By e-mail

GOVERNMENT OF INDIA
MINISTRY OF MINES
INDIAN BUREAU OF MINES
OFFICE OF THE REGIONAL CONTROLLER OF MINES, BHUBANESHWAR

No. File no –MCDR-MiFL0CR/15/2023-BBS-IBM_RO_BBS Dt : 25/05/2023

Shri/M/s. Chandi Prasad Sharma ,
Amla tola Chaibasa CHAIBASA

RAIKELA,BAHAMBA,TENSA (38478604)

Sub : Approval of the Modification of Review of Mining Plan along with Progressive Mine Closure Plan (PMCP) in respect of RAIKELA-BAHAMA-TENSA Mining Lease for Iron and Manganese Ore over an area of 69.606 ha of Shri Chandi Prasad Sharma, situated in Raikela, Bahamba and Tensa Village, Bonai Taluka, Sundargarh District of Odisha State.

Sirs,

In exercise of the powers conferred by clause (b) of sub-section (2) of section 5 of the Mines & Minerals (Development & Regulation) Act, 1957 and rule 16 read with clause (3) of Rule 17 of the Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rules, 2016 read with Government of India Order No. S.O. 1857(E) dated 18th May, 2016; I hereby **approve** the Modification of Review of Mining Plan along with Progressive Mine Closure Plan (PMCP) in respect of RAIKELA-BAHAMA-TENSA Mining Lease Area for Iron and Manganese Ore over an area of 69.606 ha of Shri Chandi Prasad Sharma, situated in Raikela, Bahamba and Tensa Village, Bonai Taluka, Sundargarh District of Odisha State. This approval is subject to the following conditions:-

A--General Conditions:

(1). The Modification of Review of Mining Plan is approved without prejudice to any other law applicable to the mine area from time to time whether made by the Central Government, State Government or any other authority and without prejudice to any order or direction from any court of competent jurisdiction.

(2). That this approval of aforesaid Modification of Review of Mining Plan does not in any way imply the approval of the Government in terms of any other provision of Mines & Minerals (Development & Regulation) Act, 1957, or the Mineral Concession Rules, 2016 and any other laws including Forest (Conservation) Act, 1980, Environment (Protection) Act, 1986 or the rules made there under and other relevant statutes, order and guidelines as may be applicable to the lease area from time to time

(3). The provisions of the Mines Act, 1952 and Rules and Regulations made thereunder including submission of notices of opening, appointment of manager and other statutory officials as required by the Mines Act, 1952 shall be complied with.

(4).The execution of Modification of Review of Mining Plan shall be subjected to vacations of prohibitory orders / notices, if any.

(5). If anything is found to be concealed as required by the Mines Act in the contents of the mining plan and the proposal for rectification has not been made, the approval shall be deemed to have been withdrawn with immediate effect.

(6). This approval for proposed mining operations and associated activities is restricted to the mining lease area only from this date. The mining lease area is as shown on the statutory plans by the Lessee/QP/Applicant and Indian Bureau of Mines has not undertaken any survey verification of mining lease boundary on the ground.

(7). Your attention is invited to the Supreme Court interim order in W.P. (C) No. 202 dated 12.12.1996 for compliance. The approval of above said Mining Plan is therefore, issued without prejudice to and is subject to the said directions of the Supreme Court as applicable.

(8).This department does not undertake any responsibility regarding correctness of the boundaries of the lease area shown on the ground.

(9). At any stage, if it is observed that the information furnished in the document are incorrect or misrepresent facts, the approval of the document shall be revoked with immediate effect.

(10). If this approval conflicts with any other law or court order/ Direction under any statute, it shall be revoked immediately.

(11). It shall be mandatory for the project proponent, abstracting ground water, to obtain “No Objection Certificate” from Central Ground Water Authority or, the concerned State/Union Territory Ground Water Authority, as the case may be.

(12). Lessee shall ensure grassing/re-grassing of worked out mining lease area in accordance with Hon'ble Supreme Court Order dated 8/1/2020.

(13). This approval has been given for mining proposal for the year 2023-24 to 2025-26 and are subject to the validity of lease period.

(14).The next Review of Mining Plan for the subsequent period of five years shall become due 180 days before expiry of this document proposal period.

(15)The validity period of the financial assurance shall be renewed before the expiry of the same and should be submitted to this office on or before 1/4/2026.

(16) The approval of this Review of Mining Plan would not warrant any entitlement for the lessee for extension of lease validity period as under section 8A(3) of MMDR Amendment Act, 2015.

(17) Disposal of OB/Waste as minor mineral shall be carried out only after obtaining permission under Rule 12(1)(k) of Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rules, 2016.

Yours Faithfully

RAIKELA,BAHAMBA,TENSA (38478604)
(B.L.GURJAR)

Regional Controller Of Mines,
Indian Bureau of Mines, Bhubaneswar

Copy for information to :-

(1).The Controller of Mines (EZ), Indian Bureau of Mines, CP-13, Sector V, Salt Lake City, Kolkata- 700 091 by mail. zo.kol@ibm.gov.in

(2). The Director of Mines, Directorate of Mines, Government of Odisha, Heads of the Department Building, Bhubaneswar–751001, Email- directorateofmines@orissaminerals.gov.in.

(3). The Director of Mines Safety , Bhubaneswar, Email- altafhussainaksa@gmail.com

(4).Qualified Person – Shri S C Nayak, by mail. consultants_geo@yahoo.co.in

(5). Concerned MCDR file.

Chapter 1 : General Information

1.1 : Lease Details

IBM Registration Number :	IBM/5881/2011
Lease Code :	38478604
Mine Code :	30ORI13042
Name of Lessee :	Chandi Prasad Sharma
Address of Lessee :	Amla Tola Chaibasa CHAIBASA
Type of Lessee :	Individual
Name of Mining Lease :	RAIKELA,BAHAMBA,TENSA
State :	ODISHA
District :	SUNDARGARH
Tehsil/ Taluk/ Mandal :	Koida
Village :	Raikela
Lease Area (Ha) :	69.606
Forest Area (Ha) :	67.3520
Name of Minerals :	IRON ORE
Name of associated minerals :	MANGANESE ORE

Type :	Existing Lease
Period of the proposal (FY) from :	2023 - 24
Period of the proposal (FY) to :	2025 - 26
Type of working :	Opencast
Nature of Use :	Non Captive
Category of Mine :	Category A

1.1.1 : Initial/subsequent Lease grant details

Grant	From	To	Lease deed execution date	Lease registration date
Initial Grant	17/04/1986	16/04/2006	17/04/1986	17/04/1986
1st Extension	17/04/2006	16/04/2026	Nil	17/04/2006

1.1.2 : Mining Plan Submission Criteria Details

Type of Document :	Modification Of Mining Plan Under Rule 17(3) Of MCR, 2016
Reason/s For Modification :	Due To Change In The Layout Of The Public Road Passing Through The Lease Area, The Land Schedule Were Changed By The State Govt. Accordingly, The Safety Zone Area Along The Public Road Has Been Considered As 10 Metere. The Present Modification Is To Incorporate The Changes Made In The Land Schedule Keeping The Production Of Iron Ore Same As That Of The Iron Ore Same As That Of The Valid Review Of Mining Plan And Also For Seeking Forest Clerance.
Period for which modification is proposed :	2023-2024 to 2025-2026

1.2 : Land Ownership Details

View Land Ownership Details Excel	Land_Ownership_Details (1).xlsx

1.3 : Existing Lease

Date of Execution :	17/04/1986

1.3.1 : Approval of earlier Mining Plan & Its Subsequent Review in Chronological Order

S.N.	Letter Number	Date	Period		Type Of Approved Document	Remark
			From	To		
1	MP/OTF-MECH/13-ORI/BHU/2007-08	11/01/2008	01/04/2006	31/03/2011	Mining Plan	Approved by IBM Nagpur
2	SM/OTFM/31-ORI/BHU/2011-12	11/04/2011	01/04/2011	31/03/2016	Scheme Of Mining	Approved by IBM Bhubaneswar
3	MS/OTFM/51-ORI/BHU/2018-19	28/03/2019	01/04/2016	31/03/2021	Review Of Mining Plan	Approved by IBM Bhubaneswar
4	RMP/A/50-ORI/BHU/2020-21/2678	04/02/2021	01/04/2021	31/03/2026	Review Of Mining Plan	Approved by IBM Bhubaneswar

1.3.2 : Partial Surrenderd Area During Stages of Operations in Chronological Order

Not Applicable

1.3.3 : Transfer of Lease Area Subsequent to Grant

Not Applicable

1.3.4 : Statutory Compliances

1.3.4.1 : Environment Clearance

Applicable :	Yes
Letter No :	J-11015/481/2007-IA.II(M)
Date :	16/06/2008
Validity :	16/04/2036
ROM Mineral :	50000.0000 (Tonnes)

1.3.4.2 : SPCB Approvals

Letter No :	8873/IND-I-CON-5935
Approval of :	Consent To Operate
Date :	23/05/2011
Validity :	31/03/2012
ROM Mineral :	50000.0000 (Tonnes)

1.3.4.3 : Forest Clearance

Applicable :	Yes
Letter No :	Applied
Date :	20/05/2005

Validity :	16/04/2036
Area (Ha) :	67.3520

1.3.4.4 : Land Acquisition Details

Total Area Acquired in hectare:	0.0000
Total Amount Paid (INR) :	0.0000

1.3.5 : Mine Location Details

Toposheet Number :	73G/1 or F45N/1

1.3.5.1 : Location of Boundary Pillars

View Location of Boundary Pillars Excel	location_boundary_pillar.xlsx

1.3.6 : Owner/Nominated Owner Details

Name	PAN of owner / Nominated Owner	Address of owner/ Nominated Owner	Mobile Number	Email	Please attach Minutes of Board Resolution in case of Nominated Owner
ChandiSharma	AIOPS7837B	Amla TolaChaibasaCHAIBASA	06582-256540	akscbsa@gmail.com	Power_of_Attorney.pdf

1.3.7 : Qualified Person Details as per M(OAHCEM)CR, 2016

S.N.	Prefix	Name	PAN of QP	Address	Mobile no.	Qualification	Exp in years as prescribed under the rule	Email
1	Mr	Chandrabhanu Das	AEOPD6128A	Geo Consultants	9437019019	Msc Tech In	18	consultants_geo@y

				Private Limited, Plot No-853, Mahaveer Nagar, Infront Of Reliance Fresh (Radhika Complex), Govind Prasad, Laxmisagar, Bhubaneswar 751006		Applied Geology		ahoo.co.in

Chapter 2A : Geology & Exploration

2A.1 : Geology

2A.1.1 : Topography

Terrain :	Undulating
Highest Level (m) from MSL :	765.0000
Lowest Level (m) from MSL :	590.0000
Average Level (m) from MSL :	175.0000
Drainage Pattern :	Dendritic
Order of Stream :	Order 1
Min Dist of Stream from Lease Area(m) :	0.0000

2A.1.2 : Details of Physiographic features and Infrastructures avaiable in and around the lease/ block area

Description	Location if existing Within the lease/block area	Distance from boundary periphery in kms, if existing outside the lease/block area. (within 5.00Kms)	Remark if any
River/Nallah/Reservoir	Southern part of the lease area	4	seasonal nala inside the lease area and Sarakanda river is 4 km west of the lease area.
Public roads (Tar road, cart road)	passing through the lease area	0	NH 215
Railway track	NA	5	Barsuan rail head
Human settlements	Nil	0	NA
Archaeological monuments/ places of worships/public utilities etc	A temple is exising beside the NH which is passing through the lease area	0	NA

Wild life sanctuaries/ national parks	Nil	0	NA
Coastal Regulation Zone (CRZ)	Nil	0	NA
Powertransmision lines/telephone lines	passing through the lease area	0	NA
Firing range	Nil	0	NA
Ordinance factory	Nil	0	NA
grazing land/ burial ground or cremation ground	Nil	0	NA
Any other specify	Nil	0	NA

Particulars	Distance from lease boundary in kms
Near by village	0.20
Nearest Railway station	5.00
Nearest Port	350.00
Distance of SH/NH from lease area	0.00

2A.1.3 : Regional Geology

Regional Geology

The Raikela-Bahamba Iron ore deposit forms the closure part of the famous Precambrian ‘Horse Shoe’ shaped iron ore belt of Singhbhum – Keonjhar – Bonai formation which extends for 60 kms in length and 25kms in width as a narrow NNE – SSW trending folded synclinorium Precambrian schistose rocks, in which whole class of iron ore deposits occur. The rock types are schists, tuffs, phyllitees, basic rocks and banded iron ore formations. The iron ore bodies mostly overly the shale/tuffs and form prominent geomorphic features due to their resistance to weathering. This has been represented by the hill ranges representing the iron ore ‘horse shoe’ of Singhbhum - Keonjhar – Bonai synclinorium. Regional Stratigraphy: The interrelationship between the different formations has been updated by several workers since it was originally profounded by Jones and Dunn. The Stratigraphy as per Murthy and Acharya (1975) is given below. Kolhan Group Sandstone,Conglomerate - Breccia ----------Unconformity---------- Basic Lava, tuffs and tuffites of Volcanic facies Mixed Facies Formation Iron , Manganese, lenses of iron formation , chert, small dolomite patches of chemical facies Minor lenses of sandy and silty shale of clastic facies. Banded Shale Formation Banded shale member Black shale member Black shale-chert member Koira Group Banded Iron Formation Finely banded Jaspilite member Coarsely banded Jaspilite member Tuffaceous shale Basic lava Volcanic Formation Basal sandstone, Gritty sandstone, Quartzite Conglomeratic at places with inter-bedded lava at top ----------Unconformity---------- Singhbhum Granite with enclaves of older meta-basic and meta-sedimentary rocks.

