38445"E	19°49'28.00625"N
145	BP-145/162	273740.341	2193457.632	78°50'23.28435"E	19°49'26.57285"N
146	BP-146/162	273764.874	2193414.110	78°50'24.14622"E	19°49'25.16817"N
147	BP-147/162	273791.104	2193370.084	78°50'25.06664"E	19°49'23.74780"N
148	BP-148/162	273815.864	2193326.788	78°50'25.93622"E	19°49'22.35058"N
149	BP-149/162	273841.942	2193281.357	78°50'26.85202"E	19°49'20.88447"N
150	BP-150/162	273867.316	2193238.450	78°50'27.74250"E	19°49'19.50013"N
151	BP-151/162	273897.951	2193184.698	78°50'28.81851"E	19°49'17.76541"N
152	BP-152/162	273917.962	2193137.906	78°50'29.52644"E	19°49'16.25255"N
153	BP-153/162	273938.590	2193093.295	78°50'30.25463"E	19°49'14.81084"N
154	BP-154/162	273969.389	2193023.069	78°50'31.34346"E	19°49'12.54062"N

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Geological Vested Block Boundary Coordinates by DGPS WGS_84 System					
Sl. No.	Point No.	Ground Easting (m)	Ground Northing (m)	WGS84 Longitude	WGS84 Latitude
155	BP-155/162	273970.651	2192975.479	78°50'31.40772"E	19°49'10.99402"N
156	BP-156/162	273974.055	2192933.640	78°50'31.54299"E	19°49'09.63526"N
157	BP-157/162	273955.932	2192854.547	78°50'30.95518"E	19°49'07.05644"N
158	BP-158/162	273932.713	2192823.350	78°50'30.17125"E	19°49'06.03261"N
159	BP-159/162	273886.853	2192787.806	78°50'28.61152"E	19°49'04.85802"N
160	BP-160/162	273842.165	2192759.930	78°50'27.08866"E	19°49'03.93322"N
161	BP-161/162	273802.277	2192732.522	78°50'25.73048"E	19°49'03.02563"N
162	BP-162/162	273755.169	2192720.934	78°50'24.11737"E	19°49'02.62934"N

Plan showing the Geological Block boundary & Proposed ML boundary are given in **Plate-II & III** and Conceptual Plan envisaged in the mining plan depicting OB area, Infrastructure locations and cardinal point co-ordinates of the lease area, block area, project area are shown in Conceptual Plan (**Plate-VIII**)

INDIAN MINE PLANNERS & CONSULTANTS ★ QCI-NABET Mining Plan Preparing Agency (MPPA) ★ ISO 9001:2015

(Pramod Prasad Gupta)

Coordinator (Mining)
Indian Mine Planners & Consultants (MPPA)
Mining Plan Preparing Agency (MPPA)

Certificate No. NABET/APA-MPPA/IA/002 dated Jan 13, 2024

Corp Office: GE-61, Rajdanga Main Road, Behind Vivanta Hotel, EM Bye Pass, Kolkata-700107

Phone: (033) 4073 3609; Cell: 09432240491, 09836003124, 07909060885

Website: www.impcon.co.in, E-mail:impcon.kolkata@gmail.com

Annexure-3A1

Yazdani International (P) Ltd.
Steering success, anchoring credibility

Annexure-III

Company Board of Directors of Yazdani International Private Limited, CIN U13209OR2006PT C009009 having registered office at 7th Floor, C-wing, Fortune Towers, Chandrasekhpur, Bhubaneshwar, Odissa-751023, India, the block allottee of Marki Mangli-II Coal Mine as per Vesting Order No NA-104/3/2020-NA dated 3rd March 2021 by the Nominated Authority of Ministry of Coal, Govt of India hereby give the following undertakings and approved as follows:

1. The Mining Plan & Mine Closer Plan of Marki Mangli-II Coal mine (Revision-01) covering an area of 339.467 Ha (Geological Block) located in Wardha Valley Coalfield, Yavatmal district, Maharashtra state prepared by Indian Mine Planners & Consultants, a QCI-NABET accredited Mining Plan Preparing Agency (MPPA) and correctness of data used in preparation of the mining plan has been verified by us.

2. Details and eligibility of Indian Mine Planners & Consultants, a QCI-NABET accredited Mining Plan Preparing Agency (MPPA) has been verified.

3. Mining Plan and Mine Closure Plan (Revision-01) as prepared by Indian Mine Planners & Consultants, a QCI-NABET accredited Mining Plan Preparing Agency (MPPA) has been accepted by us.

4. Company gives undertakings that the mine will be developed as per the approval of the mining plan from Ministry of coal and all other approvals, as required will be obtained from relevant authorities

5. Commitment is given that entire mining operation will be carried out as per the Statutory provision given under Mines Act 1952, Coal Mine Regulation 2017, EP Act 1986 and FC Act 1980 and wherever specific permission will be required the company will approach the concerned authorities

6. Company confirms that entire Progressive and Final activities shall be implemented as per the approved mining plan and mine closure plan by the concerned competent authorities.

7. The Board hereby accepts and undertakes the financial assurance for implementation in accordance with the Approved Mining plan (Including mine Closure Plan) / Final Mine Closure Plan or any financial liability which may be incidental during implementation of MP-MCP due to change in prevailing laws and rules.

