

MCDR INSPECTION REPORT 2022-23**General:**

Sl . No.	Particulars	Details
1	Name of the Mine	Metabodeli Iron Ore Mine
2	Date of Inspection:	19.09.2023
3	Name of Inspecting Officer	Shri Dayanand Upadhyay, DCOM
4	Name of official accompanying inspection	Shri T. Prasanna Kumar, President(Mines)
5	Last date of Inspection & Officer	06.09.2022 Shri Arun Kumar, RCOM
6	Total Lease Area (Ha) with breakup of Non-forest and forest land	25.00 Ha fully in forest land.
7	Mine code	30CHG08001
8	IBM Registration Number under rule 45 of MCDR, 1988/2017	IBM/4800/2011
9	Name of the Lease, Address, Phone, email and fax number	M/s Jayaswal Neco Industries Limited. Siltara Raipur (Chhattisgarh) Phone-07721-264241, 264243 email- spd.mines@necoindia.com
10	Village	Metabodeli
11	Taluka/Mandal	Tahsil- Pakhanjure
12	District	Kanker
13	Pin code	494665
14	State	Chhattisgarh
15	Post Office	Chargaon
16	Nearest Police Station	Siksod
17	Nearest Railway Station	Antagarh
18	Date of Grant of Mining Lease	11.01.2002
19	Date of Execution	17.01.2002
20	Weekly day of rest	Rotation
21	Date of opening of Mine	05.07.2002
22	Date of First Renewal, if applicable and its period & expiry	Not applicable. However as per MMDR Amendment Act, 2015 section 8A Validity of the lease period extended up to 50 years i.e. 20.06.2052 and accordingly Supplementary lease deed has been made for extended period.
23	Date of Second Renewal, if applicable and its period & expiry	Not Applicable
24	Date of submission of renewal application if Mining Operations are continuing under deemed extension	Not Applicable
25	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Shri Meghpal Singh, ED Steel & COO. Address : Siltara Growth Centre, Siltara Raipur(Chhattisgarh)-493111 Phone-07721-264241. Email :- meghpal.singh@necoindia.com Date of appointment—17.11.2014
26	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Shri T. Prasanna Kumar, President(Mines)& Agent Address: Village-Bhanupratappur Near Santoshi Mandir on Bhanupratappur Sambalpur road, Tahsil-Bhanupratappur District-Kanker (Chhattisgarh) PIN : 494669. M. No. 9109119092 Email: tembe.prasanna@necoindia.com

		Date of appointment—22.03.2017
27	Name of the Mine Manager with Address, phone, email, fax number and date of appointment in mines	Shri Krishankant, Diploma in Mining & First-class Minesmanagers competency certificate holder. Experience: 14+ years Address: Village-Bhanupratappur near Gurdwara on Argarh -Bhanupratappur Road Tahsil- Bhanupratappur, District-Kanker (Chhattisgarh) PIN-494669M.No.- 9109118939 <u>Email - mines.bhanupratappur@necoindia.com</u> Date of appointment—02.07.2018
28	Name of the Mining Engineer, Qualification and total experience with address, phone, email, fax number and date of appointment in the mine	Shri Vinod Thakur, Qualification: BE(Mining) Experience: +10years Address: Dalli-Bhanupratappur Road at Bhanupratappur District-Kanker (Chhattisgarh), PIN-494669 <u>Email- mines.bhanupratappur@necoindia.com</u> M-9109118925 Date of Appointment - 12.09.2018
29	Whether Geologist and Mining Engineer appointment in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Shri Lokesh Kumar Sahu Qualification: M Tech. (Applied Geology) Experience :+15years Address: Village- Mulla, near IIT school, Tahsil - Bhanupratappur, District-Kanker (Chhattisgarh) PIN- 494669, Email - <u>lokesh.sahu@necoindia.com</u> M-9109118930 Date of Appointment - 24.03.2017
30	Date of Approval of Mine Plan/Modified Mine Plan with five- year period and specific condition in approval letter, if any.	Modified Mining plan along with progressive Mine closure plan was approved by IBM vide letter no- BST/FE/MPLN-465/NGP/2016/41-Raipur/331 dt.24.08.2016 for period 2017-18 to 2021-22. Again Modified Mining Plan has been approved vide letter no.Kanker / Lauh/khayo/1149/2018-Raipur/244 dated 23.05.2018 for the period 2018-19 to 2021-22. Modified Mining Plan has been approved vide letter no.Kanker /Lauh/khayo-1253/2020-Raipur /954 dated 06.01.2021 for proposal period 2020-21 to 2021-22 for change in area of production. No specific condition given.
31	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five- year period and specific condition in approval letter, if any.	Review of Mining Plan for document and proposal period 2022-23 to 2026-27 submitted under rule 17(2) of MCR 2016 and rule 23 of MCDR- 2017 was approved by IBM vide letter No Kanker/ Fe/ MPLN - 1300/ 2021 - Raipur/472 dtd 18.01.2022.
32	Mineral(s) granted in lease and approved for Mining	Iron Ore.
33	Method of Mining (Opencast, Underground)	Opencast
34	Category (Fully Mechanized, Others or Manual)	Category 'A' Fully Mechanised
35	Captive/Non-Captive	Captive

