

MCDR INSPECTION REPORT1/7116/2023
General

Sl. No.	Particulars	Details
1	Name of the Mine	Neelachal Iron Ore Mines
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	Forest – 806.153 Ha <u>Non Forest – 68.137 Ha</u> Total - 874.290 Ha
3	Minecode	30ORI13070
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/5027/2011
5	Name of the lessee, Address, phone, email and fax number	Neelachal Ispat Nigam Limited IPICOL House, 1 st Floor Annexe Building, Bhubaneswar-751022 Ph- (0674) 2543898, 2543741 Fax - 2541763 Email – ninlmines@gmail.com
6	Village	Mithirda
7	Taluka/Mandal	Koira
8	District	Sundargarh
9	Pincode	770048
10	State	Odisha
11	Post office	Patmunda
12	Nearest police station	Koira
13	Nearest Railway station	Nayagarh
14	Date of Grant of Mining Lease	18.02.2009
15	Date of Execution	11.01.2017
16	Date of opening of Mine	06.08.2019
17	Date of first Renewal, if applicable and its period & expiry	NA
18	Date of second Renewal, if applicable and its period & expiry	NA
19	Date of submission of renewal application if Mining Operations are continuing under deemed extension	NA
20	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Sri Sudhir Mehta Managing Director & CEO Neelachal Ispat Nigam Limited Kalinganagar Industrial Estate PO-Duburi, Dist-Jajpur Odisha-755026 Ph- 8658028151 Email – mdoffice@tsnini.com Date of appointment – 09.07.2022
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Sri P K Mohapatra DGM (Mines) Neelachal Ispat Nigam Limited Mines Division, Lane 3, Shree Vihar, Bhalukipatla, Keonjhar – 758001 Mobile - 9439493993 Email – ninlmines@gmail.com Date of appointment – 19.08.2019

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22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Sri K Raja Reddy AGM (Mines) Neelachal Ispat Nigam Limited Mines Division, Lane 3, Shree Vihar, Bhalukipatla, Keonjhar – 758001 Mobile - 9437383776 Email – ninlmines@gmail.com Date of appointment -19.08.2019
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Sri K Raja Reddy, Qualification – BE (Mining), FCC Experience – 30 years Neelachal Ispat Nigam Limited Mines Division, Lane 3, Shree Vihar, Bhalukipatla, Keonjhar – 758001 Mobile - 9437383776 Email – ninlmines@gmail.com Date of appointment -19.08.2019
24	Name of the Geologist, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Sri Saroj Kumar Mishra, Qualification – M Sc (Geology) Experience – 32 years Neelachal Ispat Nigam Limited Mines Division, Lane 3, Shree Vihar, Bhalukipatla, Keonjhar – 758001 Mobile – 9437059195 Email – ninlmines@gmail.com Date of appointment -19.08.2019
25	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 55 & carrying out their duties as per rule 56 & 57.	Yes
26	Date of Approval of Mining Plan/ Modified Mining Plan with five-year period and specific condition in approval letter, if any.	Approved vide 314(3)/2008-MCCM(CZ)/MP-53/1086 dated 16.06.2009 (Plan period 2016-17 to 2020-21)
27	Date of Approval of Scheme of Mining/ Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	Approved vide RMP/A/02-ORI/BHU/2021-22 dated 04.05.2021 (Plan period 2021-22 to 2025-26)
28	Mineral (s) granted in lease and proved for mining	Iron Ore
29	Method of Mining (Opencast, Underground)	Opencast
30	Category (Fully Mechanised, Others or Manual)	Fully Mechanised
31	Captive/Non Captive	Captive

Scientific Mining: Compliance of proposals of approved mining plan/scheme of mining. (Duplication of information in existing TMIS data sheets and draft write up has been avoided.)