2A.1.4 : Local Geology & Structure

2A.1.4.1 : Local Geological Set-up

The lithological sequence as revealed from surface exposures and mining faces of the area is as follows: RECENT 1. Soil and Alluvium 2. Laterate with iron ore ---------- PRE CAMBRIAN 3. Upper shale and phyllite ---------- Fault ---------- Iron ore group4. Banded iron formation (BHJ/BHQ) containing iron ore bodies. 5. Shale 6. Lower shale Though the lease is for both Iron and Manganese ore, no manganese ore was encountered during prospecting and mining in blocks A and B. In future if any Manganese ore is found during the course of prospecting in the rest part of the ML area, the same shall be planned for exploitation.

2A.1.4.2 : Structure

The orebodies of the area are exhibited the shape & size of the iron ore occurrence over the area as well as disposition of different litho-units and the observed structural features are depicted in the geological plan for reference. The in-situ iron ore body exhibits a dip of around 450 towards east with a trend of N-S. No structural disturbance of the mineralisation is observed in the area.

2A.1.4.3 : Lithology, Petrographic & Mineralogical Description for Major, Associated & Indicator Minerals

The total lease area is covered with lateratic soil and Laterite excluding the quarries within Block-A and Block B where Iron ore has been intercepted along with laterite. Lateritisation is a very common feature in almost all the rock types. Laterite capping is observed in south-west portion of the lease area. Aluminous laterite is observed in south east portion of the area. Different Litho-Units of the area are described below. (i)Soil & Alluvium: :Red buff coloured lateritic soil sometimes with small percentage of alluvium is located in the eastern margin of the leasehold. Thickness of soil varies from few centimetres to 1 m. (ii)Iron ore: Iron ore of the lease area can be broadly divided in to two categories namely in-situ ore and float ore. These patches are widely distributed within the leasehold. In-situ ore is encountered around northern part of the leasehold where the Fe content is maximum. Float ore is available in the central and southern part of the. This ore is associated in a groundmass of lateritefor which the overall grade of the ore is lower than the in-situ grade. The orebodies of the area are exhibited the shape & size of the iron ore occurrence over the area as well as disposition of different litho-units and the observed structural features are depicted in the geological plan for reference. The in-situ iron ore body exhibits a dip of around 450 towards east with a trend of N-S. No structural disturbance of the mineralisation is observed in the area. (iii)Laterite: Incidence of laterite and aluminous laterite is observed on the south-western part of the area over a small patch.

2A.1.4.4 : Mode of Occurance & Controls of Mineralization

Mostly insitu iron ore in the Block A & Block B as shown in the Geological Plan. Laterite capping is found along the south-western side of the existing seasonal nala. Aluminous laterite is found along the south-eastern side of the area. Float iron ore with laterite is found on both northern & southern side of nala.

2A.1.4.5 : Extent of Weathering/ Alteration

The descending oxidizing meteoric solution through surficial weathering has penetrated from surface towards interior part of the BIF resulting in loss in volume and increase in porosity and permeability of the BIF forming insitu iron ore.

2A.1.4.6 : Nature/Form of Mineral	Lump
Specify If any other	Nil

2A.1.4.7 : Extent of Mineralization

The orebodies of the area are exhibited the shape & size of the iron ore occurrence over the area as well as disposition of different litho-units and the observed structural features are depicted in the geological plan for reference. The in-situ iron ore body exhibits a dip of around 450 towards east with a trend of N-S. No structural disturbance of the mineralisation is observed in the area.

2A.1.4.8 : Deposit Type (as per MEMC Rule)

Earlier no exploratory work was carried out in the lease area except the existing quarries. The proved zone is divided into two blocks i.e. Block A & Block B. Both of the blocks have been proposed to be developed in the renewed plan period of the mining lease. Block-A is the most prominent quarry of the lease. This quarry is situated in between the RML boundary points D2 &D3. The bottom R.L. of the quarry floor is 678 m. The height and width of the benches have been maintained with 5 m height and 10 m width. There are nos. of small quarries within the Block B which are situated between RML boundary C1 & C2. The bottom R.L. of the quarry floor is 696m. As per the evidence of field study, geological mapping and out cropping present in the lease area, 50 meter influence around the quarry periphery has been considered as G2 boundary as per the MEMC. The depth continuity of mineralization has been considered limited to the depth upto which direct evidence of mineralization is established i.e. the ore occurring till the bottom most depth of the

Strike / Trend of the Ore Body						
N	Nil	N	to	S	Nil	S

Amount of Dip of the Ore Body (degree)	Amount of Dip of the Ore Body (degree)
40	45
(from)	(to)

Dip Direction of the Ore Body			Plunge of Mineral Body (degree) (if any)	Direction of Plunge		
E	45	E	45	E	45	E

2A.2: Exploration

2A.2.1: Summary of The Previous Exploration (for fresh grant) / During Last Plan Period (for existing leases)

Name of The Agency
NA

2A.2.1.1: Geological Mapping

SI.No.	Year		Scale	Area Covered (Ha)
	From	To		
1	Nil	Nil	Nil	Nil

2A.2.1.2: Airborne Geophysical Survey

SI.No.	Type of Survey	Spacing (m)	Total line (km)	Area Covered (Ha)	Latitude (dd:mm:ss.ss)		Longitude (dd:mm:ss.ss)	
					Form	To	Form	To
1	NIL	0	0.00	0.0000	Nil	Nil	Nil	Nil

2A.2.1.3: Ground Geophysical Survey

SI.No.	Type of Survey	Spacing (m)	Total line (km)	Area Covered (Ha)	Latitude (dd:mm:ss.ss)		Longitude (dd:mm:ss.ss)	
					Form	To	Form	To
1	Nil	0	0	0.0000	Nil	Nil	Nil	Nil

2A.2.1.4: Geochemical Survey

SI.No.	Type of Sample	No of Samples	Aanlysis report	Area Covered (Ha)
1	Nil	0	Nil	Nil

2A.2.1.5: Pitting

Number of Pits
0

SI.No.	Year		Pit ID	Length of Pit (m)	Width of Pit (m)	Depth of Pit (m)	Depth (from)	Depth(to)	Running mtr	Litho units exposed	Name of the radical	Av Grade(in %)	Latitude (dd:mm:ss.ss)		Longitude (dd:mm:ss.ss)	
	From	To											From	To	From	To
1	Nil	Nil	Nil	0.00	0.00	0.00	0.00	0.00	0.00	Nil	Nil	0.00	Nil	Nil	Nil	Nil

2A.2.1.6: Trenching

Number of Trenches
0

2A.2.1.6.1: Spacing

Min (m)	Max (m)	Avg (m)
0.00	0.00	0.00

SI.No.	Year		Trench ID	Length of Trench (m)	Width of Trench (m)	Depth of Trench(m)	Depth (from)	Depth(to)	Running mtr	Litho units exposed	Name of the radical	Av. Grade	Latitude (dd:mm:ss.ss)		Longitude (dd:mm:ss.ss)	
	From	To											From	To	From	To
1	Nil	Nil	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0	0	0.0000	Nil	Nil	Nil	Nil

2A.2.1.7 Exploratory Drilling(Core/non Core)

SI.No.	Year	Exploration agency	Core holes	Non-core (RC/DTH)	Grand total	Attach log sheet of each borehole in

	From	To		Number of boreholes drilled	Total mtrs	Number of boreholes drilled	Total mtrs	Number of boreholes drilled	Total mtrs	csv/excel format
1	Nil	Nil	NA	0	0.00	0	0.00	0	0.00	Nil

2A.2.1.8: Exploratory Mining

SI.No.	Pit/Adit ID	Length in Mtr	Width in Mtr	Depth in mtrs	Volume (m^3)
1	NA	0.00	0.00	0.00	0.00

2A.2.1.9: Sampling

SI.No.	Type of sample	No of samples collected	Number of samples analyzed	Latitude (dd:mm:ss.ss)		Longitude (dd:mm:ss.ss)		Remark if any
				From	To	From	To	
1	Nil	0	0	Nil	Nil	Nil	Nil	Lump iron ore

2A.2.1.10: Chemical Analysis

SI.No.	Sample ID	Minerals	Radical with garde in %	Name of Agency	Type of agency	Attachment
1	Nil	Nil	Nil	Nil	Nil	Nil

* Chemical analysis of core /non vore samples may be uploaded in CSV file which shall normally include Five files namely collar file, survey file and Geology log file, Assay file & RQD File.

2A.2.1.11: Petrology & Mineralogical Studies

SI.No.	Type of Sample	Number of Sample Drawn	Number of Sample Analyzed	Petrographic Study Report
1	None	0	0	Nil

2A.2.1.12: Beneficiation Studies

SI.No.	Type of Beneficiation	Number of Samples	Attach

1	Nil	0	Nil

2A.2.1.13: Bulk Density Study as per M(EMC) Rules, 2015 and SOP of CGPB

Method adopted for calculating bulk density of ore and waste
As the mine is not in operation since 23.02.2011 it is not possible to collect samples for the said analysis. Hence, Bulk density of iron ore in the lease area has been considered as 3 Mt / m3 as per the previous approved document.

SI.No.	Nature of Ore/OB	Mineral	Number of samples	Bulk Density Established (t/m^3)
1	Ore	Iron	0	3.00

2A.2.1.14: Area Covered under Exploration

Level of exploration	Area in Ha.		Total Area in Ha.
	Forest	Non Forest	
G-1	0.000000	0.000000	0.000000
G-2	11.492000	0.000000	11.492000
G-3	0.000000	0.000000	0.000000
G-4	0.000000	0.000000	0.000000
Area proved as Non-mineralized	0.000000	0.000000	0.000000
Area to be explored	55.860000	2.254000	58.114000
Total	67.352000	2.254000	69.606000

2A.2.2: Summary of The Previous Exploration (Before Last Plan Period)

Name of The Agency
Chandi prasad sharma

2A.2.2.1: Geological Mapping

SI.No.	Year		Scale	Area Covered (Ha)
	From	To		
1	04/02/2005	28/12/2005	1:2000	69.61

2A.2.2.2: Airborne Geophysical Survey

SI.No.	Type of Survey	Spacing (m)	Total line (km)	Area Covered (Ha)	Latitude (dd:mm:ss.ss)		Longitude (dd:mm:ss.ss)	
					From	To	From	To
1	NIL	0.00	0.000000	0.00	Nil	Nil	Nil	Nil

2A.2.2.3: Ground Geophysical Survey

SI.No.	Type of Survey	Spacing (m)	Total line (km)	Area Covered (Ha)	Latitude (dd:mm:ss.ss)		Longitude (dd:mm:ss.ss)	
					From	To	From	To
1	NIL	0	0	0.0000	Nil	Nil	Nil	Nil

2A.2.2.4: Geochemical Survey

SI.No.	Type of Sample	No of Samples
1	Nil	0

2A.2.2.5: Pitting

SI.No.	Pit ID	Length of Pit (m)	Width of Pit (m)	Depth of Pit (m)	Litho units exposed	Litho Unit From (m)	Litho Unit To (m)	Average Grade(%)	Running Metres (m)	Latitude (dd:mm:ss.ss)		Longitude (dd:mm:ss.ss)	
										Form	To	Form	To
1	NA	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	Nil	Nil	Nil	Nil

2A.2.2.6: Trenching

Number of Trenches
0

Spacing

Min (m)	Max (m)	Avg (m)
0.00	0.00	0.00

Area Covered Under Trenching

Co-ordinates

Latitude

North	Nil
North	Nil
North	Nil
North	Nil
North	Nil

Longitude

East	Nil
East	Nil
East	Nil
East	Nil

SI.No.	Trench ID	Length of Trench (m)	Width of Trench (m)	Depth of Trench (m)	Litho Units Exposed	Average Grade	Running mtr	Latitude (dd:mm:ss.ss)		Longitude (dd:mm:ss.ss)	
								From	To	From	To
1	NA	0.0000	0.0000	0.0000	0	0	0.0000	Nil	Nil	Nil	Nil