36	Present EC Status	EC is granted for one Million Ton per annum iron ore production. CECB granted consent for one years which is valid upto 04.05.2024.
37	Status of Financial Assurance	The lessee has submitted financial assurance by way of Bank Guarantee no 04990ILG004921 dtd 24.12.2021 for an amount of Rs 85.0 Lakh valid till 31.03.2027 with respect to RMP for plan & proposal period 2022-23 to 2026-27.

Scientific Mining: Compliance of proposals of approved Mining Plan/Review of Mining Plan:

1.0 Exploration:

S.N.	Item	Proposals (2022-23)	Actual Work (2022-23)	Remarks
1a	Backlog of previous year Proposals	03 nos.	3 Nos DTH holes drilled.	3 Nos DTH holes drilled.
1b	Exploration over lease area for Geological axis 1 or 2.	Within G1 level	Within G1 level	Within G1 level
1c	Exploration Agency & Expenditure in Lakh Rupees during the year	Not specified.	In house drilling by Jayaswal Neco Industries Limited, Expenditure Rs 12.25 lakh.	In house drilling by Jayaswal Neco Industries Limited, Expenditure Rs 12.25 lakh.
1d	Balance area to be explored to bring Geological axis in 1 or 2.	Within G1 level of exploration	Entire lease area is explored under G1 level of exploration.	Entire lease area is explored under G1 level of exploration.
1e	Balance reserves as on 01.04.2023	Balance reserves as on 01.04.2023, 5445574 Tons		
1f	General remarks of Inspecting officer on geology, exploration etc.	Entire lease area is explored under G1 level of exploration.		

2.0 Development:

S.N.	Item	Proposals (2022-23)	Actual Work (2022-23)	Remarks
2a	Location of Development w.r.t. lease area	Longitude – E 497542 to E 498200 Latitude – N 2216005 to N 2216532	Actual - E 497537 to E 498198 Latitude – N 2216530 to N 2216005	Development is as per proposal.
2b	Separate benches in topsoil overburden and mineral (Rule 15)	Not Proposed	Nil	There is mixed benches with waste and ore.
2c	Stripping ratio or ore to OB ratio	1: 0.05	1: 0.04	Intercalated waste generated 23589 Cum
2d	Quantity of topsoil generation in m ³	Not Proposed	Nil	Nil
2e	Quantity of overburden generation in m ³	28557 Cum	23589 Cum	Intercalated waste generated 23589 Cum
2f	General remarks of Inspecting officer on development of pit w.r.t type of deposit etc.	Development is as per proposal.		