1/7116/2023 **Exploration**

Sl. No.	Item	Proposals for 2021-22, 2022-23 (till date)	Actual work during 2021-22, 2022-23 (till date)	Remark
1a	Backlog of previous year	2021-22: 212 nos. 2022-23: 291 nos.	2021-22: 18 nos. 2022-23: 48 nos. (continuing)	In view of disinvestment of NINL and Covid pandemic issues exploration could not be completed. Violation issued.
1b	Exploration over lease area for Geological axis 1 or 2.			Exploration is under progress with 2 nos drill rigs.
1c	Exploration Agency & Expenditure in lakh Rupees during the year	(i) M/s World Consultancy Services, BBSR – Rs.57,82,000/- (ii) M/s Gemco Kati, Nagpur	18 boreholes comprise of 1000mtrs. 48 boreholes comprise of 1583 mtrs.	
1d	Balance area to be explored to bring Geological axis in 1 or 2	617.63 Ha	100 ha apprx	
1e	Balance reserves as on 01.04.2021	153.29 Million Tonnes	It will be reassessed after completion of exploration.	

Development

Sl. No.	Item	Proposals for 2021-22, 2022-23 (till date)	Actual work during 2021-22, 2022-23 (till date)	Remark
2a	Location of development w.r.t. lease area	Mithirda	Mithirda	
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	NA	Nil	
2c	Stripping ratio or ore to OB ratio	1:0.054		
2d	Quantity of topsoil generation in m3	2021-22: Nil 2022-23: Nil	2021-22:300 m3 2022-23:100 m3	
2e	Quantity of overburden generation in m3	2021-22: 105892.2 2022-23: 106432.35	2021-22:16621m3 2022-23: 49707 m3	

EXPLOITATION

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Item No.	Item	Proposals for 2021-22, 2022-23 (till date)	Actual work during 2021-22, 2022-23 (till date)	Remark
3a	Number of pits proposed for production	2021-22 : 1 2022-23 : 1	2021-22 : 1 2022-23 : 1	
3b	Quantity of ROM mineral production proposed	2021-22: 1950181 T 2022-23: 1960129 T	2021-22 : 226040 T 2022-23: 1077000 T	
3c	Recovery of salable/usable mineral from ROM production	2021-22: 1835465 T 2022-23: 1844827 T	2021-22: 46969 T 2022-23: 576247 T	
3d	Quantity of mineral reject generation	2021-22: 114716 T 2022-23: 115301 T	2021-22: 0 2022-23: 0	
3e	Grade of mineral reject generation and threshold value declared	45-55% Fe	45-55% Fe	
3f	Quantity of sub-grade mineral generation	2021-22: 114716 T 2022-23: 115301 T	2021-22: 0 2022-23: 0	
3g	Grade of sub-grade mineral generation	45-55% Fe	45-55% Fe	
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	Proposed		Obtained permission under Reg No.106(2)(b) of MMR 1961
3k	Provision of mining machineries in mineral benches	Proposed		Permission obtained for deployment of HEMM under Reg No.106(2)(b) of MMR 1961
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes	Yes	
3m	Total area covered under excavation/pits	20.94	5 ha	
3n	Ore to OB ratio for the pit/mine during the year	1:0.054		
3o	Total area put in use under different heads at the end of year	68.47	6 ha	
3p	Production of ROM mineral during last six-year period, as applicable 2016-17 to 2020-21 2021-22	9400380 1950181	54 226040	

I/7116/2023 **Solid Waste management-Dumping**

Sl. No.	Item	Proposals for 2021-22, 2022-23 (till date)	Actual work during 2021-22, 2022-23 (till date)	Remark
4a	Separate dumping of topsoil, OB & mineral reject (Rule 33, 37)	Proposed	Stacked separately	
4b	Location of topsoil, OB & mineral reject dumps			
4c	Number of dumps within lease area and outside lease area	Within ML – 1 Outside ML - Nil	Nil	Used mostly for road making & basement preparation
4d	Location of dumps w.r.t. ultimate pit limit	1km away from proposed quarry	Not dumped so far	
4e	Number of active & alive dumps	Nil	Nil	
4f	Number of dead dumps	Nil	Nil	
4g	Number of dumps stabilized	NA	NA	
4h	Whether Retaining wall or garland drain all along dumps are there	Proposed	Not yet developed	
4i	Length of Retaining wall or garland drain all along dump	Proposed 250m	Not yet developed	OB dump and Mineral Reject dump not created so far.
4j	Number of settling ponds	Proposed 2 nos	Not yet developed	

