

MCDR INSPECTION REPORT

General

S. N.	Particulars	Details
1	Name of the Mine	Rajhara Mech. Mine
2	Date of Inspection:	13.09.2024
3	Name of Inspecting Officer	Sanjay Kumar Mahapatra, Assistant Controller of Mines
4	Name of official accompanying inspection	Shri Rakesh Singh, Mines Manager
5	Last date of Inspection & Officer	Shri D Upadhyay, DCOM on 21.09.2023
6	Total Lease Area (Ha) with breakup of Non-forest and forest land	Total Lease- 220.42 Ha Under Forest- 100.76 Ha Non-forest- 119.66 Ha
7	Mine code	30MPR13005
8	IBM Registration Number under rule 45 of MCDR, 1988	IBM/5662/2011
9	Name of the lessee, Address, phone, email and fax number	M/s STEEL AUTHORITY OF INDIA LIMITED (SAIL) ISPAT BHAVAN , LODHI ROAD , NEW DELHI
10	Village	Pandridalli
11	Taluka/Mandal	Dondi
12	District	Balod
13	Pin code	491228
14	State	Chhattisgarh
15	Post office	Dallirajhara
16	Nearest police station	Dallirajhara
17	Nearest Railway station	Dallirajhara
18	Date of Grant of Mining Lease	01.06.1958
19	Date of Execution	01/06/1958
20	Date of opening of Mine	31.12.1959
21	Date of first Renewal, if applicable and its period & expiry	0106.1958 TO 31.05.1988 (30 Years) Initial Grant 01.06.1988 to 31.05.1998 (10 Years) First Renewal
22	Date of second Renewal, if applicable and its period & expiry	01.06.1998 to 27.04.2003 (05 Years) Second Renewal 28.04.2003 to 27.04.2023 (20 Years) Third Renewal
23	Date of submission of renewal application if Mining Operations are continuing under deemed extension	28.04.2023 to 27.04.2043 Extension of Lease (20 Years)
24	Name of the Nominated Owner with Address, phone, email, fax number and	Sri Anirban Dasgupta O/o Director Incharge / Ispat Bhawan , Bhilai Steel Plant(SAIL) PO: Bhilai Tehsil: Durg District: Durg State : Chattisgarh Pin Code : 491001 Official Mobile No. :

	Date of appointment	9407980010 Landline No. with STD code : E-mail : anirbandasgupta@sail.in <u>06.08.2021</u>
25	Name of the Mine Agent with Address, phone, email, fax number and	Sri Jay Prakash O/o Rajhara Mech. Mine PO: Dallirajhara Tehsil: Doundi District: Balod State : Chhattisgarh Pin Code : 491228 Official Mobile No. : 9407983618 Landline No. with STD code : E-mail : jayprakash@sail.in <u>03.09.2024</u>
	Date of appointment	Sri Rakesh Singh O/o Rajhara Mech. Mine PO: Dallirajhara Tehsil: Doundi District: Balod State : Chhattisgarh Pin Code : 491228 Official Mobile No. : 9407982855 Landline No. with STD code : E-mail : rakeshsingh1@sail.in <u>19.10.2018</u>
26	Name of the Mines Manager with Address, phone, email, fax number and	Sri Rakesh Singh (First Class Mining competency) 18 Years Experience O/o Rajhara Mech. Mine PO: Dallirajhara Tehsil: Doundi District: Balod State : Chhattisgarh Pin Code : 491228 Official Mobile No. : 9407982855 Landline No. with STD code : E-mail : rakeshsingh1@sail.in <u>19.10.2018</u>
	Date of appointment in mines	Sri S.K. Srivastava (M.Phil) O/o Rajhara Mech. Mine PO: Dallirajhara Tehsil: Doundi District: Balod State : Chhattisgarh Pin Code : 491228 Official Mobile No. : 9407984104 Landline No. with STD code : E-mail : sksrivastava2@sail.in <u>01.07.2015</u>
27	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and	
	Date of appointment in mine	
28	Name of the Geologist, Qualification and total experience with Address, phone, email, fax number and	
	Date of appointment in mine	
29	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 55& carrying out their	YES

	duties as per rule 56 & 57.	
30	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	314(3)/2004- MCCM (CZ)/MP-23 date 09.01.2006 (01.04.2003 to 31.03.2008)
31	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	314(3)/2004- MCCM (CZ)/MP-23 date 09.01.2006 (01.04.2003 to 31.03.2008)
32	Mineral(s) granted in lease and proved for mining	Iron Ore
33	Method of Mining(Open cast, Underground)	Open cast
34	Category (Fully Mechanised, Others or Manual)	Fully Mechanised
35	Captive/Non Captive	Captive
36	Environmental Clearance	EC Not obtained. Matter sub-judice in High court of Bilaspur.
37	SPCB Approval	NO.11225/TS/CECB/2021 vide dated 19.03.2021 valid till 31.03.2024 for 4.5 Million tonne.
38	Financial Assurance details	Rs 10.026 crore valid till 31.03.2028
39	Status of Submission of Drone data/ Satellite Imagery	Not submitted & Violation issued.