Corporate Office : 7th Floor, C-Wing, Fortune Towers, Chandrasekharpur, Bhubaneswar - 751023, Odisha, India
Phone : +91 674 6750200, 2301897, Fax : +91 674 2301898, Web : www.yazdaniinternational.com

Yazdani International (P) Ltd.

Steering success, anchoring credibility

8. Company gives undertakings that the reclamation & rehabilitation work shall be carried out in accordance with the approved Mine Closure Plan and any modification/ amendments which may be made in the mine Closure Plan by Ministry of Coal, from time to time.

9. Company give undertakings that the protective measures contained in the mine closure. plan including mine closure plan, reclamation and rehabilitation works will be carried out in accordance with the approved mine closure plan and final mine closure plan and undertake to submit a yearly report before 1st July of every year to the Coal Controller setting forth the extent of protective and rehabilitative works carried cut as envisaged in the approved mine closure plans (Progressive and Final Closure)

10. Company gives undertakings that they will obtain a mine closure certificate from Coal Controller to the effect that the protective, reclamation and rehabilitation works carried out in accordance with the approved mine closure plan/final mine closure plan and will surrender the reclaimed land to the State Government concerned.

For and on behalf of the Board of Directors of Yazdani International Private Limited

Authorized Signatory

Name: **Meraj Yusha**

Designation: Managing Director

YAZDANI INTERNATIONAL PVT. LTD. BBSR

Corporate Office : 7th Floor, C-Wing, Fortune Towers, Chandrasekharpur, Bhubaneswar - 751023, Odisha, India
Phone : +91 674 6750200, 2301897, Fax : +91 674 2301898, Web : www.yazdaniinternational.com

Annexure 4

No. 13016/9/2004-CA-I
Government of India
Ministry of Coal

New Delhi, dated 31st January, 2008.

To

M/s. Shree Virangana Steel Ltd.,
Office No. 126-128,
1st Floor, Shriram Tower,
Kingsway, Sadar,
Nr. NIT office,
Nagpur – 440 001.

Subject : Approval of Mining Plan for Marki-Mangli coal block II, III & IV, Tehsil-Jhari-Jamni, Taluk-Wani, Dist.-Yavatmal, Maharashtra.

Sir,

I am directed to refer to your letters No. SVSL/NGP/2007-7/0186 dated 01.01.2007 and No. SVSL/NGP/MINE/2007/009 dated 07.04.2007 submitting mining plan for Marki-Mangli coal block II, III & IV for approval of the Central Government and to state that the mining plan for Marki-Mangli coal block II (December, 2006) to be read with compliance report (May, 2007), Marki-Mangli coal block III (February, 2007) and Marki-Mangli IV (March, 2007) to be read alongwith compliance report (August, 2007 of Marki Mangli III & IV) of M/s. Shree Virangana Steel Ltd., has been considered and the approval of the Central Government thereon is hereby conveyed under Section 5 (2) (b) of the Mines & Minerals (Development & Regulation) Act, 1957 subject to the following condition :-

i) The mining company shall take all necessary precautions regarding safety of mine workings, persons deployed therein.

ii) The approval of the mining plan is without prejudice to the requirement of approvals from competent/prescribed authority under the relevant rules/regulations etc.

2. Two copies of the approved mining plans duly signed by the competent authority are returned herewith with the request that a copy of the approved mining plan may be submitted to the concerned State Government for necessary action and also a photocopy of the approved mining plan may be sent to the Coal Controller for monitoring of the block.

Yours faithfully,

(V.S. Rana)
Under Secretary to the Govt. of India.

Encls. As above.

TOPWORTH URJA & METALS LTD. NAGPUR

TOPWORTH URJA & METALS LTD.

Authorised Signatory

Annexure-5

Annexure-V : Bar Chart showing schedule of implementation of Mine Closure activities of Marki Mangli-II Coal Mine
(Progressive & Final closure period) with duration of important activities.