3.0 Exploitation:

S.N.	Item	Proposals (2022-23)	Actual Work (2022-23)	Remarks
3a	Number of pits proposed for production	One	One	Nil
3b	Quantity of ROM mineral production proposed	995775 MT	995707 MT	Entire ROM is being utilised.
3c	Recovery of Salable/usable mineral from ROM production	995775 MT	995707 MT	
3d	Quantity of mineral reject generation	Not proposed.	Nil	Nil
3e	Grade of mineral reject generation and threshold value declared	Not proposed.	Nil	Nil
3f	Quantity of sub-grade mineral generation	Not proposed.	Nil	Nil
3g	Grade of sub-grade mineral generation	Not proposed.	Nil	Nil
3h	Manual/Mechanized method adopted for segregation from ROM	Mechanized	Mechanized	Mechanized
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	Not Proposed	Only crushing & screening is practiced.	Only crushing & screening is practiced.
3j	Provision of drilling & blasting in mineral benches	Occasional drilling Blasting.	Due to soft nature of rock and mineral it is directly excavated from excavator as per proposal.	Due to soft nature of rock and mineral it is directly excavated from excavator as per proposal.
3k	Provision of mining machineries in mineral benches	1. Excavators 4 nos of 2.6 cum capacity 2. Pay loader 10 No 3. Dumpers: 17 nos. Capacity 25 Tone 4. Jeep/Tractor-NIL 5. Rock breaker 2 06 Weigh Bridge – 3 Nos 07. Fuel Pump with HSD storage tank- 1 No 08. DG set -4 09. Ambulance -1 Water Pump -2 nos 10. Water tanker: 04 nos. Capacity 10000 liters 11. Crusher-1	1. Excavator-6 Nos 2. Loader 1 nos, 3. Dumpers: 8 nos. 4. Jeep/Tractor-1 4. Water Tanker 2 5. Double decor Power screen 150 TPH=1 nos 6. Crusher – 1 nos. 250 TPH , 7. Generator (Diesel)- 400.000 KWH-1 20.000 KWH-1 128.000 KWH-1	Excavator, Loader and Dumper are equipped to winning out the mineral
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes, Bench height-6m	Yes	Bench height is suitably matched with the excavator.
3m	Total area covered under excavation /pits	12.70 Ha for the plan period	11.83 Ha at the end of year	11.83 Ha at the end of year

3n	Ore to OB ratio for the pit/mine during the year	1: 0.05	1: 0.04	Intercalated waste generated 23589 Cum
3o	Total area put in use under different heads at the end of year	At the end of plan period: Pit-12.7Ha, Waste-1.80 Ha Mineral & Others-0.80 Ha	Pit- 11.83 Ha Waste/reject-0.441 Others-0.75 HA	As on 31/03/2023: Pit- 11.83 Ha Waste/reject-0.441 Others-0.75 HA
3p	Production of ROM mineral during last five-years period, as Applicable (tonne)	2018-19:931472 MT	2018-19-931371 MT	ROM production is utilized to its own captive plant.
		2019-20-950222 MT	2019-20:950149 MT	
		2020-21-995415 MT	2020-21:995411 MT	
		2021-22-995358 MT	2021-22:995441 MT	
		2022-23-995775 MT	2022-23-995707MT	
3q	General remarks of inspecting officer on method of mining etc	The ROM production has been carried out from single pit as per proposal.		