2A.2.2.7: Exploratory Drilling

2A.2.2.7.1:Core/Non-core Drilling

SI.No.	Year		Exploration agency	Core holes		Non-core (RC/DTH)		Grand total		Attach log sheet of each borehole in csv/excel format
	From	To		Number of boreholes drilled	Total mtrs	Number of boreholes drilled	Total mtrs	Total boreholes	Total mtrs	
1	Nil	Nil	NA	0	0.00	0	0.00	0	0.00	Nil

2A.2.2.8: Exploratory Mining

SI.No.	Pit / Adit ID	Volume (m^3)
1	NA	0.00

2A.2.2.9: Sampling

SI.No.	Type of sample	Number of Samples	Area Covered (Ha)	Latitude (dd:mm:ss.ss)		Longitude (dd:mm:ss.ss)	
				From	To	From	To
1	Grab	2	1.30	21:51:42.63	21:51:45.83	85:10:33.05	85:10:35.68

2A.2.2.10: Chemical Analysis

SI.No.	Sample ID	Minerals	Radical Analysis	Attachment
1	SJ/BAR/IO-2018/00203	Iron ore	Fe, SiO2, Al2O3, P, LOI,Mn	Chemical_Analysis_C_P_Sharma.xlsx

2A.2.2.11:Petrology & Mineralogical Studies

SI.No.	Type of Sample	Number of Sample Drawn	Number of Sample Analyzed	Petrographic Study Report

1	None	0	0	Nil

2A.2.2.12: Beneficiation Test

SI.No.	Type of Beneficiation	Number of Samples	Attachment
1	Nil	0	Nil

2A.2.2.13: Bulk Density

SI.No.	Rock Type	Number of Samples	Minerals	Bulk Density Established (t/m^3)
1	Lumpy	1	Iron	3.00

2A.2.2.14: Area Covered under Exploration

Level of exploration	Area in Ha.		Total Area in Ha.
	Forest	Non Forest	
G-1	0.0000	0.0000	0.0000
G-2	11.4920	0.0000	11.4920
G-3	0.0000	0.0000	0.0000
G-4	0.0000	0.0000	0.0000
Area proved as Non-mineralized	0.0000	0.0000	0.0000
Area to be explored	55.8600	2.2540	58.1140
Total	67.3520	2.2540	69.6060

SI.No.	Year		Area converted to G1 from G2, G3 & G4	% increase in G-1 Area	Remaining Area % in G2	Remaining Area % in G3	Remaining Area % in G4	Remaining Area in G2	Remaining Area in G3	Remaining Area in G4
	From	To								
1	Nil	Nil	0.00	0.00	0.00	83.00	0.00	0.00	Nil	Nil
Potentially Mineralised area (Ha)										11.49

2A.2.3 Ore Body Geometry & Grade

SI.No.	Name of the ore band	General Strike / Trend	Dip Of Mineral Body	Average Strike Length (m)	Average Width (m)	Chemical parameters				
						Average Depth (m)	Name of the radical	Min Grade (%)	Max Grade (%)	Avg Grade (%)
1	iron	N-S	E	855.00	624.00	32.00	Fe	62.76	65.37	64.00

2A.2.4: Reserve / Resource Estimation Method

2A.2.4.1: Methodology

Resource / Reserve Estimation Method
Sectional Area Method
Methodology
In the process, three nos. of cross sections have been prepared over the lease area covering Block-A & Block-B. Then categories of reserve have been depicted in the cross sections to estimate the reserve by cross sectional area method. The data obtained from the existing quarries along transverse section lines are plotted in the sections marking the ore zone. Cross sectional areas of the ore zones are separately calculated for each section and multiplied by the corresponding inter sectional distance (length of influence) to arrive at volume of ore for each section. The volume of ore for each section has been multiplied by bulk density and recovery factor to reach at the final estimation of tonnage of resource/reserve.

2A.2.4.2: Resource Calculation

SI.No.	Cross Section/Block	Section Area/ Block Area(sq mt)	Influence(m)	Depth in mtr	Volume (m^3)	Bulk Density (t/m^3)	Resource Quantity (t)	Level of Exploration	Type of Land	Name of the radical	Grade (%)	Method used for resource estimation
1	G1	1533	243.00	Nil	223511.00	3.00	670534.00	332	Forest	Fe	62.78	Cross sectional method with 60% recovery
2	G2	1941	107.00	Nil	124612.00	3.00	373837.00	332	Forest	Fe	62.76	Cross sectional method with

												60% recovery
3	G3	1672	102.00	Nil	102326.00	3.00	306978.00	332	Forest	Fe	62.76	Cross sectional method with 60% recovery
Total					450449.00		1351349.00					

2A.2.4.3: Mineral Resource Estimate for Conversion to Mineral Reserve

Resource under pit slope, and safety zone have been deducted from resources to arrive upon mineral reserve.

2A.2.4.4: Threshold value & Cut off Parameters

The Threshold values of iron ore has been considered as 45% Fe and cutoff has been considered as 58% Fe. while estimating the Reserves.

2A.2.4.5: Mining Factors or Assumptions

As per the evidence of field study, geological mapping and out cropping present in the lease area, 50 meter influence around the quarry periphery has been considered as G2 boundary as per the MEMC. The depth continuity of mineralization has been considered limited to the depth upto which direct evidence of mineralization is established i.e. the ore occurring till the bottom most depth of the quarries which have been included as G2.

2A.2.4.6: Metallurgical Factors or Assumptions

Nil

2A.2.4.7: Cost & Revenue Factors

The iron ore of the lease hold is meant for domestic sale and at present there is good demand of iron ore for use in making steel. As it is a leased mine, the revenue earned from selling of the iron ore is substantially higher than the cost of production. Since operating cost is Rs.1908/tonne and average market value of iron ore is Rs.3848/tonne, the mine is economically viable.

2A.2.4.8: Market Assessment

The iron ore of the lease hold is meant for domestic sell and at present there is good demand of iron ore for use in making steel.

2A.2.4.9: Other Modifying Factors

NA

2A.2.4.10: Classification

PROBABLE MINEABLE RESERVE (122) Based on the existing quarries in the area and also from the nearby working mines, the thickness of the probable zone is considered up to the quarry depth. Laterally 50 meter around periphery of the quarry has been considered as G2 as per MEMC. Thus, the geological axis can be brought under G2. On feasibility axis, Environmental Clearance is already obtained. Leasehold area is valid as per the rule of MCR 1960. There will be no displacement and the pre-feasibility report has been prepared. Thus, the resources can be brought under F2. On economic front, the materials were already being dispatched to the various consuming industries in past running years, accordingly the grade of the ore is suitable for market value for the end use. Land use pattern, working plan is already known or designed. Thus the reserves can be brought under E1.Thus probable reserves can be classified under122 group. FEASIBLE & PREFEASIBLE MINERAL RESOURCES (222) The ore which cannot be extracted due to pit slope and other safety barriers like existing public road has been put under this category, probable reserve which can not be mined out has been put under 222.

2A.2.4.11: Calculation of blocked resources

SI.No.	Reserves blocked due to	Cross section/Block	Sectional area/ block area (in Sq mtr)	Influence (m)	Depth (m)	Volume (m^3)	Bulk Density (t/m^3)	Resource Quantity (t)	UNFC code	Type of Land	Name of the radical	Grade (%)	Method used for resource estimation
1	7.5 Meter Safety Barrier	G1	245.00	243.00	Nil	35721.00	3.00	107163.00	222	Forest	Fe	62.78	cross sectional with recovery 60%
2	7.5 Meter Safety Barrier	G2	1358.60	107.00	Nil	87223.00	3.00	261670.00	222	Forest	Fe	62.80	cross sectional with

													recovery 60%
3	7.5 Meter Safety Barrier	G3	152.00	102.00	Nil	9302.00	3.00	27907.00	222	Forest	Fe	62.76	cross sectional with recovery 60%
Total						132246.00		396740.00					

2A.2.4.12: Calulation of Reserves - I

SI.No.	Cross section/Block	Sectional area/ block area (in Sq mtr)	Influence (m)	Depth (m)	Volume (m^3)	Bulk Density (t/m^3)	Resource Quantity (t)	UNFC code	Type of Land	Name of the radical	Grade (%)	Method used for resource estimation
1	G1	1512	207.00	Nil	187790.00	3.00	563370.00	122	Forest	Fe	62.78	Cross sectional method with 60% recovery
2	G2	605	103.00	Nil	37389.00	3.00	112167.00	122	Forest	Fe	62.80	Cross sectional method with 60% recovery
3	G3	1615	96.00	Nil	93024.00	3.00	279072.00	122	Forest	Fe	62.76	Cross sectional method with 60% recovery
Total					318203.00		954609.00					

2A.2.4.13: Calculation of Reserves -II

Mineral	IRON ORE

Reserves/ Resources estimated as on	28/02/2023

UNIT of estimation	tonnes

A. Mineral Reserve

Classification	Code	Quantity			Grade		Remark
		Forest	Non Forest	Total	Forest	Non Forest	
1. Proved Mineral Reserve (A)	111	0.00	0.00	0.00	0	0	Nil
2. Probable Mineral Reserve (A)	121	0.00	0.00	0.00	0	0	Nil
3. Probable Mineral Reserve (A)	122	954609.00	0.00	954609.00	62.80 Fe	0	Recovery 60%

B. Remaining Resources

Classification	Code	Quantity			Grade		Remark
		Forest	Non Forest	Total	Forest	Non Forest	
1. Feasibility Mineral Resource (B)	211	0.00	0.00	0.00	0	0	Nil
2. Prefeasibility Mineral Resource (B)	221	0.00	0.00	0.00	0	0	Nil
3. Prefeasibility Mineral Resource (B)	222	396740.00	0.00	396740.00	62.80 Fe	0	Recovery 60%
4. Measured Mineral Resource (B)	331	0.00	0.00	0.00	0	0	Nil
5. Indicated Mineral Resource (B)	332	0.00	0.00	0.00	0	0	Nil
6. Inferred Mineral Resource (B)	333	0.00	0.00	0.00	0	0	Nil
7. Reconnaissance	334	0.00	0.00	0.00	0	0	Nil

Mineral Resource (B)							

Total Mineral Resources (A+B) :	1351349.00

2A.2.4.13: Calculation of Reserves -III

Associated Mineral (MANGANESE ORE)

Mineral	MANGANESE ORE
Reserves/ Resources estimated as on	Nil
UNIT of estimation	2

A. Mineral Reserve

Classification	Code	Quantity			Grade		Remark
		Forest	Non Forest	Total	Forest	Non Forest	
1. Proved Mineral Reserve (A)	111	Nil	Nil	Nil	Nil	Nil	Nil
2. Probable Mineral Reserve (A)	121	Nil	Nil	Nil	Nil	Nil	Nil
3. Probable Mineral Reserve (A)	122	Nil	Nil	Nil	Nil	Nil	Nil

B. Remaining Resources

Classification	Code	Quantity			Grade		Remark
		Forest	Non Forest	Total	Forest	Non Forest	
1. Feasibility Mineral Resource (B)	211	Nil	Nil	Nil	Nil	Nil	Nil
2. Prefeasibility Mineral Resource (B)	221	Nil	Nil	Nil	Nil	Nil	Nil
3. Prefeasibility Mineral Resource (B)	222	Nil	Nil	Nil	Nil	Nil	Nil

4. Measured Mineral Resource (B)	331	Nil	Nil	Nil	Nil	Nil	Nil
5. Indicated Mineral Resource (B)	332	Nil	Nil	Nil	Nil	Nil	Nil
6. Inferred Mineral Resource (B)	333	Nil	Nil	Nil	Nil	Nil	Nil
7. Reconnaissance Mineral Resource (B)	334	Nil	Nil	Nil	Nil	Nil	Nil

Total Mineral Resources (A+B) :	0.00

2A.2.5: Future Exploration Proposal

2A.2.5.1: Geological Mapping

SI.N.	Year	Scale	Area Covered (Ha)
1	Nil	Nil	0.00

2A.2.5.2: Ground Geophysical Survey

SI.No.	Year	Type of Survey	Spacing (m)	Total line (km)	Area Covered (Ha)	Latitude (dd:mm:ss.ss)		Longitude (dd:mm:ss.ss)	
						From	To	From	To
1	Nil	NIL	0	0	0.0000	Nil	Nil	Nil	Nil

2A.2.5.3: Pitting

Number of Pits
0

SI.No.	Year	Land Type	Pit ID	Length of Pit (m)	Width of Pit (m)	Depth of Pit (m)	Latitude (dd:mm:ss.ss)		Longitude (dd:mm:ss.ss)	
							From	To	From	To