Sl. No.		Head	Amt Cr	Year
	Progressive closure			Y1 Y2 Y3 Y4 Y5 Y6 Y7 Y8 Y9 Y10 Y11 Y12 Y13 Y14 Y15 Y16 Y17 Y18 Y19 Y20 Y21 Y22 Y23 Y24 Y25 Y26 Y27 Y28 Y29 Y30 Y31 Y32 Y33 Y34 Y35 Y36 Y37 Y38 Y39
1		Water quality management	0.51	
2		Air quality management	1.02	
3		Waste Management	7.50	
4		Barbed wire fencing around dump	1.79	
5		Barbed wire fencing around the Pit	1.97	
6		Filling of Void - Rehandling of Crown Dump	0.00	
7		Top Soil management	0.23	
8		Technical & Biological reclamation of Mines out land & OB dump plantation	5.38	
9		Plantation over virgin area including green belt	3.24	
10		Manpower Cost and supervision	5.10	
11		Toe Wall around the dump	0.18	
12		Garland drain	0.49	
13		Garland drain around the dump	0.22	
14		Any other Activity	0.20	
1	Dismantling of Infrastructure & Disposal / rehabilitation of Mining machinery	Dismantling of workshop/CHP/Mine facilities etc	0.15	
2		Rehabilitation of the dismantled facilities	0.10	
3		Dismantling of pumps and Pipes / HEMMP & M	0.15	
4		Dismantling of stowing bunkers, provisions for bore well pumping arrangement		
5		Dismantling of UG equipment		
6		Rearranging water pipelines to dump top park / Agricultural land	0.10	
7		Dismantling of Power lines	0.15	
8		Any other Activity(Misc)	0.10	
9	Safety and security	Barbed wire fencing around dump	0.35	
10		Barbed wire fencing around pit	0.35	
11		Barbed wire fencing with masonary pillar	0.50	
12		Concrete wall with masonary pillar around the pit	0.75	
13		Concrete wall fencing around the water body	0.75	
14		Stabilization (benching,pitching)side walls of water body	0.40	
15		Toe Wall around the dump	0.30	
16		Garland drain	0.25	
17		Garland Drain around the dump		
18		Drainage Channel from main OB dump		
19	Technical & Biological Reclamation of Mined out area and OB Dump	Filling of Void	0.50	
20		Top Soil management	1.51	
21		OB rehandling for back filling	4.71	
22		Terresing, Blanketing with soil and vegetation for Ext. OB dump	1.30	
23		Peripheral road, gates, view point, cemented steps on bank	1.00	
24		Expenditure on development of Agriculture land	8.40	
25		Landscaping and Plantation	0.75	
26	Annexure-V: Post Closure management and supervision	Power cost	0.10	
27		Post Mining Water quality management	0.04	
28		Post Mining Air quality management	0.05	
29		Subsidence monitoring for 5 years	0.33	
30		Waste Management	12.50	
31		Manpower Cost and supervision	2.10	
32		Any other Activity(Misc)	1.50	
33	Others activities	Entrepreneurships development, vocational / skill development training for sustainable income of affected people	2.50	
34		Golden Handshake / Retrenchment benefits to employees of OC	2.50	
35		Golden Handshake / Retrenchment benefits to employees of UG	0.00	
36		One time financial grant to Society / Institutions / Organisations which is dependent upon the project	1.75	
37		Provide jobs in other mines of the company	1.50	
38		Continuation of other services like running of schools etc.	2.25	
39	**Any other Activity(Misc)**		2.50	
			79.98	

Annexure 6

bharatkosh.gov.in
Government of India Receipt Portal

RECEIPT

Transaction Ref.No. 0507220007000 Dated: Jul 5 2022 12:01PM

Received from M/S. YAZDANI INTERNATIONAL PVT LTD with Transaction Ref.No.0507220007000

Dated Jul 5 2022 12:01PM the sum of INR 84967 (Eighty-Four Thousand Nine Hundred Sixty-Seven Only) through Internet based Online payment in the account of

Coal and Lignite, , .

Disclaimer:- This is a system generated electronic receipt, hence no physical signature is required for the purpose of authentication

Printed On: 07-07-2022 04:46:51

Courtesy :- Controller General of Accounts

Annexure 7

TO WHOM IT MAY CONCERN

The Mining Plan & Mine Closure Plan of MARKI MANGLI II COAL MINE Coal Mine formulated by Mining Plan Preparing Agency-INDIAN MINE PLANNERS AND CONSULTANTS, QCI Number- NABET/APA-MPPA/IA/002 Dated 28-01-2021 which was sent for expert review to Mining Plan Preparing Agency-Min Mec Consultancy Pvt Ltd, QCI Number- NABET/APA-MPPA/IA/004 .

The Mining Plan & Mine Closure Plan of MARKI MANGLI II COAL MINE Coal Mine has been review from Technical and administrative angle and has found to be prepared in line with the guideline for formulation, processing, scrutiny and approval of Mining Plan and Mine Closure Plan circulated vide OM dated 29th May 2020. The subject mining plan is found to be in order and is recommended for consideration of the Approving Authority for approval.

.

Digital Signature

Min Mec Consultancy Pvt Ltd

A-121 Paryavaran Complex

IGNOU Road

New Delhi, 110030

NABET/APA-MPPA/IA/004

9811030881

Additional Annexure-8

F.No.NA-104/3/2020-NA
Government of India/ भारत सरकार
Ministry of Coal/ कोयला मंत्रालय
O/o Nominated Authority /नामनिर्दिष्ट प्राधिकारी का कार्यालय
*****

R.No.120- 1st Floor, F-Wing
Shastri Bhawan, New Delhi,
Dated: 07th March, 2022

To,

Shri Meraj Yusha,
Managing Director,
Yazdani International Private Limited,
Office Address: 7th Floor, C-Wing, Fortune Towers,
Chandrasekharpur, Bhubaneswar,
Odisha – 751023, India
Email: meraj@yazdaniinternational.com

Subject: Revised Mining Plan and Mine Closure Plan of Marki Mangli-II Coal Mine – reg.