4.0 Solid Waste Management-Dumping:

S.N.	Item	Proposals (2022-23)	Actual Work (2022-23)	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32,33)	Separate dumping of OB. No Top soil and Reject proposed.	Being done as per proposal	Being done as per proposal
4b	Location of topsoil, OB & mineral reject dumps	Top soil-Not proposed Sub-grade stacking-Not proposed Waste dump: 4975556 to 497612 E & 22162141 to 2216276 N	Waste dump: 4975556 to 497612 E & 22162141 to 2216276 N	Being done as per proposal
4c	Number of Dumps within lease area and outside lease area	Two number of dump within lease area.	Two number of dump within lease area.	Two number of dump within lease area.
4d	Location of Dumps w.r.t. ultimate pit limit (Rule 16)	Out Side the Ultimate pit limit	The dump is located outside the Ultimate Pit Limit.	The dump is located outside the Ultimate Pit Limit
4e	Number of Active & Alive dumps	One number of Active Dump	One number of Active dump	One number of Active dump
4f	Number of dead dumps	Not proposed	One dump established by plantation	One dump established by plantation
4g	Number of dumps established	Not proposed	One dump established by plantation	One dump established by plantation
4h	Whether Retaining wall or garland drain all along dumps are there	Construction Retaining wall or garland drain all along dumps has been proposed	Yes, Garland drain and Retaining wall has been constructed in the toe side of waste dump.	
4i	Length of Retaining wall or garland drain all	Garland drain of 120m size and	Garland drain 120 meter and	Garland drain and Retaining

	along dump	retaining wall of 220m	Retaining wall -300 meter is constructed in the toe side of waste dump.	wall has been constructed in the toe side of waste dump.
4j	Number of settling ponds	01	Three no. of settling pond has been constructed.	Three no. of settling pond has been constructed.
4k	Specific commends of inspecting officer on waste dump management	Separate dumping of OB is maintained as per proposal. Retaining wall is made all along dump.		

5.0 Solid Waste Management-Backfilling:

S.N.	Item	Proposals (2022-23)	Actual Work (2022-23)	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	Not proposed	Nil	Area is not matured for reclamation and rehabilitation.
5b	Area under backfilling of mined out area	Not proposed	Nil	Area is not matured for reclamation and rehabilitation.
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	Not proposed	Nil	Area is not matured for reclamation and rehabilitation.
5d	Total area fully reclaimed & rehabilitated	Not proposed	Nil	Area is not matured for reclamation and rehabilitation.
5e	General remarks of inspecting officer on backfilling, reclamation etc	Area is not matured for reclamation and rehabilitation.		

6.0 Progressive Mine Closer Plan:

S.N.	Item	Proposals (2022-23)	Actual Work (2022-23)	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly-Rule 26 (2)	As per 26(2) of MCDR 2017 the annual report has to be submitted	PMCP Submitted on 29.06.2023	PMCP Submitted on 29.06.2023
6b	Management of worked/mined out benches (i) Area available for rehabilitation (Ha) (ii) Afforestation done (ha) (iii) No. of saplings planted during the year (iv) Cumulative no. of plants (v) Any other specific method of rehabilitation (vi) Cost incurred on watch & care during the year	Not Proposed at present	NIL	NIL
6c	Compliance on reclamation and rehabilitation by backfilling			
	Voids available for backfilling (L*B*D)	Not proposed	Nil	Area is not matured

				for reclamation and rehabilitation.
	Void filled by waste/tailings	Not proposed	Nil	Area is not matured for reclamation and rehabilitation.
	Afforestation on the backfilling	Not proposed	Nil	Area is not matured for reclamation and rehabilitation.
	Rehabilitation by making water reservoir	Not proposed	Nil	Area is not matured for reclamation and rehabilitation.
	Any other specific means	Not proposed	Nil	Area is not matured for reclamation and rehabilitation.
6d	Compliance of Rehabilitation of waste land within lease			
	i. Afforestation	250nos.	1000nos.	1000nos. plantation
	ii. Area rehabilitation (ha)	0.1ha	0.00 Ha	
	iii. Method of rehabilitation	Plantation	Plantation	Plantation
6e	Compliance of Environment monitoring (core zone & buffer zone)	Environment monitoring proposed.	Environment monitoring carried out at regular interval and observed that all the parameters within specified standard limit.	Environment monitoring carried out at regular interval and observed that all the parameters within specified standard limit.
6f	General remarks of inspecting officer on PMCP compliance & progressive closer operations	Area is not matured for reclamation and rehabilitation. Plantation is carried out as per proposal.		