Solid Waste management-Backfilling

Sl. No.	Item	Proposals for 2021-22, 2022-23 (till date)	Actual work during 2021-22, 2022-23 (till date)	Remark
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	Nil	Nil	
5b	Area under backfilling of mined out area	Nil	Nil	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 36)	Nil	Nil	
5d	Total area fully reclaimed & rehabilitated	Nil	Nil	

1/7116/2023 Progressive Mine Closure Plan

Sl. No.	Item	Proposals for 2021-22, 2022-23 (till date)	Actual work during 2021-22, 2022-23 (till date)	Remark
6a	Whether Annual report on PMCP submitted on time and correctly - Rule 26(2).		Submitted upto 2021-22	
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	Nil	Nil	
6c	Compliance on reclamation and rehabilitation by backfilling i) Voids available for backfilling (L X B X D) ii) Void filled by waste/tailings iii) Afforestation on the backfilled area iv) Rehabilitation by making water reservoir v) Any other specific means	Nil	Nil	
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	Nil	Nil	
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Proposed	Being carried out regularly through an NABL accredited agency	

Mineral Conservation

Sl. No.	Item	Proposals for 2021-22, 2022-23 (till date)	Actual work during 2021-22, 2022-23 (till date)	Remark
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Nil	Nil	
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	Nil	Nil	Crushing and screening of ROM is being done.

Environment

Sl. No.	Item	Proposals for 2021-22, 2022-23 (till date)	Actual work during 2021-22, 2022-23 (till date)	Remark
8a	Separate removal and utilization of topsoil (Rule 36)	NIL	400 m3	Stacked separately for use during gardening & afforestation
8b	Concurrent use or storage of topsoil	NIL		
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 37)	Proposed	Being Stacked	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Proposed to use overburden for road making as and when required.		Used mostly for road making & basement preparation
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Proposed	Nil	
8f	Baseline information on existence of plantation & additional Plantation done	2021-22: 800 2022-23: 800	2021-22: Nil 2022-23: 2995	Planted within safety zone
8h	Water sprinkling on roads to control airborne dust	Proposed	Being done over haul roads with 2 nos of water tankers (12KL each)m	

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Compliance of Rule 45

Sl.No.	Item	COMMENTS		Remarks
9a	Status of submission of Monthly and Annual returns	M.R. Submitted upto 31.12.2022 A.R. Submitted upto 2021-22		
Sl.No.	Item	Details given in A.R. for the year 2021-22	Observation of I/Officer	Remarks
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer-3 Geologist- 2 Manager-1	Mining Engineer-3 Geologist- 2 Manager-1	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Area covered under opencast working- 5 ha. Reclaimed area-nil Occupied by plant,building and roads- 1 ha.	Area covered under opencast working- 5 ha. Reclaimed area-nil Occupied by plant,building and roads- 1 ha.	
9d	Scrutiny of Annual return on afforestation	Nil	Nil	
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	Nil	Nil	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM stock- 28.8 openingclosing stock- 179100 Production- 226040 Dispatch- 7897.96	Found in order	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Cost of production- 8402	Checked it and found in order	
9i	Scrutiny of Annual return on fixed assets			
9k	Scrutiny of Annual return on mining machineries	Shovel- .900cum- 3nos Shovel-2.1cum- 1 no Drilling machine- 2nos Dozer-1 Dumper-35 tonnes- 4nos.	Checked it and found in order.	

Details of violations observed during current inspection and compliance position of earlier violation pointed out:-

Rule No.	Proposed as per Mining Plan/ Rule Position	Violation
11(1)	(i) As per the Mining Plan approved vide letter No. RMP/A/02-	(i) During inspection it was

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	ORI/BHU/2021-22, dated 04.05.2021 , it was proposed to drill 212 nos. of exploratory bore holes in the year 2021-22.	observed only 18 nos. of bore holes drilled during the year 2021-22 .
33	The holder of a mining lease shall, on or before the 30 th day of June every year submit to the authorized officer, as the case may be, and the State Government, a digital copy along with a print copy of the surface geological plans and sections maintained under rule 32.	The copy of surface geological plans and sections has not been submitted for the year 2021-22 to the Regional Controller Mines.

Violation issued on 09.02.2023.



Jitendriya Pradhan
Assistant Mining Engineer