Ref: Letter of even no dated 14.02.2022 from O/o NA (enclosed)

Sir,

This is in reference to the letter dated February 14, 2022 from the O/o Nominated Authority and subsequent communication received from M/s Yazdani International Pvt Ltd vide letter dated February 24, 2022, you are hereby informed that since the statutory clearances are needed to be obtained afresh by the allocattee, the efficiency parameters for coal mines other than Schedule-II coal mines would be applicable for the Marki Mangli-II Coal Mine. The same has been placed at **Annexure.**

Yours faithfully,

(Manish Uniyal)
Under Secretary to the Government of India
Tel: 011-23384106

ANNEXURE I: EFFICIENCY PARAMETERS

For Coal Mines other than Schedule II coal mines

Activities	Completion time	Milestone (MS) No.	% of Performance Security to be appropriated for delay in completion of MS
Prospecting Licence or Notification under section 4 of the CBA Act, 1957, as applicable	-	MS-1	Not Applicable
Completion of Drilling/ Exploration in accordance with the provisions of Clause 14	-		
Preparation of Geological Report (GR)	Within 15 months from the date of allocation		
	After 15 months upto 24 months from the date of allocation		
	After 24 months upto 30 months from the date of allocation		
Mining Lease Application	-	MS-2	-
Submission of Mining Plan subject to the provisions of Clause 15	-		-
Approval of Mining Plan/Project Report subject to the provisions of Clause 15	6 months from the completion of previous MS/ If MS-1 is not applicable, 6 months from the date of allocation		10%
Forest Clearance Application	-		-

Environment Clearance Application	-	MS-3	-
Forest Clearance (FC)-stage 1	-		-
Forest Clearance (FC)-stage 2	-		-
Wildlife Clearance	-		-
Approval under PESA	-		-
Environment Clearance (EC)	18 months from the completion of previous MS		10%
Approval for Nallah /River Diversion	-	MS-4	-
Approval for diversion of Power line/Rail/Road	-		-
Permission to draw Water	-		-
Permission to draw Power	-		-
Consent to Establish /Operate	-		-
Grant of Mining Lease or order by the Central Government under section 11 of CBA Act, 1957, as applicable	-		-
Land Acquisition & possession of land and R&R required to reach rated capacity as per approved mining plan	21 months from the completion of previous MS		25%
Intimation to DGMS for Mine opening	-	MS-5	-
Approval for use of Explosive & Licence for Storage of Petroleum	-		-
Permission under Factories Act, 1948	-		-
Permission for use of Radio Frequency Communication System	-		-
Labour related	-		-

Escrow Account	-		-
Application for Opening permission	-		-
Mine Opening Permission	6 months from the completion of previous MS		25%

Note:

1. **Only the activity within the Milestone Number, against which percentage of appropriation of performance security has been assigned in the last column ('Main Activity'), will be monitored for the purpose of appropriation of performance security.**

2. Activities other than Main Activity, against which percentage of appropriation of performance security has not been assigned, will be monitored for the purpose of early development of mines. However, in case of default in such activities, penalty will not be imposed.

3. The completion time provided for the Milestones does not bar the successful bidder from obtaining clearances concurrently, if allowed under the Applicable Laws.

4. In *bona fide* cases of delays not attributable to the Successful Bidder the Nominated Authority will decide on case to case basis the extension of timeline in Efficiency Parameters from the total time granted for all the Milestones, i.e. 66 months in case of mine where GR is to be prepared (Partially Explored Mines) and 51 months in case of mines where GR is not required to be prepared (Fully Explored Mines). For the said purpose, the Nominated Authority may refer the matter to Scrutiny Committee which will consider the delay caused on case to case basis and furnish its recommendation to the Nominated Authority for taking a decision.

5. For Partially Explored Mines, appropriation for delay in completion of MS-1 and MS-2 shall be from the performance security submitted pursuant to clause 6.1.3 of the Agreement and appropriation for delay in completion of remaining milestones shall be from the revised performance security submitted pursuant the said clause.

6. If the Successful Bidder is able to complete the last Milestone (i.e. Mine Opening Permission/ MS-5) within the total time granted for all the Milestones, i.e. 66 months in case of mine where GR is to be prepared (partially explored mines) and 51 months in case of mines where GR is not required to be prepared (fully explored mines), then the amount of performance security appropriated for delay in completion of any previous Milestone (if any) may be refunded to the Successful Bidder.

Additional Annexure-9

Annexure-XII

MARKI MANGLI II OCP (0.3 MTY)											
Power & Energy Balance for the Loads of Marki Mangli II OCP											
						kW	kVAr	kVA	MkWh		
A	**OB**										
	Total (OB)	**0.00**	**0.00**			**0.00**	**0.00**	**0.00**	0.00		
B	**COAL**										
1	CHP	200.00	200.00	0.70	0.70	140.00	142.00	200.00	0.69		
	TOTAL (COAL)	**200.00**	**200.00**			**140.00**	**142.00**	**200.00**			
C	**COMMON**										
1	Workshop	500.00	400.00	0.50	0.60	400.00	300.00	666.67	1.32		
2	Pumping	570.00	420.00	0.80	0.80	336.00	252.00	420.00	1.63		
	80 lps x 120 m hd main pump (2+1)- 150 kW each, 80 lps x 60 m hd slurry pump - 2 nos - 60 kW each										
3	Quarry Lighting	400.00	300.00	0.90	0.90	270.00	130.50	300.00	1.48		
4	Surface Lighting & Offices	300.00	250.00	0.90	0.90	225.00	108.75	250.00	1.18		
5	Miscellaneous loads	200.00	200.00	0.80	0.80	160.00	120.00	200.00	0.89		
	TOTAL (COMMON)	**1970.00**	**1570.00**			**1391.00**	**911.25**	**1662.91**			
	Total(A+B+C)	2170.00	1770.00			1531.00	1053.25	1858.30			
	Total (with 1.2 Diversity factor)	2170.00	1770.00			1275.83	877.71	1548.59			
	After Improving Power Factor to 0.98	**2170.00**	**1770.00**			**1275.83**	**260.37**	**1301.87**	**7.19**	**23.98**	**143.89**
	Transformer Selected 2X 1.6 MVA 33/6.6 kV						617.33				
					2 nos (3 x 105) k		Capacitor Bank		Assuming MSEB Tariff = 6		