Exploration

S.N.	Item	Proposals for, 2023-24	Actual work during 2023-24,	Remark
1a	Backlog of previous year	Nil	Nil	
1b	Exploration over lease area for Geological axis 1 or 2.	40	26	Violation of Rule 11(1) of MCDR 2017 issued on 21.10.2024
1c	Exploration Agency & Expenditure in lakh Rupees during the year	NA	M/s South West Pinnacle 457 Lakh Rs	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	NIL	.
1e	Balance reserves as per latest approved document	35.434 MT tonne	33.787 MT(as on 01.04.2024)	Depletion of 1.647 MT produced during the year 2023-24
1f	General remarks of inspecting officer on geology, exploration etc.	Exploration in form of 40 boreholes were proposed during the year 2023-24 against which only 26 exploration has been carried out. Violation of Rule 11(1) of MCDR, 2017 was issued on 21.10.2024.		

Development

S.N	Item	Proposals for, 2023-24	Actual work during 2023-24	Remark
2a	Location of development w.r.t. lease area	Pit I Latitude 20° 34' 25.42" N to 20° 33' 59.19 Longitude 81° 05' 38.09" E to 81° 06' 6.56" E Pit-II 20° 34' 0.50" N to 20° 34' 26.32 81° 04' 50.12" E to 81° 05'18.45" E	Pit I Latitude 20° 34' 25.42" N to 20° 33' 59.19 Longitude 81° 05' 38.09" E to 81° 06' 6.56" E	<u>Pit II not worked</u> Thus violation of Rule 11(1) of MCDR 2017 issued on 21.10.2024
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	NIL	Being maintained	
2c	Stripping ratio or ore to OB ratio	1:1.09 (T/M ³)	1:0.81 (T/M ³)	
2d	Quantity of topsoil generation in m ³	NIL	NIL	
2e	Quantity of overburden generation in ton	4.94 MT	3.62 MT	
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc	The quarry-I development is on the location as per proposal in approved Mining Plan The waste handling is marginally on lower side due to less development which may be due to less demand for production of ore from captive steel plant. Pit II not worked Thus violation of Rule 11(1) of MCDR 2017 issued on 21.10.2024		

EXPLOITATION

N.	Item	Proposals for, 2023-24	Actual work during 2023-24	Remark
3a	Number of pits proposed for production	02	01	<u>Pit II not worked</u> Violation of Rule 11(1) of MCDR 2017 issued on 21.10.2024
3b	Quantity of ROM mineral production proposed	2.14 MT	1.65 MT	The quantity of ore production is on lower side due to less demand from captive steel plant.
3c	Recovery of salable/usable	Full recovery	Full recovery	

	mineral from ROM production		
3d	Quantity of mineral reject generation	Nil	Nil
3e	Grade of mineral reject generation and threshold value declared	Nil	Nil
3f	Quantity of sub-grade mineral generation	Nil	Nil
3g	Grade of sub-grade mineral generation	Nil	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised	Mechanised
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	NA	NA
3j	Provision of drilling & blasting in mineral benches	Blast hole drilling using IDM-30 & ICM-260 drill machines.	Blast hole drilling using IDM-30 & ICM-260 drill machines.
3k	Provision of mining machineries in mineral benches	Hydraulic excavators, Dump trucks, dozers, grader.	Hydraulic excavators, Dump trucks, dozers, grader
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	YES (10 Mtrs.)	YES
3m	Total area covered under excavation/pits	125.1 Ha.	125.1 Ha.
3n	Ore to OB ratio for the pit/ mine during the year	1:1.09 (T/M ³)	1:0.81 (T/M ³)
3o	Total area put in use under different heads at the end of year	Covered under current (O-C) Workings 113.000 Reclaimed-rehabilitated 13.880 Used for waste disposal 41.280 Occupied by plant, buildings, residential,	Covered under current (O-C) Workings 113.000 Reclaimed-rehabilitated 13.880 Used for waste disposal 41.280 Occupied by plant, buildings, residential, welfare buildings and roads 4.720

welfare
buildings and
roads 4.720

3p	Production of ROM mineral during last six-year period, as applicable	2019-20	2.2M	2019-20	1.25M
		2020-21	2.5M	2020-21	1.33M
		2021-22	2.5M	2021-22	1.4MT
		2022-23	3.5M	2022-23	1.66M
		2023-24	2 MT	2023-24	1.65M
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3q General remarks of inspecting officer on method of Production carried from Pit-I only, Pit II not worked , Violation of Rule 11(1) of MCDR 2017 issued on 21.10.2024