1	Nil	Nil	NA	0.00	0.00	0.00	Nil	Nil	Nil	Nil

2A.2.5.4: Trenching

Number of Trenches
0

2A.2.5.4.1: SPACING

Min (m)	Max (m)	Avg (m)
0.00	0.00	0.00

2A.2.5.4.2: Area Covered Under Trenching

Co-ordinates

SI.No.	Year	Land Type	Trench ID	Length of Trench (m)	Width of Trench (m)	Depth of Trench(m)	Latitude (dd:mm:ss.ss)		Longitude (dd:mm:ss.ss)	
							From	To	From	To
1	Nil	Nil	NA	0.0000	0.0000	0.0000	Nil	Nil	Nil	Nil

2A.2.5.5: Exploratory Drilling

2A.2.5.5.1: Core Drilling & Non-Core Drilling

SI.No.	Year	In Forest Area				In Non Forest Area				Total Borehole	Total Meter
		No. of Borehole	Total Mtr	Type Borehole	Grid Interval	No. of Borehole	Total Mtr	Type Borehole	Grid Interval		
1	2023-2024	67	20100.00	Core	100.00	2	600.00	Core	100.00	69	20700.00

2A.2.5.6: Exploratory Mining

SI.No.	Year	Pit ID	Length in meter	Width in meter	Depth in meter	Volume (m^3)
1	Nil	NA	Nil	Nil	Nil	Nil

2A.2.5.7: Sampling

SI.No.	Year	Type of Sample	Number of Samples Proposed	Area Covered(Ha)	Latitude (dd:mm:ss.ss)		Longitude (dd:mm:ss.ss)	
					From	To	From	To
1	Nil	Nil	0	0.00	Nil	Nil	Nil	Nil

2A.2.5.8 Petrographic & Mineralgraphic Studies

SI.No.	Year	Type of Sample	Number of Samples Proposed
1	Nil	None	0

Chapter 2B : Geology & Exploration UG : NA

Chapter 3: Mineral Beneficiation / Processing

Name of The Ore/Mineral	Iron Ore

3.1: Mineralogy of the ROM ore/ Mineral

SI.No	Valuable Mineral Name	Approx. Mineral %	Gangue Mineral/s name	Approx. Mineral Gangue %
1	Mineralogy test will be undertaken	Nil	Nil	Nil

3.2: Complete Chemical Analysis of the ROM Ore/Mineral

SI.No	Radical	Wt%
1	Fe	62.7800
2	Fe	62.8000
3	Fe	62.7600

3.3: Crushing Section

3.3.1: Primary Crushing

SI.No	Type of Crusher	Make	Capacity of Crusher(tph)	Feed Size(mm)	Product Size(mm)
1	Jaw Crusher	sandvic	200	150.0000	5.0000

3.3.2: Secondary Crushing

Not Applicable

3.3.3: Tertiary Crushing

Not Applicable

3.4: Grinding Section

3.4.1: Dry Grinding

Not Applicable

3.4.2: Wet Grinding

Not Applicable

3.5: Dry Processing

3.5.1: Screening and Classification

SI.No	Type of Screen/Classifer	Stages	Make	Capacity(tph)	Aperture Size of Screen/Classifier (mm), if applicable	Feed Size(mm)	Product (mm)	Product Quality(if applicable)
1	Mobile screen	Single	Krestac	200.0000	30.0000	500.0000	Nil	>45%

3.5.2: Other Operations

Not Applicable

3.5.3: Product Quality

Not Applicable

3.6: Wet Processing

3.6.1: Scrubbing / Washing

SI.No	Type of Scrubbers / washers	Stages, if applicable	Make	Capacity(tph)	Feed Size(mm)	Product Size (mm)	Product Quality, if available	Water Requirement(l/h)	Fresh Water Requirement (l/h)	Recirculated Water (l/h)
1	NA	Not applicable	NA	Nil	Nil	Nil	Nil	Nil	Nil	Nil

3.6.2: Screening and Classification

SI.No	Type of screen / classifiers	Stages, if applicable	Make	Capacity(tph)	Aperture Size of Screen/Classifier (mm), if applicable	Feed Size(mm)	Product Size (mm)	Product Quality, if available	Water Requirement(l/h)	Fresh Water Requirement (l/h)	Recirculated Water (l/h)
1	Nil	Not applicable	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

3.6.3: Gravity Separation

SI.No	Type of separators (jig, table,	Stages, if applicable	Make	Capacity(tph)	Feed Size(mm)	Product (Conc) (tph)	Product-Mid (tph), if available	Product-Tail (tph)	Water Requirement(l/h)	Fresh Water Requirement (l/h)	Recirculated Water (l/h)

	spiral, etc.)										
1	Nil	NA	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

3.6.4: Magnetic Separation

SI.No	Type of magnetic separators (magnetic intensity)	Stages, if applicable	Make	Capacity(tph)	Feed Size(mm)	Product-Mag (tph)	Product-Mid (tph), if available	Product non-Mag (tph)	Water Requirement(l/h)	Fresh Water Requirement (l/h)	Recirculated Water (l/h)
1	Nil	NA	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

3.6.5: Flotation

SI.No	Type of flotation equipment (froth/ column)	Stages (rougher/ cleaner, etc), if applicable	Make	Capacity(tph)	Feed Size(mm)	Product-Float (tph)	Product non-Float (tph)	Water Requirement(l/h)	Fresh Water Requirement (l/h)	Recirculated Water (l/h)
1	Nil	NA	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

3.6.6: Other Operations

SI.No	Type of equipment / operation	Stages, if applicable	Make	Capacity(tph)	Feed Size(mm)	Product-Conc (tph)	Product-Mid (tph), if available	Product-Tail (tph)	Water Requirement(l/h)	Fresh Water Requirement (l/h)	Recirculated Water (l/h)
1	Nil	Not applicable	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

3.6.7: Product Quality (wet processing)

Products	Wt%	In Tonnes	Size (Range) mm	Complete chemical analysis

Concentrate	0.0000	0.0000	0	NA
Sub-grade	0.0000	0.0000	00	NA
Rejects	0.0000	0.0000	0	NA

3.7: Overall Product Quality (Dry cum Wet Processing)

Products	Wt%	In Tonnes	Size (Range) mm	Complete chemical analysis
Concentrate	0.0000	0.0000	0	NA
Sub-grade	0.0000	0.0000	0	NA
Rejects	0.0000	0.0000	0	NA

3.8: Disposal Method for tailing/ rejects

a) Explain the disposal method for tailing or reject from processing plant with detail chemical / mineral analysis of tailing	Nil
b) Size and capacity of tailing pond, toxic effect of such tailings, process adopted to neutralise its effect (if any)	Nil
c) Any other data (if available)	Nil

3.9: Overall water requirement of mining and mineral processing

Indicate quantity, source of supply, disposal of water and extent of recycling and chemical analysis of water	WATER_BALANCE.pdf

3.10: Flow sheets and charts

Material balance chart of mineral processing plant(s) (each stage of process)	MATERIAL_BALANCE.pdf
Attach flow sheet of beneficiation of plant(s)	Nil

Any other data (if applicable)	Nil

Chapter 4A: Mining Operations

4A.1.1: Existing Method of Mining	Mechanized

Choose one or more	HEMM with deephole drilling	None	None	None

4A.1.2: Proposed Method of Mining	Mechanized

Choose one or more	HEMM with deephole drilling	None	None	None

Reasons for Proposed Changes	The mining in the area was done by semimechanised method Quarries were developed within two blocks confined to the eastern part of the lease area The area shows favorable topography for developing approach road up to the pit excavation site Conventional tools and machineries such as spade chisel crowbar hammer 09 cum excavator jack hammer were used for excavation The ore produced from the mine was transported by tippers to the crushing point situated outside the leasehold The waste generated du

4A.2: Operational Parameters

4A.2.1: Inventory of Existing Pits & Dumps

4A.2.1.1: Pits

SI.No.	Pit ID	Pit Status	Area Covered by Pit(Ha)	Pit Dimensions(L*W*D)
1	Quarry-1	Active	0.23	52x44x6
2	Quarry-2	Active	0.05	35x13x2
3	Quarry-3	Active	0.04	50x7x2

4	Quarry-4	Active	210.00	21x10x1
5	Quarry-5	Active	2.52	210x120x42

4A.2.1.2: Dumps and Stacks

4A.2.1.2.1: Dump Details

SI.No.	Dump ID	Dump Status	Type of Dump	Total of Dump Quantity(t)	Area Covered by Dump(Ha)	Height(m)	Latitude (dd:mm:ss.ss)		Longitude (dd:mm:ss.ss)	
							From	To	From	To
1	Existing Dump	Active	Waste	182560.00	1.30	4.00	21:51:42.63	21:51:45.83	85:10:33.05	85:10:35.08

4A.2.1.2.2: Stack Details

SI.No.	Stack ID	Type of Stack	Total Stack of Quantity(t)	Area Covered by Stack(Ha)	Height(m)	Latitude (dd:mm:ss.ss)		Longitude (dd:mm:ss.ss)	
						From	To	From	To
1	Scattered stacks	Stack for mineral reject	2160	0.144	0.5	21:51:53.50	21:51:55.00	85:10:37.03	85:10:45.05

4A.2.1.3: Details of stabilised dumps

SI.No.	Dump ID	Number of Terraces	Average Height of Terraces(m)	Lenght of Toe Wall(m)	Lenght of Garland Drain(m)	Area Stablized(Ha)	Method of Stablization
1	NA	Nil	0.00	0.00	0.00	0.00	0

4A.2.2: Opencast Mining

4A.2.2.1: Bench Parameters

Pit ID	Year	Max Height of	Min Width of the	Slope of the Bench	Max Height of	Minimum Width of	Slope of the Bench	Overall Slope of	Number of Benches in	Number of Benches in	Number of Benches in	Max Depth of	Depth of Water	Max Slope Angle of

		the Benches in Over Burden (m)	Benches in Over Burden (m)	in Over Burden (degree)	the Benches in Mineral (m)	the Benches in Mineral (m)	in Mineral (degree)	Pit (degree)	Top Soil	Over Burden	Mineral	Workings (m)	Table (mRL)	Haul Roads (1xx in)
Quarry-5	2023-2024	0.00	0.00	0.00	6.00	10.00	45.00	22.00	0	0	3	15.00	655.00	16
Quarry-5	2024-2025	0.00	0.00	0.00	6.00	10.00	45.00	22.00	0	0	2	12.00	655.00	16
Quarry-5	2025-2026	0.00	0.00	0.00	6.00	10.00	45.00	22.00	0	0	2	12.00	655.00	Nil

4A.2.2.2: Yearwise Opencast Development - I Continue

SI.No.	Year	Pit ID	Bench	Direction	Bulk Density of Overburden (BD1) (ton/m^3)	Bulk Density of Mineral (BD2) (tonn/m^3)	Top Soil Volume (Length x Width x Height) (m^3)	Over Burden Volume (Length x Width x Height) (m^3)	Over Burden Quantity (t)	ROM Volume (Length x Width x Height) (m^3)	ROM Quantity (t)	Recovery	Mineral Reject (t)	Production Main (t)	Production Associated (t)	OB Ratio to Ore (m^3/ton)
1	2023-2024	Quarry-5	3	Towards east	2.50	3.00	0.00	20315.00	50787.50	16582.00	49746.00	0.95	2487.30	47258.70	0.00	0.4084
2	2024-2025	Quarry-5	2	Towards east	2.50	3.00	0.00	26548.00	66370.00	16670.00	50010.00	0.95	2500.50	47509.50	0.00	0.5309
3	2025-2026	Quarry-5	2	Towards east	2.50	3.00	0.00	32810.00	82025.00	16582.00	49746.00	0.95	2487.30	47258.70	0.00	0.6596
Total									199182.50		149502.00		7475.10	142026.90	0.00	

4A.2.2.2 Yearwise Opencast Development - I End

SI.No.	Year	Pit ID	Total Topsoil Volume (m^3)	Total Over Burden Volume (m^3)	Total Over Burden Quantity (t)	Total ROM Volume (m^3)	Total ROM Quantity (t)
1	2023-2024	Quarry-5	0.00	20315.00	50787.50	16582.00	49746.00
2	2024-2025	Quarry-5	0.00	26548.00	66370.00	16670.00	50010.00

3	2025-2026	Quarry-5	0.00	32810.00	82025.00	16582.00	49746.00
		Total	0.00	79673.00	199182.50	49834.00	149502.00