Additional Annexure-10

Annexure 10

List of PC, TAE and TM in the preparation of Mining Plan & Mine Closure Plan

1. Mr. P. P. Gupta (IH), Project Coordinator
2. Dr. N. B. Chanda (IH), TAE−ESH
3. Mr. B. N. Basu (IH), TAE−ME
4. Mr. D Bhadra (IH), TAE−CEM
5. Mr. A Chattopadhyay (EMP), TAE−CEM
6. Mr. A Choudhury (EMP), TAE−CEM
7. Mr. H. K. Sinha (EMP), TAE−SUR
8. Mrs. Bipasa Banerjee (IH), TAE−MG
9. Mrs. Monika Sarkar (IH), AutoCAD Drawings

Additional Annexure-11

Annexure-11

Observations made by Expert/Peer Reviewing MPPA(Min Mec) and Compliance of the same by Mine Plan Project Proponent/Consultant(IMPCON) to Project Proponent

Item/Ref	Observations/Comments/Feedback by Expert Reviewing Agency(ERA)	Action	Compliance by PP/Consultant MPPA
1.2.4	i) A. Average annual rainfall is 1135.7 mm in monsoon season lasts from mid June to mid September - Pls check whether there will be full stop in place of ‘‘in’’. ii) highest flood level (HFL) of the seasonal nala may be.	Approve	Remarks complied.
Plate-1	a. State map showing Districts - Should also show other districts besides YAVATMAL. b. India map showing States - Should also show other states besides Maharashtra. c. Direction - North may be marked	Approve	Complied.
1.4.6	Non operational as per 1.4.6 but it is written that “Mine is an operational mine” under para 3.1.2 - May be reconciled	Reject	Mine is non operational since 2014 and suitably modified in chapter 3.
1.5.9	Two seams Top and Bottom mentioned in Para 2.2.2. All the seams mentioned in GR shall be mentioned under para 1.5.9.	Approve	Complied
1.5.10	Seam Top written under column “Seam”, though Seam Bottom is written under column “Reason”	Approve	Seems to be portal issue necessary correction made in inputs
1.5.11	1.5.11 & 1.5.12 - The Geological Block area and geological block area projected were less in AMP than present proposal, how does the Gross Reserve and Net reserves are same in AMP and present proposed MP ?	Reject	Nett geol. reserve taken 90% of gross GR , applicable for AMP and RMP

2.2.5	Area to be mentioned in Sq.Km	Approve	Complied
2.2.11	Two seams Top and Bottom mentioned in Para 2.2.2. All the seams mentioned in GR shall be mentioned	Approve	Complied
2.2.14.1	Seam Bottom may be mentioned also and “Reason not considered for mining ” for seam bottom is to be written against seam bottom	Approve	Complied, part is portal issue
Plans/ Plates	i) Plate-3A - BHs and block boundary may be removed, only ML boundary may be kept. Keep bounding coordinates as such. ii) Plate-3B - Show only Project boundary and coordinates. Keep bounding coordinates as such. iii) Plate-3C - Show only Block boundary and coordinates. Keep bounding coordinates as such.	Approve	complied
Plans/ Plates	Plate-4 - Nothing may be shown outside the project boundary. Pit boundary, Dumps, Facilities etc may be shown.	Approve	Complied
Plans/Plates	Plate-5A1 - Title may be retained only “Geological Plan”	Approve	Complied
Plans/ Plates	Plate-10A1 - Some stray lines are there - Only floor contours, Faults and BHs no, may be retained, the other lines to be deleted.	Approve	Complied
Plans/ Plates	Plate-11 - Only longitudinal section is given - Cross sections along dip also may be given	Approve	Complied
Plans/ Plates	i) Plate-2A - Bore Holes and their coordinates Table given - BH and their coordinates Table not required. Pit boundary, Dumps, Facilities etc may be shown. In Index only Block boundary is mentioned, It may be Block/ project /ML boundary	Approve	Complied