Solid Waste management-Dumping

S.N	Item	Proposals for, 2023-24	Actual work during 2023-24	Remark
4a	Separate dumping of topsoil, OB & mineral reject (Rule 33, 37)	Yes	Being Maintained	No top soil generation reported during the year.
4b	Location of topsoil, OB & mineral reject dumps	Latitude 20° 34' 23.62" N to 20° 33' 48.75" Longitude 81° 06' 1.48" E to 81° 06' 22.26" E	Latitude 20° 34' 23.62" N to 20° 33' 48.75" Longitude 81° 06' 1.48" E to 81° 06' 22.26" E	Waste Dumping has been carried out in the safety zone (7.5-meter area within and along the lease boundary) and extended beyond the lease boundary in Kokan Waste Dump near boundary pillar No 52. Violation issued on 21.10.2024
4c	Number of dumps within lease area and outside lease area	Within Lease 1	Within Lease 1	
4d	Location of dumps w.r.t. ultimate pit limit	Outside Ultimate Pit	Outside Ultimate Pit	
4e	Number of active & alive dumps	1	1	
4f	Number of dead dumps	Nil	Nil	
4g	Number of dumps stabilized	Nil	Nil	
4h	Whether Retaining wall or garland drain all along dumps are there	Yes	Yes	

4i	Length of Retaining wall or garland drain all along dump	Nil	Nil	2530 Meter
4j	Number of settling ponds	NIL	NIL	06
4k	Specific comments of inspecting officer on waste dump management	Waste Dumping has been carried out in the safety zone (7.5-meter area within and along the lease boundary) and extended beyond the lease boundary in Kokan Waste Dump near boundary pillar No 52. Violation issued on 21.10.2024		

Solid Waste Management-Backfilling

S.N	Item	Proposals for, 2023-24	Actual work during 2023-24	Remark
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	Backfilling Proposed	Being Done	Backfilling of Quarry-II was proposed upto 540 MRL (height) during the year 2023-24. However, it is observed during inspection that back filling has been reached up to the height of 547 MRL(height)
5b	Area under backfilling of mined out area	317985 M ³	Being Done	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 36)	NA	NA	
5d	Total area fully reclaimed & rehabilitated	13.06	13.06	
5e	General remarks of inspecting officer on backfilling, reclamation etc	Backfilling of Quarry-II was proposed upto 540 MRL (height) during the year 2023-24. However, it is observed during inspection that back filling has been reached up to the height of 547 MRL(height). Violation of Rule 11(1) of MCDR 2017 issued on 21.10.2024.		

Progressive Mine Closure Plan

N.	Item	Proposals for, 2023-24	Actual work during 2023-24	Remark
6a	Whether Annual report on PMCP submitted on time and correctly - Rule 26(2).	As per guideline	Submitted	Submitted on dated 22.6.24 along with AR 23-24
6b	Management of worked/mined out benches	i) NIL	i) NIL	
		ii) 3.3500	ii) 0.5760	
	i) Area available for rehabilitation (ha)	iii) 8060	iii) 8060	1140 within lease
	ii) Afforestation done (ha)	iv) 61795	iv) 61795	6620 out
		1	1	

	iii) No. of saplings planted during the year	v) NIL vi) -	v) NIL vi) 3.	side of the lease
	iv) Cumulative no. of plants			
	v) Any other specific method of rehabilitation			
	vi) Cost incurred on watch & care during the year			
6c	Compliance on reclamation and rehabilitation by backfilling			
	i) Voids available for backfilling (L X B X D)	317985 M ³	368518 M ³	Backfill continued in Quarry-11.
	ii) Void filled by waste/tailings	Waste	Waste	
	iii) Afforestation on the backfilled area	Not proposed	Not Matured	
	iv) Rehabilitation by making water reservoir	NA		
	v) Any other specific means			
6d	Compliance of Rehabilitation of waste land within lease	Not proposed	Nil	
	i) Afforestation			
	ii) Area rehabilitated (ha)			
	iii) Method of rehabilitation			
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Environmental monitoring of air, water & noise proposed	Environmental monitoring of air, water & noise was carried out	Parameters were within the permissible limit.
6f	General remarks of inspecting officer on PMCP compliance & progressive closure operations	Annual PMCP report has been submitted. Plantation has been carried out as per proposal. Environmental monitoring of air, water & noise was carried out Parameters were within the permissible limit		