4A.2.2.3: Transportation & Hauling Equipment

SI.No.	Type	Make	Capacity (m^3)	No. of Equipments
1	Tipper	Tata	20.00	6

4A.3: Material Handling Summary

4A.3.1: Studies Undertaken

Title	Study Undertaken	Attachment (only pdf allowed)
Blast Vibration Study Report	No	Nil
Slope Stability Study Report	No	Nil
Recovery Study Report	No	Nil
Hydrological Study Report	No	Nil
Mineral Beneficiation Study Report	No	Nil
Subsidence Study Report	No	Nil
Geotechical Study Report	No	Nil
Any Other Study Report	No	Nil
Bulk Density Study Report	Yes	Bulk_Density_Study_Report.pdf

4A.3.2: Insitu Mining

SI.No.	Year	Waste Quantity(t)	ROM Quantity(t)	Total Handling (t)	ROM Quantity Saleable Mineral (t)	ROM Quantity Mineral Reject (t)	OB Ratio to Ore (Waste Quantity / ROM Quantity)	Grade Range (%)

1	2023-2024	50787.50	49746.00	100533.50	47258.70	2487.30	1.02	62.80
2	2024-2025	66370.00	50010.00	116380.00	47509.50	2500.50	0.75	62.80
3	2025-2026	82025.00	49746.00	131771.00	47258.70	2487.30	0.61	62.80
4	2023-2024	Nil	Nil	Nil	Nil	Nil	Nil	Nil
5	2023-2024	Nil	Nil	Nil	Nil	Nil	Nil	Nil
	Total	199182.50	149502.00	348684.50	142026.90	7475.10		

4A.3.3: Dump workings

SI.No.	Year	Dump ID	Latitude (dd:mm:ss.ss)		Longitude (dd:mm:ss.ss)		Area (m2)	Avg Height of Dump (m)	Volume (m^3)	Total Dump Quantity (t)	Proposed Dump Handling Quantity (t) (A)	Proposed Recovery of Saleable Mineral (t)(B)	Proposed Waste Quantity (t) (A-B)	Grade Range (%)	Justification
			From	To	From	To									
1	Nil	NA	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

4A.3.4: Calculation Summary

Year	2023-2024	2024-2025	2025-2026	Total
(A) Total ROM quantity (t)	49746.00	50010.00	49746.00	149502.00
(B) Saleable ore from ROM (t)	47258.70	47509.50	47258.70	142026.90
(C) Proposed Dump Handling Quantity (t)	0.00	0.00	0.00	0.00
(D) Saleable Ore recovered from dump workings (t)	0.00	0.00	0.00	0.00
(E) Total Saleable Ore (t)(=B+D)	47258.70	47509.50	47258.70	142026.90
(F) Total Quantity Handled (t)(=A+C)	49746.00	50010.00	49746.00	149502.00

4A.4: Machine Calculation

4A.4.1: Machine Requirement Summary

Number of Average Working Days in One Year (A)	300
Number of Shifts per Day (B)	1
Material Handling Required per Day (t) ((D)=Largest of (Q1,Q5)/(A))	498.34
Material to be Handled per Shift (t) ((E)=(D)/(B))	498.34
Handling Required per Hour (t) ((F)=(E)/8 hours)	71.14
Effective Shift Time	7 hrs 00 mins

4A.4.2: Shovel / Excavator Requirement

Effective Shift Time	7 hrs	00 mins

SI.No.	Type	Bucket Capacity (m^3)(A)	Bucket Fill Factor (B)	Swell Factor (C)	Tonnage Factor (t/m^3) (D)	Machine Utilization Factor (%) (U)	Efficiency (%) (E)	Cycle time (sec) (F)	(G) TPH =TPH (G) =((3600 x A x B x C x D x E x U) / F)	Total Hours (H) =Number of working days x Number of shifts/day x Effective shift hours	Yearly handling by one Excavator (t) (I)=(G x H)	Maximum handling of the material by this machine during the block period (t) (J)	Number of excavator machines required (K) = (J / I)	Standby excavator (L)
1	Excavators	0.90	0.9	0.6	3.00	0.60	0.40	25	50.39	2100	105819.00	131771.00	1.25	1

4A.4.3: Dumper Requirement

Effective Shift Time	7 hrs	00 mins

SI.No.	Total Hours=Number of working days (W)x Number of shifts/day x Effective shift hours (Machine Requirement Summary) (A)	Capacity of Dumpers (t) (B)	Speed of the dumper (KMPH) (i)	Lead Distance (KM) (ii)	Time taken to cover distance in minutes(iii) =(ii/i) x 60	Queuing, Loading Time at Shovel (min) (iv)	Queuing, Unloading Time during unloading (min) (v)	Total Time to complete one trip(vi) = (iii + iv + v)	No. of Trips / hr = (60 / vi)	Total transportation per hour =(B X vii)	Yearly handling by one dumper (ix) = A x TPH	Maximum handling of the material by this machine during the block period (t) (x)	Number of dumpers will be (xi) =(x / ix)	Plus Standby dumper (xii)
1	2100	10.00	10.00	0.25	1.50	5.00	3.00	9.50	6	63	132720.00	131771.00	1	1

4A.4.4: Drill Machine Requirement

Effective Shift Time	7 hrs	00 mins

SI.No.	Type of Drill	Depth of Hole(including Sub-grade Drilling (m)	Spacing (m)	Burden (m)	Bulk Density of Waste (t/m^3)	Bulk Density of Mineral (t/m^3)	Yield per Hole (t)	Yield per Meter (t/m) = Yield per Hole (t)/Depth of Hole(including Sub-grade Drilling (m))	Annual Target Known (t)	Drilling Requirement per Day (m) = (Annual Target Known (t) / Yield per Meter (t/m))/Number of Average Working Days in One Year (A)	Drilling Requirement per Shift(m)	Rate of Drilling per Hours (m/hr) = Drilling Requirement per Shift(m)/Effective Shift Time	Required No. of drills (m/c) = Required rate of drilling in meters per hr./ Actual rate of drilling in meters per hr of the machine deployed	Stand by Drill

1	Others	6.60	3.00	2.50	2.50	3.00	49.50	7.50	92239.00	41.00	41.00	5.85	0.14	1

4A.4.5: Machine Deployment Details

4A.4.5.1: Excavator & Loading Equipment

SI.No.	Type	Make	Capacity (m^3)	No. of Equipments
1	Excavator	L&T/ Hitachi	0.90	1

4A.4.5.2: Dozers Details

SI.No.	Type	Make	Capacity (hp)	No. of Equipments
1	NA	Nil	Nil	Nil

4A.4.5.3: Drilling Details

SI.No.	Type	Make	Capacity (t)	Diameter of Hole(mm)
1	Wagon Drill	Atlas Coppe1212	Nil	100.00

4A.5 Blasting Requirement

4A.5.1: Blasting & Explosive Requirement in Waste/Development

SI.No.	Drill Pattern / Spacing of Holes (m)	Burden of Holes (m)	Number of Rows / Rings	Yield per Holes in Waste (m^3)	Frequency of Blasting in a Week	Maximum Number of Holes Blasted in a Round	Charge per Hole (kg)	Charge per Round (kg)	Explosive Requirement Per Month in Development (kg)	Powder Factor in Development / Waste (t/kg)	Depth Of Hole
1	3	2.5	2	49.5	2	20	15	300	1200	9	6.6

4A.5.2: Blasting & Explosive Requirement in Mineral / Ore

Type of Explosive	Type of Explosives used / to be Used
Ammonium Nitrate Fuel Oil Mixture	Aluminised Gelled Slurry Explosives (Large Diameter)

SI.No.	Total ROM proposed to be handled in CUM/annum	Total ROM proposed to be handled in CUM/day	Spacing of Holes (m)	Burden of Holes (m)	Number of Rows	Yield per Holes in ROM Zone (m^3)	Frequency of Blasting in a Week	Maximum Number of Holes Blasted in a Round	No of Holes Required to be Blasted per Round	Charge per Hole (kg)	Charge per Round (kg)	Explosive Requirement Per Month for ROM Zone Blasting (kg)	Powder Factor in Ore (t/kg)	Pop Shooting (no of Boulders)	Plaster Shooting (no of Boulders)	Use of Rockbreaker	Capacity	Secondary Blasting Requirements	Depth Of Hole
1	16670	55	3	2.5	2	49.5	2	20	20	15	300	1200	7	0	0	2	0	0	6.6

4A.6: Man Power Deployment

4A.6.1: Managerial

SI.No.	Particular	Number of Persons in Shift 1	Number of Persons in Shift 2	Number of Persons in Shift 3	Number of Persons in General Shift	Total No. of Persons per day
1	1st Class	Nil	Nil	Nil	1	1
2	Mining Engineer	Nil	Nil	Nil	1	1
3	Geologist	Nil	Nil	Nil	1	1

4A.6.2: Supervisory

SI.No.	Particular	Number of Persons in Shift 1	Number of Persons in Shift 2	Number of Persons in Shift 3	Number of Persons in General Shift	Total No. of Persons per day
1	Foreman	Nil	Nil	Nil	1	1
2	Mine-mate	Nil	Nil	Nil	1	1

4A.6.3: Skilled Workers / Operators

SI.No.	Particular	Number of Persons in Shift 1	Number of Persons in Shift 2	Number of Persons in Shift 3	Number of Persons in General Shift	Total No. of Persons per day
1	Dumper Operator	Nil	Nil	Nil	2	2
2	Drill Operator	Nil	Nil	Nil	1	1

4A.6.4: Semi-skilled Workers

SI.No.	Number of Persons in Shift 1	Number of Persons in Shift 2	Number of Persons in Shift 3	Number of Persons in General Shift	Total No. of Persons per day
1	0	0	0	15	15

4A.6.5: Unskilled Workers

SI.No.	Number of Persons in Shift 1	Number of Persons in Shift 2	Number of Persons in Shift 3	Number of Persons in General Shift	Total No. of Persons per day
1	0	0	0	10	10

4A.6.6: Others Specify

SI.No.	Particular	Number of Persons in Shift 1	Number of Persons in Shift 2	Number of Persons in Shift 3	Number of Persons in General Shift	Total No. of Persons per day
1	other	0	0	0	30	30

4A.6.7: No of Persons Engaged Per Day

SI.No.	Number of Persons in Shift 1	Number of Persons in Shift 2	Number of Persons in Shift 3	Number of Persons in General Shift	Total No. of Persons per day

1	Nil	Nil	Nil	64	64

No of Shifts per Day ((A) = Machine Requirement Summary (B))	1
Average Daily Employment per Shift ((B) = (Total Number of Person per Day) / (A))	64
Material to be Handled per Shift ((C) = Machine Requirement Summary (E))	498

4A.6.8: Supervision

SI.No.	Particular	Qualification	Requirement / Proposed	In Position / Existing Strength	(Requirement / Proposed) - (In Position / Existing Strength) = (-) Shortage / (+) Excess	Remarks
1	Mine Foreman	Diploma In Mining With Foreman Competency Certificate	1	0	1	Nil
2	Mining Mate	Mate Certificate Of Competency	1	0	1	Nil

4A.7: Waste Management

4A.7.1: Existing Dump

SI.No.	Year	Dump Id	Type of Dump	Proposed Area (ha)	Height (m)	Latitude (dd:mm:ss.ss)		Longitude (dd:mm:ss.ss)		Total Dump Quantity (m^3)	Existing Dump Location
						From	To	From	To		
1	2023-2024	Existing dump	Waste	1.30	4.00	Nil	Nil	Nil	Nil	182560.00	Northern side of the lease

4A.7.2: New Dump

SI.No.	Year	Dump Id	Type of Dump	Proposed Area (ha)	Height (m)	Latitude (dd:mm:ss.ss)		Longitude (dd:mm:ss.ss)		Total Dump Quantity (m^3)	New Dump Location
						From	To	From	To		

1	2023-2024	Proposed dump	Waste	0.09	8.00	21:51:55.67	21:51:57.28	85:10:31.88	85:10:36.11	20315.00	NW of the lease area
2	2024-2025	Proposed dump	Waste	0.21	7.00	21:51:55.79	21:51:57.93	85:10:31.93	85:10:35.81	26548.00	NW of the lease area
3	2025-2026	Proposed dump	Waste	0.50	4.00	21:51:56.03	21:51:59.04	85:10:31.95	85:10:35.45	32810.00	NW of the lease area

4A.7.3: Existing Stack

SI.No.	Year	Stack ID	Type of Stack	Proposed Area (ha)	Height (m)	Latitude (dd:mm:ss.ss)		Longitude (dd:mm:ss.ss)		Total Stack Quantity (m^3)	Existing Stack Location
						From	To	From	To		
1	Nil	Small scattered stacks	Stack for mineral	0.14	0.50	21:51:53.50	21:51:55.00	85:10:37.03	85:10:45.05	2160.00	Small scattered stacks in block A&B