7.0 Mineral Conservation:

S.N.	Item	Proposals (2022-23)	Actual Work (2022-23)	Remarks
7a	ROM mineral dispatch or grade wise sorting within lease area	Grade wise sorting by crushing and screening	The grade wise sorting has been done by Mechanised screening and crushing.	The grade wise sorting has been done by Mechanised screening and crushing.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Mechanical	Mechanical	Mechanical
7c	Different grade of mineral sort out at mine	Mechanical	Lumps – 60 to 62% Fe Lumps – 62 to 65% Fe Fines- below 55% Fe Fines- 55 to 58% Fe Fines- 58 to 60 % Fe Fines - 60 to 62% Fe	Lumps – 60 to 62% Fe Lumps – 62 to 65% Fe Fines- below 55% Fe Fines- 55 to 58% Fe Fines- 58 to 60 % Fe Fines - 60 to 62% Fe

7d	Any beneficiation process at mines	Not proposed	Nil	Only crushing and screening
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	Grade wise sorting is being practiced by crushing and screening.		

8.0 Environment:

S.N.	Item	Proposals (2022-23)	Actual Work (2022-23)	Remarks
8a	Separate removal and utilization of topsoil (Rule32)	Top soil Not proposed.	Nil	Top soil Not proposed.
8b	Concurrent use or storage of topsoil	Top soil Not proposed.	Nil	Top soil Not proposed.
8c	Separate dumps for overburden waste rock, rejects and fines (Rule 33)	Separate OB/waste dump.	Separate OB/waste dump is maintained.	Separate OB/waste dump is maintained.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not proposed	Nil	Area is not matured for reclamation and rehabilitation.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not proposed	Nil	Area is not matured for reclamation and rehabilitation.
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	250 saplings	1000 saplings have been planted in safety zone area	1000 saplings have been planted. Cumulative 10600 no. of sapling planted.
8g	Survival rate	Not specified.	Survival rate 90%	Survival rate 90%
8h	Water sprinkling on roads to control airborne dust	Water tanker	Water tanker used to control airborne dust	Water tanker used to control airborne dust
8i	General remarks of inspecting officer on aesthetic beauty in and around mine area	Aesthetic beauty in and around mines area is maintained by plantation.		

9.0 Compliance of Rule 45:

SN	Item	Comments	Remarks	
9a	Status of submission of monthly and Annual returns	MR submitted regularly		
		AR submitted on - 29-06.2023		
SN	Item	Details Given in A.R.	Observation of I/Officer	Remarks
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mines Manager- Shri Krishankant Mining Engineer -- Shri Vinod Thakur Geologist—Shri Lokesh kumar Sahu	Information on Mining Engineer, Geologist and Manager are furnished.	Information on Mining Engineer, Geologist and Manager are furnished.

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pit- 11.83 Ha Waste/reject-0.441 Others-0.75 HA etc	Found in order.	Found in order.
9d	Scrutiny of Annual return on afforestation	1000 saplings	Found in order.	Found in order.
9e	Scrutiny of Annual return on mineral reject generation (Grade & Quantity)	Nil	Found in order.	Found in order.
9f	Scrutiny of Annual return on ROM stock and/or grade ore	As on 31.03.2023 ROM Stock- 6.885 MT Fine below 55% Fe – 114.89 MT	Found in order.	Found in order.
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production costs	Since captive mine therefore sale value is not applicable. Production Cost –Rs 1958/-	Found in order.	Found in order.
9i	Scrutiny of Annual return on Fixed assets	Fixed asset as on 31.03.2023- Rs. 60088601	Found in order.	Found in order.
9k	Scrutiny of Annual return on mining Machineries	1.Front end loader 1nos, 1.5Cum 2.Shovel (hydraulic) 6 nos, 1.900 Cum 3.Dumpers: 8 nos. Capacity 25 Ton. 4 Crusher- 250 TPH -1 Screen – 1 nos. 150 TPH , nos	Found in order.	Found in order.

10- Details of violations observed during last inspection and the compliance status.

No Violation of serious nature is observed during the inspection.

Date:

Signature:

Name: D. Upadhyay

Designation: DCOM