3.1.2	i. Under heading “Proposed method of mining” gradient of seam is to be corrected as 6° - 12°. ii. Parameters under heading “Mining System” a. Coal seam thickness mentioned as 1.80-7.35, though under para 2.2.2 & 2.2.14 it is 0.4 - 8.35 Pls correct. b. No. of Faults written as 4, though under para 2.2.2 F1-F9 nine faults are mentioned pls check. c. Please relook figures of ‘Excavation area at surface’, Minable Reserve, Extractable reserves’, ‘OB”, ‘SR’ ‘Life’ etc of the table and reconcile in line with figures mentioned at other paras. iii. Under heading “Mineable Reserve” the minable and extractable reserves are 10.19 m3 and 9.68 m3 , to be corrected as “MT” iv. Bench height For OBR (2.5 m3 Hyd. Shovel) 10-12m. Please review if it will be 8-10m	Approve	The corrected table replaced.
Plans/Plates	Plate-13 - Title is “Total excavation Plan” - May be changed to “Total Coal, OB Ratio Plan”	Approve	Complied
6.1.2	129.49 Ha “Agricultural land” should be booked under “Plantation” in line with table under para 8.1.2. Pls reconcile	Reject	It has been proposed to do plantation in the reclaimed area or other area which shall be developed to agricultural land at the end use
6.1.3	Surface features over the block area may be mentioned and not only about the diversions.	Approve	Complied
Plans/Plates	Plate-9 - Nothing may be shown outside the project boundary. Title may be “Tentative Land use Plan”	Approve	Complied
Post Closure	Technically reclaimed land is less than degraded land	Approve	Complied(typo error)
8.1.2	6.059 Ha Forest land return is mentioned in Y-5, if it is Safety zone area, it shall be returned to forest department only after mine closure period.	Reject	Complied
8.10.3	87.06 MM3 is mentioned in progressive and in post closure period also, pls relook.	Approve	Corrected suitably
8.10.2.2	WPI for May-2022 Provisional is adopted, March-22 final maybe considered for escrow calculation	Reject	Present escrow amount is tentative based on prevailing WPI (prov) MoC directs to update even at approval stage and actual excrow amount shall be on base date of opening.
Annexure / Plate	Plate-20 - Reclamation Plan has been put here - It should be replaced by “Post Mining Land use Plan” with relevant Tables	Approve	Complied
Annexure /Plate	Plate-21A to 21D - a. Road - Road connecting Pit mouth to Stack/ CHP, facilities not shown. b. Haul Road - Upto Dump top may be shown. c. Surface Contours - May not be shown within excavated area. d. Benches - Finishing may be done.	Approve	Complied
Annexure /Plate	Plate-21E - Reclaimed /Planted area may also be shown	Approve	Complied
Annexure /Plate	Plate-22 - Forest area returned is not marked on Plate, The Table shows Forest returned in 5th year, Pls check if it will be returned in Post Closure Stage. Technically reclaimed land is less than degraded land in Table.	Approve	Complied
Plate	Plate-23 - It seems to be same plan as Plate 14	Approve	Noted and modified ,Plate 23 has been renamed and uploaded as Dump Plan.

Plate	Plate nos. I, II, III etc Should be 1, 2, 3 etc in Monogram/ Emblem	Approve	All the plans have been revised as suggested.

(PC MPPA-IMPCON)

Additional Annexure-12

Annexure-12

Compliance of Observations of Hon'ble Scrutiny Committee Mine Plan & Mine Closure Plan of Marki Mangli-II Coal block (Application APP00210),

Sl No	Parameters	Final Observation Details	Reply/Compliance
	INPUT SHEET		
6	a. Targeted capacity b. Peak rated capacity (150% of the rated capacity)	Rated capacity and Peak capacity shall be furnished.	In the input sheet the rated capacity and peak rated capacity have been furnished on portal, seems to be portal issue. (Snap shot of para is as below)
			
1.1	**Chapter 1 : Project Information**		
1.3.9	Cardinal Points co-ordinates of the Block boundary	The table shall be as per the format given in the guidelines.	Revised table of the cardinal points as per guidelines has been uploaded .
1.4.6	Likely date of mining operations, if operations not yet started & reasons for non-commencement of operations	Has the stated coal excavated and overburden removed certified by any authority?	Yes The production in the mine started in the year 2013-14 by the previous allocatee i.e M/s Shree Virangana Steels Ltd. The mine was operational till 2014 . The coal and OB production from the mine was 0.10 Mte and 0.42 MCUM respectively. The subject Coal and OB production from the mine have been certified by Ministry of Coal in the mine dossier received at the time of bidding.
1.51	Block Area in "Ha"	Geological Block area has increased as compared to the Earlier approved mining plan? To be explained.	As per approved Mining Plan geological block area mentioned is 330.70 Ha. However, prior to issuance of vesting order MoC has provided a file named "Mine Cardinal Points" to the project proponent through which the coordinates of the block cardinal points as well as block summary was available. Subsequently, DGPS survey has been carried out based on the boundary co-ordinates provided by MoC and it has been found that the block area is 339.467 Ha (~3.4 sq.km as per block summary document) .
2.1	**DETAILS OF THE BLOCK**		
2.2.12	Seams not considered for Mining with reasons	Seam Folio plan and floor contour plan of Bottom Seam shall be furnished (if present in the GR)	Bottom Seam is impersistent and intersected in only 3 boreholes, In GR no seam folio and floor contour plan of bottom seam have been made/available.
3.1	**MINING METHOD**		
3.1.2	Proposed method of mining with justification with justification on suitability of method of mining	(a) Sand from OB has been proposed to be mined. It shall be noted that necessary approvals/ permissions regarding extraction/ processing/ other details of sand extraction from OB shall be taken from the competent authority (as per statute). (b) Height of top soil dump to be specified.	a) The Project proponent shall comply all the prevailing statutory clearances/ permissions and approvals as required during actual implementation of the proposed scheme of sand from OB. b) The height of top shall be 3m for single tier and 6m for two tier maximum. This has also been