4A.7.4: New Stack

SI.No.	Year	Stack ID	Type of Stack	Proposed Area (ha)	Height (m)	Latitude (dd:mm:ss.ss)		Longitude (dd:mm:ss.ss)		Total Stack Quantity (m^3)	New Stack Location
						From	To	From	To		
1	2023-2024	Proposed stack	Stack for mineral reject	0.02	4.00	21:51:46.84	21:51:47.37	85:10:34.79	85:10:35.36	829.00	NE of lease area
2	2024-2025	Proposed stack	Stack for mineral reject	0.00	5.00	21:51:46.84	21:51:47.37	85:10:34.79	85:10:35.36	833.00	NE of lease area
3	2025-2026	NE of lease area	Stack for mineral reject	0.00	4.00	21:51:46.84	21:51:47.37	85:10:34.79	85:10:35.36	829.00	NE of lease area

4A.8: Mineral Waste Handling To Utilize As Minor Mineral

SI.No.	Year	Dump ID	Type of Dump	Proposed Area (ha)	Quantity Handled (t)	Quantity Recovered (t)	Name Of Minor Mineral	Alternative Waste Utilization (m^3)
1	Nil	NA	Nil	0.00	0.00	0.00	NA	0.00

4A.9: Use of Minerals

SI.No.	Proposed Use Of Mineral	Name Of Mineral	Relevant Use Of Mineral	Physical Specifications	Chemical Specifications
1	Direct Selling	IRON ORE	Making of Steel& sponge iron	+5-18 mm and +10-30mm Lumps and -5 mm fines	+58%Fe

* Choose among these:

1. Captive use in own industry

2. Direct Selling

3. Selling Post-Beneficiation /Up-gradation

*Select more than one, if applicable

Chapter 4 B : Mining Operations UG : NA

Chapter 5: Sustainable Mining

5.1: Sustainable Mining and SDF Implementations in Compliance of Rule 35 of MCDR'2017

The mine is temporarily discontinued since 2011. Before 2011, the mine was in operation for a short period. At that time no sustainable develeoment work was carried out. But after reopening of mine, all the mining and its allied activities will be strictly adhered to the template of the star rating prescribed by the Indian Bureau of Mines. Every year self assessment report will be submitted within the stipulated time. In addition to, Drone survey data will be submitted regularly.

(Total 200 characters)

Compliance of Vishakha Committee Guidelines for prevention of women harassment at workplace	Not Implemented

5.2: CSR INITIATIVES

5.2.1: 2023-2024

Details of Work Proposed during the Year / Measures Planned for the Affected Segment	Cumulative Work done / Measures Taken
5.2.1.1: Area to be Developed for Recreation	
Area (Ha)	Area (Ha)
0.01	0.00

5.2.1.2: Area for Water Storage & Recharge Facility	
Area (Ha)	Area (Ha)
0.00	0.00

5.2.1.3: Efforts Made towards Housing for Local Communities	
Number of Houses	Number of Houses
0	0

5.2.1.4: Efforts Made towards Providing Transport to Local Communities	
Number of Beneficiaries	Number of Beneficiaries
20	0

5.2.1.5: Efforts Made towards Providing Healthcare to Local Communities	
Number of Beneficiaries	Number of Beneficiaries
50	0

5.2.1.6: Efforts Made towards Providing Hygiene & Sanitation to Local Communities	
Number of Beneficiaries	Number of Beneficiaries
5	0

5.2.1.7: Efforts Made towards Skill Development Programs to Local Communities	
Number of Beneficiaries	Number of Beneficiaries
0	0

5.2.1.8: Efforts Made to Promote Education & Knowledge Based Initiatives	
Number of Beneficiaries	Number of Beneficiaries
5	0

5.2.1.9: Communication Facilities Provided to Local Communities	
Number of Beneficiaries	Number of Beneficiaries
0	0

5.2.1.10: Any Other Steps Taken for Improving the Socio-Economic Standard of Local Communities	
Number of Beneficiaries	Number of Beneficiaries
10	0

5.2.1.11: Adoption of ODF		
Number of Toilets Built inside the Lease Area	Number of Toilets Built outside the Lease Area:	Number of Beneficiaries
0	1	10

5.2.1.12: Awareness Program among Mine Workers for Swatchata	
Number of Swatchata Programmes Proposed	Number of Swatchata Programmes Held
1	0

5.2.1.13: Efforts for green energy	
Total energy consumption (KWh)	Green energy consumption (% of total)
10.00	2.00

5.2.1.14: Water & recycled use	
Total water consumption (KLD)	Water recycled (% of total)
10.00	5.00

5.2.2: 2024-2025

Details of Work Proposed during the Year / Measures Planned for the Affected Segment	Cumulative Work done / Measures Taken
5.2.2.1: Area to be Developed for Recreation	
Area (Ha)	Area (Ha)
0.00	0.00

5.2.2.2: Area for Water Storage & Recharge Facility	
Area (Ha)	Area (Ha)
0.00	0.00

5.2.2.3: Efforts Made towards Housing for Local Communities	
Number of Houses	Number of Houses
5	0

5.2.2.4: Efforts Made towards Providing Transport to Local Communities	
Number of Beneficiaries	Number of Beneficiaries
0	0

5.2.2.5: Efforts Made towards Providing Healthcare to Local Communities	
Number of Beneficiaries	Number of Beneficiaries
0	0

5.2.2.6: Efforts Made towards Providing Hygiene & Sanitation to Local Communities	
Number of Beneficiaries	Number of Beneficiaries
0	0

5.2.2.7: Efforts Made towards Skill Development Programs to Local Communities	
Number of Beneficiaries	Number of Beneficiaries
0	0

5.2.2.8: Efforts Made to Promote Education & Knowledge Based Initiatives	
Number of Beneficiaries	Number of Beneficiaries
0	0

5.2.2.9: Communication Facilities Provided to Local Communities	
Number of Beneficiaries	Number of Beneficiaries
0	0

5.2.2.10: Any Other Steps Taken for Improving the Socio-Economic Standard of Local Communities	
Number of Beneficiaries	Number of Beneficiaries
0	0

5.2.2.11: Adoption of ODF		
Number of Toilets Built inside the Lease Area	Number of Toilets Built outside the Lease Area:	Number of Beneficiaries
1	0	5

5.2.2.12: Awareness Program among Mine Workers for Swatchata	
Number of Swatchata Programmes Proposed	Number of Swatchata Programmes Held
1	0

5.2.2.13: Efforts for green energy	
Total energy consumption (KWh)	Green energy consumption (% of total)
0.00	0.00

5.2.2.14: Water & recycled use	
Total water consumption (KLD)	Water recycled (% of total)
0.00	0.00

5.2.3: 2025-2026

Details of Work Proposed during the Year / Measures Planned for the Affected Segment	Cumulative Work done / Measures Taken
5.2.3.1: Area to be Developed for Recreation	
Area (Ha)	Area (Ha)
0.00	0.00

5.2.3.2: Area for Water Storage & Recharge Facility	
Area (Ha)	Area (Ha)
0.00	0.00

5.2.3.3: Efforts Made towards Housing for Local Communities	
Number of Houses	Number of Houses
0	0

5.2.3.4: Efforts Made towards Providing Transport to Local Communities	
Number of Beneficiaries	Number of Beneficiaries
0	0

5.2.3.5: Efforts Made towards Providing Healthcare to Local Communities	
Number of Beneficiaries	Number of Beneficiaries
0	0

5.2.3.6: Efforts Made towards Providing Hygiene & Sanitation to Local Communities	
Number of Beneficiaries	Number of Beneficiaries
0	0

5.2.3.7: Efforts Made towards Skill Development Programs to Local Communities	
Number of Beneficiaries	Number of Beneficiaries
0	0

5.2.3.8: Efforts Made to Promote Education & Knowledge Based Initiatives	
Number of Beneficiaries	Number of Beneficiaries
0	0

5.2.3.9: Communication Facilities Provided to Local Communities	
Number of Beneficiaries	Number of Beneficiaries
0	0

5.2.3.10: Any Other Steps Taken for Improving the Socio-Economic Standard of Local Communities	
Number of Beneficiaries	Number of Beneficiaries
0	0

5.2.3.11: Adoption of ODF		
Number of Toilets Built inside the Lease Area	Number of Toilets Built outside the Lease Area:	Number of Beneficiaries
0	0	0

5.2.3.12: Awareness Program among Mine Workers for Swatchata	
Number of Swatchata Programmes Proposed	Number of Swatchata Programmes Held
0	0

5.2.3.13: Efforts for green energy	
Total energy consumption (KWh)	Green energy consumption (% of total)
0.00	0.00

5.2.3.14: Water & recycled use	
Total water consumption (KLD)	Water recycled (% of total)
0.00	0.00

5.3: Rehabilitation & Resettlement of Affected Persons

Particular	2023-2024	2024-2025	2025-2026
Proposed Number of Project Affected Persons(PAP)	0	0	0
Proposed Number of Person for Alternate Arrangement for Sustainable Livelihood	0	0	0
Proposed Number of Person for Skill Training	0	0	0
Proposed Number of Person Likely to get Direct Employment	0	0	0
Proposed Number of Person Likely to get Indirect Employment	0	0	0
Proposed Project Affected Families Skilled and Absorbed	0	0	0
Proposed Number of Project Affected Families	0	0	0

Chapter 6: Progressive Mine Closure Plan

6.1: Status of Land

Total Area Degraded					Total mined out area Reclaimed and Rehabilitated			Other Areas Reclaimed and Rehabilitated	
Total area under excavation in the lease		Area under Dumps(in hect)	Area under utility services(in hect)	Area under Stack yards(in hect)	Mined out Area Reclaimed but not rehabilitated(in hect)	Mined outArea fully Rehabilitated from Reclaimed area(in hect)	Area under Water Reservoir considered Rehabilitated (in hect)	Stabililized Waste dump Rehabilitated (in hect)	Virgin area under Green Belt (in hect)
Area under mining operation	Mined Out area in the lease								
5.43	0.00	1.30	0.01	0.14	0.00	0.00	0.00	0.00	10.68

6.2: Progressive Reclamation and Rehabilitation Plan

6.2.1: Backfilling

Quantity of Waste / Fill Material Available at Site (m^3)	79673.00
Availability of Top Soil for Spreading (m^3)	0.00
Proposed Spread Area (m^2)	0.00

6.2.1.1: Year Wise Proposal

SI.No	Year	Pit ID	Area (m^2)	Top RL	Bottom RL	Estimated Expenditure (₹ INR)
1	2025-2026	NA	0.00	0	0	0.00
2		NA	0.00	0	0	0.00
3		NA	0.00	0	0	0.00

6.2.2: Water Reservoir

Average Rainfall of The Area (mm)	1200.00
Proposed Area under Water Storage	0

6.2.2.1: Preparations For Ground Water Recharging

6.2.2.1.1: Drilling Holes	
Year	Proposed no of Holes to be Drilled
2023-2024	0.00
2024-2025	0.00
2025-2026	0.00

6.2.2.1.2:Preparation of Course Gravel Bed	
Year	Proposed Area of Bed (LxW)
2023-2024	0.00
2024-2025	0.00
2025-2026	0.00

Please specify, if others
Nil

6.2.2.2: Protective measures (Please specify running meter)

6.2.2.2.1: Fencing					
Year	Proposed Fencing Length (m)	Latitude(dd:mm:ss.ss)		Longitude(dd:mm:ss.ss)	
		From	To	From	To
2023-2024	0	Nil	Nil	Nil	Nil
2024-2025	0	Nil	Nil	Nil	Nil

2025-2026	0	Nil	Nil	Nil	Nil

6.2.2.2.2: Retaining Wall

Year	Proposed Wall Length (m)	Latitude (dd:mm:ss.ss)		Longitude (dd:mm:ss.ss)	
		From	To	From	To
2023-2024	0	Nil	Nil	Nil	Nil
2024-2025	0	Nil	Nil	Nil	Nil
2025-2026	0	Nil	Nil	Nil	Nil

6.2.2.2.3: Garland Drains

Year	Proposed Bund Length (m)	Latitude (dd:mm:ss.ss)		Longitude (dd:mm:ss.ss)	
		From	To	From	To
2023-2024	0	Nil	Nil	Nil	Nil
2024-2025	0	Nil	Nil	Nil	Nil
2025-2026	0	Nil	Nil	Nil	Nil

6.2.3: Green Belt Development

6.2.3.1: Cumulative work done (upto end of previous block of five years)

SI.No	Total Expenditure Incurred up to Last Year (INR)	Area Covered (Ha)	Number of Plants	Survival Rate (%)
1	0.00	0.00	Nil	0.00

6.2.3.2: Year Wise Proposal

SI.No	Year	Green Belt Location (s)	Area Proposed to be Covered (Ha)	Number of Plants Proposed	Expected Survival Rate (%)	Estimated Expenditure (₹ INR)