Mineral Conservation

S.N.	Item	Proposals for, 2023-24	Actual work during 2023-24	Remark
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM	ROM	Rom Processed outside the lease area .
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	NIL	NIL	
7c	Different grade of mineral sorted out at mines	Nil	Nil	
7d	Any beneficiation process at mines	No	No	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	During mine visit no subgrade mineral/ mineral reject observed. Thus, no comments to offer. ROM dispatched from the mine.		

Environment

S.N.	Item	Proposals for, 2023-24	Actual work during 2023-24	Remark
8a	Separate removal and utilization of topsoil (Rule 36)	NA	NIL	Negligible Top soil. Used in plantation.
8b	Concurrent use or storage of topsoil	Nil	NIL	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 37)	Proposed	Being maintained.	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Proposed	Being maintained.	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	3.35	3.35	
8f	Baseline information on existence of plantation & additional Plantation done	Nil	23-24 Within ML =1440 Outside ML =6620 Total = 8060 Cumulative 31 st march 2024 Within ML-- 149953 Outside ML-- 467998	
8g	Survival rate	Not specified	85%	
8h	Water sprinkling on roads to control airborne dust	Yes	4	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Aesthetic beauty in and around mines area is maintained by plantation. Top soil generation negligible and used for plantation during the year 2023-24.		

Compliance of Rule 45

S.N	Item	COMMENTS	Remarks	
9a	Status of submission of Monthly and Annual returns	M.R. being Submitted in time. A.R. Submitted up to 22.06.2024		
S.N	Item	Details given in	Observation of I/ Officer	Remarks

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	A.R. for the year 2022-23/ 2023-24 Shri Rakesh Singh (Manager) Shri Rakesh Singh (Mining Engineer) Shri Sanjay Srivastava, Geologist	Both Mining Engineer & Geologist present during inspection.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Abounded by (O-C)Mining - 0.000 Covered under (O-C)Workings - 113.00 Reclaimed – rehabilitated - 13.880 Used for Waste disposal - 41.280 Occupied by plant, Buildings, residential roads etc. - 4.720 Unused land, undistributed forest - 47.540 Work done under progressive mine Closer plan during year - 0.00	Appears to be correct.
9d	Scrutiny of Annual return on afforestation	Afforestation in WML Number of tree planted – 1440 Survival rate in percentage – 85 Total no. of	Appears to be correct.

		trees at the end of the year - 149953	
		Afforestation in OML	
		Number of tree planted - 6620	
		Survival rate in percentage - 85	
		Total no. of trees at the end of the year - 467998	
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	0.00	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	(a)Open Cast Working Opening stock - 22154.031 Production - 1657795.680 Closing stock - 1009.571 (b)Under Ground Working - 0.00 (c)Dump Working - 0.00	Average Grade:- 62.00 Appears to be correct.
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Sale value / Ex Mine Price - Rs 2717.09/-	As captive mines of SAIL, Bhillai Steel Plant.
9i	Scrutiny of Annual return on fixed assets	Rs.7350577 47	As per AR
9k	Scrutiny of Annual return on mining machineries	BLAST HOST DRILL 152.000 BLAST HOST DRILL 152.000 MM - 2 SHOVEL (HYDRAULIC) 4.500 CUM --7 DUMPER 50.000 TONNE -	As per AR

DUMPER
60.000 TONNE -
7
DOZER 410.000
HP -5
MOTOR
GRADER
164.000 HP -1
DUMPER
60.000 TONNE -
1

10. Drone Survey Information and data thereof.: Drone data not submitted. Violation of Rule 34.A of MCDR 2017 issued on 21.10.2024.

11- Status of compliance of MCDR, 2017 including therewith the rectification of outstanding violation of the rules.

- (i) No violation pointed during earlier inspection.
- (ii) Violation of Rule 11(1), 13(2), 34.A and 45(7) of MCDR, 2017 are pointed out after current inspection. Violation letter issued on 21.10.2024

) संजय कुमार महापात्र)
सहायक खान नियंत्रक
भारतीय खान ब्यूरो