		(c) Observations made by Accredited MPPA and point-wise compliance done by the project proponent, during Expert Review, shall be furnished. (d) The project proponent shall submit an undertaking that the mine shall be operated as per the Environment Clearance (EC) & Forestry Clearance (FC) for the project (refer Para 1.16 of the Guidelines for preparation of Mining Plan of MoC dated 29.05.2020). (e)The company board shall give financial assurance for implementation (refer Para III, Annexures of the Guidelines for preparation of Mining Plan of MoC dated 29.05.2020).	mentioned at para 3.1.2 (appearing just before text of 3.1.3 para of the report). c) The observations/feedback made by Expert Reviewing MPPA has been complied online in swcs portal. The captured para wise observations/feedback and compliance made thereon by the Project Proponent and its MPPA consultant is now being annexed as **Annexure-11 .** d) The undertakings required as per guideline is covered in Annexure 3A1 under item 5 of the Board's resolution which is already uploaded in the portal. e) The contents of the para-III, Annexure of guideline have been fully covered and committed for compliance (Refer item 6,7,8 and 9 of the Board's resolution) which is uploaded as Annexure-3A1.
3.1.11	Whether negative proving for coal/lignite in the proposed site for OB dump /infrastructure has been done	Parameters should be according to the guidelines. To be corrected.	Yes OB dumping has been proposed in the non coal bearing area and falls within the allocated block area lying beyond the incrop of the workable seam. Four boreholes MK-13,14,25 36 have been drilled beyond the incrop of the bottom most base Seam. Moreover, exposures of Lameta beds in the west, also confirm the non-coal bearing nature of the zone. The geological Report has been prepared by Directorate of Geology and Mining Department, Maharashtra State conforming the non coal bearing area within the geological block and proposed lease area. With reference to the Geological Plan (Plate-5) and Conceptual Plan (Plate- 8), it can be seen that the proposed OB dump and infrastructure area are falling in non-coal bearing zone, beyond the incrop of both the coal seams. The lithologs of all the above four boreholes are provided in plate no- 6A, 6B. It is further proposed that during actual mine operation and making access to the seam few shallow bore holes shall be drilled for exact delineation of coal seam incrop.
4.1	**Safety Management**		
	Important safety aspects: Major Risks and uncertainties to the project viz. Proximity to river, adjacent working, geo-mining disturbances, slope stability and remedial measures suggested. It should also include proposed overall	(a) Timeline for HFL determination of nala to be specified? All safety precautions shall be taken against inundation.	(a) This is a seasonal nala originating from north out side of block where no HFL is available. During mine opening in 2026 and topographical survey of mine area by the project, proponent shall mark/extend and cooperate the authority for such determination of HFL in the diverted

	slope of the quarry and OB dump, dump height, strata control, fire and spontaneous heating, gas monitoring, disaster management, danger from inrush of water etc.	(b) Nala diversion route and safety precaution taken against inundation to be elaborated /shown on plan	route. All statutory precautions as required under Coal Mines Regulation 2017 and other statutory provisions shall be complied and have been suitably addressed in the para 4.1.1 of Safety Chapter. The said para is further supplemented with this compliance . (b) The Nala diversion route has been shown in all relevant plans of the mining plan

Additional Annexure-13

ANNEXURE-13

COMPLIANCE TO THE OBSERVATIONS OF THE INTERNAL COMMITTEE ON MINUTES OF MEETING OF VIDEO CONFERENCE DATED 10-08-2022 FOR APPROVAL OF MINING PLAN MINE CLOSURE PLAN OF MARKI MANGLI-II COAL MINE(APP00210) OF M/s YAZDANI INTERNATIONAL PRIVATE LIMITED

A. After due deliberation the Mining Plan & Mine Closure Plan (Application No APP00210)was recommended for additional clarification from the project proponent.

ITEM	OBSERVATIONS	COMPLIANCES
1	Annexure 3A1: Company Board approval shall specify "Financial Assurance for implementation" (refer Parameter III, Annexures of the of the Guidelines for Preparation, Processing, Scrutiny, Approval and Revision of Mining Plan for the Coal and Lignite Blocks of MoC circulated vide OM F No. 34011/28/2019-CPAM dated 29.05.2020.	The updated Annexure3A1 covering the para of "financial Assurance for Implementation is being appended and uploaded as compliance.
2	Table 8.10.1: (a) Under Progressive Mine closure 50 mm3 has been proposed under "Filling ofVoid- rehandling of Crown dump" and 87.06 MCum have been considered under "Waste Management" . These shall be explained/ corrected. (b) Under Corpus RR , 15 Cr. Expenditure has been proposed. This shall be explained/ corrected. (In this regard it shall be noted that in Para 2.3 of the Guidelines for Preparation, Processing, Scrutiny, Approval and Revision of Mining Plan for the Coal and Lignite Blocks of MoC circulated vide OM F No. 34011/28/2019-CPAM dated 29.05.2020, it is stated that "where the backfilling of the mine void is being carried out as part of regular mining operations, it shall not be included in the list of progressive mine closure activities. However, in case, where the backfilling of mine voidis to be carried out specifically for closure of the mine, quantum of such overburden and the mineclosure fund earmarked for the purpose must be included in the list of activities to be taken up formine closure in the mining plan")	(a) Provisioning of 50 mm3 proposed under "Filling of void -rehandling of Crown Dump" and 87.06 mm3 "Waste Management under Progressive Mine Closure at para 8.10.1 was reconciled and rectified in line with the extent provisions made in para 2.3 of the Guidelines for preparation , Processing ,Scrutiny, Approval and Revision of the Mining Plan for the Coal and Lignite Blocks of MoC circulated vide OM F No 34011/28/2019-CPAM dated 29.05.2020. Provisioning of 50 mm3 proposed under "Filling of Void-rehandling of Crown dump" and 87.06 mm3 under Waste management has been incorporated as a part of Post Mine Closure activities. (b) A provisioning of Rs 15 Cr under RR has been incorporated for financial assistance post closure of mine for people likely to be affected directly or indirectly as a part of initiative of Govt. of India for "Just Transition" Policy. This provisioning has been made under the head "Post Closure activities".