1	2023-2024	safety zone along the road	0.399	213	80	15000
2	2024-2025	safety zone along road	0.399	213	80	15000
3	2025-2026	safety zone along road	0.399	213	80	15000

6.2.4: Use of Shallow Pits

6.2.4.1: Cumulative Work Done (upto end of previous block of five years)

SI.No	Pit ID	Work Done	Area covered (m^2)	Total Expenditure Incurred (up to last five year block) (₹ INR)
1	NA	0	0.00	0.00

6.2.4.2: Year Wise Proposal

SI.No	Year	Pit ID	Total Area(Ha)	Area Proposed for Crops (Ha)	Suitable Crops	Area Proposed for Grass (Ha)	Total Proposed Expenditure (₹ INR)	Latitude (dd:mm:ss.ss)		Longitude (dd:mm:ss.ss)		Remarks
								From	To	From	To	
1	2023-2024	NA	0.00	0.00	0	0.00	0.00	Nil	Nil	Nil	Nil	NA
2	2024-2025	NA	0.00	0.00	0	0.00	0.00	Nil	Nil	Nil	Nil	NA
3	2025-2026	NA	0.00	0.00	0	0.00	0.00	Nil	Nil	Nil	Nil	NA

6.2.5: Pisciculture

6.2.5.1: Total Expenditure incurred as on Date (INR)	0

6.2.5.2: Cumulative work done as on Date

SI.No	Pit ID	Area (m^2)	Expenditure (₹ INR)
1	NA	0.00	0.00

6.2.5.3: Year Wise Proposal

SI.No	Year	Pit ID	Area (m^2)	Estimated Expenditure (₹ INR)
1	2023-2024	NA	0.00	0.00
2	2024-2025	NA	0.00	0.00
3	2025-2026	NA	0.00	0.00

6.2.5.4: Source of Water for Pisciculture	NA

6.2.5.5: Whether the quality of water has been assessed & found to be suitable for Pisciculture	No

6.2.6: Recreational Facility

6.2.6.1: Total Expenditure Incurred (up to last five year block) (INR)	0.00

6.2.6.2: Cumulative work done as on Date

SI.No	Pit ID	Area (m^2)	Expenditure (₹ INR)
1	NA	0.00	0.00

6.2.6.3: Year Wise Proposal

SI.No	Year	Type of Recreational Facility	Area Covered (Ha)	Latitude (dd:mm:ss.ss)		Longitude (dd:mm:ss.ss)		Estimated Expenditure (INR)
				From	To	From	To	
1	2023-2024	NA	0.00	Nil	Nil	Nil	Nil	0.00
2	2024-2025	NA	0.00	Nil	Nil	Nil	Nil	0.00
3	2025-2026	NA	0.00	Nil	Nil	Nil	Nil	0.00

6.2.7: Dump Area Stabilization & Development

SI.No	Year	Dump ID	No of Terraces	Average Height of Terraces (m)	Length of Toe Wall (m)	Length of Garland Drain (m)	Area Stabilized (Ha)	Method of Stabilization	Estimated Expenditure (₹ INR)	No of Check Dams
1	2023-2024	NA	0	0.00	0.00	0.00	0.00	NA	0.00	Nil
2	2024-2025	NA	0	0.00	0.00	0.00	0.00	NA	0.00	Nil
3	2025-2026	NA	0	0.00	0.00	0.00	0.00	NA	0.00	Nil

6.2.8: Other Form of Reclaiming the Area

6.2.8.1: Cumulative work done as on Date

SI.No	Total Expenditure incurred as on Date (INR)	Work Done
1	0.00	0

6.2.8.2: Year Wise Proposal

SI.No	Year	Work Proposals	Estimated Expenditure (INR)
1	2023-2024	0	0.00
2	2024-2025	0	0.00
3	2025-2026	0	0.00

6.2.9: TopSoil Management

6.2.9.1: Cummulative Work Done as on Date

SI.No	Top Soil Generated (m^3)	Top Soil Utilized (m^3)	Topsoil Stored (m^3)	Total expenditure incurred as on date (₹)

1	0.00	0.00	0.00	0.00

6.2.9.2: Year Wise Proposal

SI.No	Year	Topsoil Generated (m^3) (A)	Topsoil Utilized (m^3) (B)	Topsoil Stored (m^3) (A-B)	Estimated Expenditure (INR)
1	2023-2024	0.00	0.00	0.00	0.00
2	2024-2025	0.00	0.00	0.00	0.00
3	2025-2026	0.00	0.00	0.00	0.00

6.2.10: Tailings Dam Management

SI.No	Year	Yearly generation of Tailing (m^3) (A)	Total capacity of Tailing Pond (m^3)	Measures Proposed for Periodic Desilting	Yearly Utilization of Tailing (m^3) (B)	Disposal of Tailing to Tailing Pond (m^3) (A-B)	Tailing Dam Design	Structural Stability Studies
1	2023-2024	0.00	0.00	0	0.00	0.00	Nil	Nil
2	2024-2025	0.00	0.00	0	0.00	0.00	Nil	Nil
3	2025-2026	0.00	0.00	0	0.00	0.00	Nil	Nil

6.2.11: Land Use of Lease Area at the Expiry of Lease Period

Total Area Degraded				Non Degraded area	Total mined out area Reclaimed and Rehabilitated			Other Areas Reclaimed and Rehabilitated			
Mined Out area in the lease	Area under Dumps(in hect)	Area under the Tailing Dam	Area under utility services(in hect)	Area undistur bed/virgin	Mined out Area Reclaimed but not rehabilitated(i n hect)	Mined outArea fully Rehabilitated from Reclaimed area(in hect)	Area under Water Reservoir considered Rehabilitated (in hect)	Stabililized Waste dump Rehabilitated (in hect)	Virgin area under Green Belt (in hect)	Rehabilitated Area under utility services(in hect)	Rehabilitated Area under Tailing dam (in hect)
56.16	0.00	0.00	0.00	2.76	0.00	8.22	0.00	0.00	10.68	0.00	0.00

Chapter 7: Financial Assurance/ Performance Surety (AREA PUT TO USE)

2023-2024

Consolidated View of Financial Assurance

SI.No	Particular	Area put to use at Start of Year (ha) (A)	Additional Requirement (ha) (B)	Total (ha) (C = A + B)
1	Area under Mining	5.43	0.00	5.43
2	Topsoil stacking	0.00	0.00	0.00
3	Overburden/Waste Dumping	1.30	0.00	1.30
4	Mineral Storage	0.14	0.00	0.14
5	Infrastructure (Workshop, Administrative Building etc.)	0.01	0.00	0.01
6	Roads	2.17	0.00	2.17
7	Railway	0.00	0.00	0.00
8	Tailing Pond	0.00	0.00	0.00
9	Effluent Treatment Plant	0.00	0.00	0.00
10	Mineral Separation Plant	0.00	0.00	0.00
11	Township Area	0.00	0.00	0.00
12	Others to specify	0.60	0.00	0.60
	Total	9.65	0.00	9.65

2024-2025

Consolidated View of Financial Assurance

SI.No	Particular	Area put to use at Start of Year (ha) (A)	Additional Requirement (ha) (B)	Total (ha) (C = A + B)
1	Area under Mining	5.43	0.00	5.43
2	Topsoil stacking	0.00	0.00	0.00
3	Overburden/Waste Dumping	1.30	0.00	1.30
4	Mineral Storage	0.14	0.00	0.14
5	Infrastructure (Workshop, Administrative Building etc.)	0.01	0.00	0.01
6	Roads	2.17	0.00	2.17
7	Railway	0.00	0.00	0.00
8	Tailing Pond	0.00	0.00	0.00
9	Effluent Treatment Plant	0.00	0.00	0.00
10	Mineral Separation Plant	0.00	0.00	0.00
11	Township Area	0.00	0.00	0.00
12	Others to specify	0.60	0.00	0.60
	Total	9.65	0.00	9.65

2025-2026

Consolidated View of Financial Assurance

SI.No	Particular	Area put to use at Start of Year (ha) (A)	Additional Requirement (ha) (B)	Total (ha) (C = A + B)
1	Area under Mining	5.43	0.00	5.43
2	Topsoil stacking	0.00	0.00	0.00
3	Overburden/Waste Dumping	1.30	0.00	1.30
4	Mineral Storage	0.14	0.00	0.14
5	Infrastructure (Workshop, Administrative Building etc.)	0.01	0.00	0.01

6	Roads	2.17	0.00	2.17
7	Railway	0.00	0.00	0.00
8	Tailing Pond	0.00	0.00	0.00
9	Effluent Treatment Plant	0.00	0.00	0.00
10	Mineral Separation Plant	0.00	0.00	0.00
11	Township Area	0.00	0.00	0.00
12	Others to specify	0.60	0.00	0.60
	Total	9.65	0.00	9.65

Financial Assurance

Financial Assurance

Category A Mining Lease

Total Area Proposed to be put to use in hect(Year 1 to 5)	Amount of Bank Gurantee (Lac INR)	Valid till (dd/mm/yyyy)	Upload copy of Bank Gurantee as attachment
9.65	48.25	31/03/2026	NEW_BANK_GUARANTEE.pdf

Category B Mining Lease

SI.No	Total Area Proposed to be put to use in hect(Year 1 to 5)	Amount of Bank Gurantee (Lac INR)	Valid till (dd/mm/yyyy)	Upload copy of Bank Gurantee as attachment
1	Nil	Nil	Nil	Nil

Chapter 8: Review of Previous Proposals (Not applicable for fresh grant)

8.1: General

8.1.1: Lease Area Utilization

Sl. No.	Type of land use (in ha)	Area at the beginning of the proposal period	Area proposed under activity	Actual Area utilized in the proposal period	Deviation	Reasons for deviation
1	Mining	5.43	0.00	0.00	0	NA
2	Mineral storage	0.14	0.00	0.00	0	NA
3	Mineral Beneficiation plant	0.00	0.00	0.00	0	NA
4	Township	0.00	0.00	0.00	0	NA
5	Tailing Pond	0.00	0.00	0.00	0	NA
6	Railways	0.00	0.00	0.00	0	NA
7	Roads	2.17	0.00	0.00	0	NA
8	Infrastructure (Workshop, administrative building etc.)	0.01	0.00	0.00	0	NA
9	OB/waste dump	1.30	0.00	0.00	0	NA
10	Top soil preservation	0.00	0.00	0.00	0	NA
11	Others	0.60	0.00	0.00	0	NA
12	Total area put to use	9.65	0.00	0.00	0	NA
13	Excavated area reclaimed	0.00	0.00	0.00	0	NA
14	Waste dump area reclaimed	0.00	0.00	0.00	0	NA

15	Undisturbed Area	59.96	0.00	0.00	0	NA
	Total	69.61	0.00	0.00	0	

8.1.2: SDF and CSR Expenditures

Activity	Proposals		Achievement	Deviation	Reasons for deviation
Total expenditure incurred for implementation of SDF at mine level including - Environment Protection - CSR & other welfare activities in peripheral area (Explanation: Expenditure is not over and above the statutory levies imposed by the Government; However, THIS EXCLUDES CONTRIBUTION TO DMF & NMET and is over and above the statutory levies imposed by the Government.)	10% of Royalty (a)	Total Expenditure for SDF implementation (b)			
CSR (Corporate Social Responsibility) spending at the mine level in Proposal Period (as per Companies Act, 2013 or otherwise)	0.00	0.00	0.00	0.00	Mine is temporarily discontinued since 2011

8.2: Technical Details

8.2.1: Exploration

Particulars	Proposals			Achievement			Deviation			Reasons for deviation
	Boreholes	Pits	Trenchs	Boreholes	Pits	Trenchs	Boreholes	Pits	Trenchs	
Number of	69	0	0	Nil	Nil	Nil	-69	Nil	Nil	Mine is

Boreholes/ Pits/ Trenches			temporarily discontinued
Boreholes Meterage (If Boreholes selected in first row) (m)	20700	0	-20700	Mine is temporarily discontinued
Grid	100	0	-100	Mine is temporarily discontinued
G Axis upgradation during Proposal Period as per guidelines of MEMC Rule 2015)	69.61	0	-69.61	Mine is temporarily discontinued
Area converted under G1 from G2/G3	69.61	0	-69.61	Mine is temporarily discontinued

8.2.2: Mine Development (Opencast/ Underground/ Both/ Dump Mining)

Particulars	Proposals	Actual	Deviation	Reasons for deviation
8.2.2.1: Generation of Ore/Waste While Development				
Ore	99754	0	-99754	Mine is temporarily discontinued
Waste	46863	0	-46863	Mine is temporarily discontinued
Generated Waste while ROM recovery	46863	0	-46863	Mine is temporarily discontinued
Dumping Site (For Surface)	Northwestern side of Block-B	0	No dump was developed	Mine is temporarily discontinued
Removal of waste/ over burden in cubic meters	46863	0	-46863	Mine is temporarily discontinued
8.2.2.2: Excavation				