Additional Annexure-14

Annexure-14

Compliance of the Observations of the Internal Committee constituted under MMDR Act 1957 for approval of MiningPlan / Mine Closure Plan was held on 30/08/2022 through Video Conference (VC) to consider Mining Plan and Mine Closure Plan for MARKI MANGLI II COAL MINE of M/s YAZDANI INTERNATIONAL PRIVATE LIMITED

Following members of the Internal Committee attended the meeting:

1. Shri. Joginder Singh, OSD , Member
2. Shri. MARAPALLY VENKATESHWARLU, Director Technical, Member
3. Shri. AJITESH KUMAR, Deputy Secretary (NA), Member

After due deliberation the Mining Plan & Mine Closure Plan (Application No APP00210) was recommended for additional clarification from the project proponent.

The compliance of observations are given as below :

Sl No	Observations	Compliance
1	It is observed that compliance to the following clarifications communicated vide MoM of Internal Committee for approval of Mining Plan and Mine Closure Plan held on 10.08.2022 through VC to consider Mining Plan and Mine Closure Plan (First modification) for Marki Mangli II Coal Mine have not been done by the project proponent:	It is submitted that the Compliance of the observations of Internal committee held on 10.08.22 communicated vide MoM has been submitted and uploaded as annexure-13 for kind consideration. However, as advised in the observations and communicated vide this MoM of the Internal committee held on 30.08.22 is being submitted a fresh with explanation and corrections in the relevant portions of the table and annexure for further kind consideration and approval.
	Table 8.10.1: (a) Under Progressive Mine closure 50 mm3 has been proposed under “Filling ofVoid- rehandling of Crown dump” and 87.06 MCum have been considered under “Waste Management” has been proposed. . These shall be explained/ corrected. (In this regard it shall be noted that in Para 2.3 of the Guidelines for Preparation, Processing, Scrutiny, Approval and Revision of Mining Plan for the Coal and Lignite Blocks of MoC circulated vide	a) The quantity of 50mm3 earlier proposed for “Filling Void- rehandling of crown dump” Taking the note of observations of the Hon’ble committee members and prevailing guidelines OM F No. 34011/28/2019-CPAM dated 29.05.2020 the activity is now placed as “Waste management” activity
	OM F No. 34011/28/2019-CPAM dated 29.05.2020, it is stated that “where the backfilling of the mine void is being carried out as part of regular mining operations, it shall not be included in the list of progressive mine closure activities. However, in case, where the backfilling of mine voidis to be carried out specifically for closure of the mine, quantum of such overburden and the mineclosure fund earmarked for the purpose must be included in the list of activities to be taken up formine closure in the mining plan”) (Note: The activities/ parameters along with the quantity and timing shall be in accordance withthe stage plans/ excavation schedules envisaged in the mining plan. The related bar chart shallalso be modified/ corrected)	at Post closure stage where quarry void of 125 m depth(max) shall be backfilled with existing waste (internal) dump and about 50 mm3 of waste will required be handled by dozing and grading as post closure activity, so that the depth of Void(water body) shall reduce to be about 30m or within statutory permissible safe depth. Since transportation of waste is not involved, a nominal provision of @INR 2.5/m3 has only been considered for the same . Earlier 87.06mm3 of waste considered under “waste management” has been relooked and now assessed that only 30 mm3 of waste will be required to be rehandled and dozed from the internal dump to maintain permissible height of the backfilled area as a “ Progressive mine closure activities -Waste management . The provision @INR 2.5/m3 has been made, and figures have been accordingly corrected/modified. The related bar chart(Annexure-5) has been suitably corrected and modified.
	(b) Under Corpus RR, 15Cr. expenditure has been proposed. This shall be explained/ corrected (Note: The expenditure proposed shall be according to the list of activities/ parameters as shown in table 8.10.1, Appendix-I, of the Guidelines for Preparation, Formulation, Submission, processing, Scrutiny, Approval and Revision of Mining Plan for the Coal and Lignite Blocks of MoC circulated vide OM F No. 34011/28/2019-CPAM dated 29.05.2020.) The project proponent shall make desired changes in the mining plan and upload on SWCS portalfor further processing	(b) Considering the prevailing guidelines and observations of the Committee figures have been relooked and corrected . The provisions meant for miscellaneous activities for the people who will be directly or indirectly affected due to operation and closure of mine and other unforeseen reasons, now the financial provision is made to take care of the same and the activities enlisted in the head “Other” of table 8.10.1 of the guideline. The total provision in this head now works out to Rs 13 Cr. After incorporating the modification and correction as mentioned above , the mining plan along with this compliance Annexure-14 being uploaded for further kind consideration and approval.