Lateral extent	161	0	-238	Mine is temporarily discontinued
Vertical extent	26.5	0	-445	Mine is temporarily discontinued

8.2.3: Mining operation: Dump Mining

Particulars	Proposals	Achievement	Deviation	Reasons for deviation
Handling of Material	0	0	0	0
Waste Generated post recovery	0	0	0	0
Dumping site for waste	0	0	0	0

8.2.4: Zero Waste Mining

Particulars	Proposals	Achievement	Deviation	Reasons for deviation
Alternative use / Disposal of Waste Generated (excluding top soil)	0.00	0.00	0.00	0

8.2.5: Backfilling

Particulars	Proposals	Achievement	Deviation	Reasons for deviation
Site (Co-ordinates)	0	0	0	No exhustion of ore was established
Area	0	0	0	No exhustion of ore was established
Depth	0	0	0	No exhustion ore was established
Volume Backfilled (CuM)	0	0	0	No exhustion of ore was established
Backfilled Area available for Reclamation and Rehabilitation	0	0	0	No exhustion ore was established
Backfilled Area Reclaimed and Rehabilitated	0	0	0	No exhustion of ore was established
Balance Backfilled Area	0	0	0	No exhustion of ore was established

8.2.6: Production of Mineral(s)

Particulars	Proposals	Achievement	Deviation	Reasons for deviation
8.2.6.1: ROM				
Opencast	99754.0000	0.0000	-99754.0000	Mine is temporarily discontinued
8.2.6.2: Cleaned Ore				
Opencast	0.0000	0.0000	0.0000	NA
Dump Mining	0.0000	0.0000	0.0000	NA
Recovery from Mineral Rejects or Tailings	0.0000	0.0000	0.0000	NA
Total	0.0000	0.0000	0.0000	NA

8.2.7: Handling of Mineral Rejects/ Sub-Grade

Particulars	Proposals	Achievement	Deviation	Reasons for deviation
Generation of mineral rejects				
Opencast	4978	0	-4978	Mine is temporarily discontinued
Dump Mining	0	0	0	NA
Other recovery	0	0	0	NA
Stacking of mineral rejects/ sub-grade mineral (Dump Id)	mineral rejects stack at the eastern side of lease area in Block-A	0	No MR stack wwas developed	Mine is temporarily discontinued
Blending of mineral reject / sub-grade	0	0	0	0

8.2.8: Environment Compliances

Particulars	Proposals	Achievement	Deviation	Reasons for deviation
8.2.8.1: Top soil				

Generation	0	0	0	NA
Utilization	0	0	0	NA
Stacking (Dump Id)	0	0	0	NA
Reclamation	0	0	0	NA
Rehabilitation	0	0	0	NA
8.2.8.2: Afforestation (Dumps/Benches/Backfilled Area etc.)				
2021 - 2022	0	0	0	NA
2022 - 2023	0	0	0	NA
Nil	Nil	Nil	Nil	Nil
Nil	Nil	Nil	Nil	Nil
Nil	Nil	Nil	Nil	Nil
8.2.8.3: Afforestation (Green Belt)				
2021 - 2022	3998	0	-3998	Mine is temporarily discontinued since 2011
2022 - 2023	3998	0	-3998	Mine is temporarily discontinued since 2011
Nil	Nil	Nil	Nil	Nil
Nil	Nil	Nil	Nil	Nil
Nil	Nil	Nil	Nil	Nil
Construction of check dams	Nil	Nil	Nil	Nil
Construction of Garland Drain (in meter)	Nil	Nil	Nil	Nil
Construction of Retaining Walls (in meter)	Nil	Nil	Nil	Nil
8.2.8.4: Tailings				
Generation	0	0	0	NA
Utilization	0	0	0	NA

Disposal	0	0	0	NA

8.3: Socio-Economic Review

8.3.1: Rehabilitation & Resettlement for Project Affected People

Particulars	Proposals	Achievement	Deviation	Reasons for deviation
No. of Project Affected People (PAP)	0.0000	0.0000	0.0000	Mine is temporarily discontinued since 2011
%age of PAP for whom alternate arrangements made for sustained livelihood	0.0000	0.0000	0.0000	Mine is temporarily discontinued since 2011
% of project affected families given employment	0.0000	0.0000	0.0000	Mine is temporarily discontinued since 2011
% of project affected families who have been skilled by the lessee and absorbed (% of total employment given to affected families)	0.0000	0.0000	0.0000	Mine is temporarily discontinued since 2011

8.3.2 : Grievance Redressal

Grievances Received	2021 - 2022	2022 - 2023	Nil	Nil	Nil
	0	0			
Grievances Redressed	0	0			

8.3.3: Welfare and socio-economic development programs for local communities

Particulars	2021 - 2022	2022 - 2023	Nil	Nil	Nil
8.3.3.1 Support for Drinking Water & Agriculture					
No. of Water Storage Tanks constructed	0	0	Nil	Nil	Nil

Drinking Water Facilities provided (Bore wells/ Pumps etc.)	0	0	Nil	Nil	Nil
Irrigation Support provided (Canals/ Pumps etc.)	0	0	Nil	Nil	Nil
No. of Water tanks De-silted	0	0	Nil	Nil	Nil
Water Treatment facilities provided (A/NA)	0	0	Nil	Nil	Nil
Amount of Water treated (in kL) (if selected A in above)	0	0	Nil	Nil	Nil
8.3.3.2 Support to Health & Medical Services					
No. of persons identified from Occupational health diseases	0	0	Nil	Nil	Nil
No. of Health Camps/ Medicine Camps Organized	0	0	Nil	Nil	Nil
8.3.3.3 Support to Skill development & Education					
Vocational Training Provided/ Support Provided					
No. of employees undergone Vocational training	0	0	Nil	Nil	Nil
No. of other persons undergone Vocational training	0	0	Nil	Nil	Nil
Number of Literacy & Education Camps held/ Supported	0	0	Nil	Nil	Nil
8.3.3.4 Support to Transportation Services & Infrastructure					
Expenditure on Transportation Services & Infrastructure	0	0	Nil	Nil	Nil
Road development (m) in the peripheral area (not lease area)	0	0	Nil	Nil	Nil
No. of Public transport support provided (Ambulance/Buses/ School Vans etc)	0	0	Nil	Nil	Nil

8.3.3.5 Swatchata Programs: Creating/providing sanitation and healthy condition in and around the mine area					
Adoption of ODF within mining lease area					
No. of Toilets built in the Lease Area	0	0	Nil	Nil	Nil
Adoption of ODF in nearby villages					
No. Of Toilets built in the villages	0	0	Nil	Nil	Nil
Provision for greenage recreational facility (Within Lease Area/ Outside)					
Recreational Area Type (Picnic Spot/ tracks/Park Etc)	0	0	Nil	Nil	Nil
Area covered (For within Lease Area only)	0	0	Nil	Nil	Nil
Awareness program among Mine workers for Swatchata					
No. of Swatchchta Programmes held	0	0	Nil	Nil	Nil

Chapter 9 : Impact Assessment (NA)

Chapter 10: Annexures

1. Upload Document

1.1 Upload Document

SI.No.	Title	Is Upload	Document (only pdf allowed)
1	Letter of Intent /Letter of lease grant	Nil	Nil
2	Copy of lease deed executed	Nil	lease_dead_compressed.pdf
3	Copy of Declaration of Owner/Nominated Owner in case of Company/partnership firm	Nil	power_of_Attorney.pdf
4	ID & Address Proof of Owner/ Nominated Owner	Nil	Anil_Kumar_Sharma_PAN_Card_compressed.pdf
5	Copy of Environment and Forest Clearence, Consent to Establish, Consent to Operate	Nil	EC,_Consent_to_Operate,_Forest_communication_letter.pdf
6	Copy of Registration of Company (RoC)/Partnership firm (Registration) & Deed	Nil	partnership_deed_compressed.pdf
7	Consent letter for Qualified Person	Nil	Consent.pdf
8	Experience & Qualification Details of Qualified Person	Nil	QP_Exprience.pdf
9	Certificate from QP	Nil	QP_Certificate.pdf
10	Copy of Bank Guarantee	Nil	BG.pdf
11	Copy of Performance Surety	Nil	Nil
12	Copy of MDPA (as applicable)	Nil	Nil
13	Exploration details	Nil	Nil
14	Copy of feasibility Report	Nil	FEASIBILITY_REPORT.pdf
15	Copy of Study reports conducted as per Para	Nil	Bulk_Density_Study_Report.pdf

	4.3.1		
16	Chemical and Mineralogical analysis report	Nil	CHEMICAL_ANALYSIS_(2).pdf
17	Any other Report or Certification as required in the submitted Document.	Nil	Land_use_table_comparison_Statement.pdf
18	Copy of Scale relaxation approval granted(if applicable)	No	Nil
19	Mineral processing flowsheet with stage wise recovery	Nil	Nil
20	Any Other	Yes	At_a_glance_information_Final.pdf

Chapter 11: Plates (OC)

1. Upload Document

1.1 Upload Document

S.N.	Title	Is Upload	Document
1	Lease sketch plan;	Nil	LEASE_PLAN.pdf
2	Surface Plan (.KMZ format)(Georeferenced); A statutory plan as per MCDR, 2017. The Plan should be submitted showing different color codes for:(1) Active Pits & Excavation area(2) Excavated area reclaimed & rehabilitated (3)Active dumps (4) Stabilized & rehabilitated dump area , (5) Green belt (6) Mineral Stacks (7) Utilities such as plant, buildings etc (8) Lease boundary along with other details.)	Nil	SURFACE_PLAN.kmz
3	Surface Geological Plan of the lease (.KMZ format)(Georeferenced); The Plan should be submitted showing different color codes for : (1) Lithological/Geological Occurance (2) Area under G1,G2,G3 & G4 (3) Active pits & Excavation area (4) Dump Area (5) Mineral Stacks (6) Lease boundary along with other details.)	Nil	GEOLOGICAL_PLAN.kmz
4	Surface Geological sections (in Pdf format); Geological sections with different color coding depicting all the features shown in Surface Geological Plan.)	Nil	GEOLOGICAL_SECTION.pdf
5	Five year Production and Development plan (.KMZ format)(Georeferenced); The Plan should be submitted showing different color coding for: (1) Active Pit and Excavation area ,	Nil	COMPOSITE_DEVELOPMENT_PLAN.kmz

	(2) Year wise excavation proposal for year I to V ((3) Active dump and yearwise dump proposal for year I to V (4) Year wise Dump working proposal for year I to V (6) Lease boundary (with reference to chapter 4) along with other details.)		
6	Five year Production and Development sections (in pdf fromat); Year wise excavation and dumping proposals with different color coding depicting all the features as shown in the Five year Production and development plan.)	Nil	COMPOSITE_DEVELOPMENT_SECTION.pdf
7	Progressive Mine Closure Plan (.KMZ format)(Georeferenced); The Plan should be submitted showing different color coding for : (1) Yearwise excavated area Reclaimed & rehabilitated for year I to V (2) Year wise dump area to be stabilized and dump area to be rehabilitatd for year I to V (3) Year wise Green area proposed from year I to V.(4) Any other reclamation and rehabilitation measures proposed (5) Lease boundary (with reference to chapter 6) along with other details.)	Nil	PMCP_PLAN.kmz
8	Progressive mine Closure sections (in pdf format); Year wise Progressive mine clouser sections showing all the yearwise reclamation, rehabilitaion proposals as depicted in the Progessive mine clouser plan.)	Nil	Progressive_Mine_Closure_Section.pdf
9	Conceptual Plan (.KMZ format)(Georeferenced); The Plan should depict the staus of lease area as envisaged at the end of life of Mine showing all the details. Status of land use shall be depicted by different color coding.)	Nil	CONCEPTUAL_PLAN.kmz
10	Conceptual Sections (pdf) format;	Nil	Conceptual_Sections.pdf
11	Geo referenced Cadastral Plan; Duly certified by the State Government)	Nil	CADASTRAL_MAP.pdf
12	Financial Assurance Plan (KMZ);	Nil	FINANCIAL_ASSURANCE.kmz

13	Environmental Plan (.KMZ format)(Georeferenced); As per MCDR, 2017 indicating all the details.)	Nil	ENVIRONMENT_PLAN.kmz
14	Any other plan/section as deemed necessary by approving authority;	Yes	DGPS_MAP.pdf
15	Five Year Production and Development sections (in pdf format);	Yes	Nil
16	LEVEL WISE SLICE PLAN; LEVEL WISE SLICE PLAN (PDF FORMAT IN VISIBLE SCALE))	Yes	Levelwise_slice_plan.pdf

Chapter 11 : Plates(UG) : NA