

**INDIAN BUREAU OF MINES
MINERALS DEVELOPEMMENT AND REGULATION DIVISION**

MCDR INSPECTION REPORT

Bhubaneshwar regional office

Mine file No : ORI/IRON/SNG/MCDR-12/BBS

Mine code : 30ORI13072

- (i) Name of the Inspecting : SKM) SANJAY KUMAR MAHAPATRA
Officer and ID No.
- (ii) Designation : Assistant Mining Engineer
- (iii) Accompanying mine : BISWANATH SAHOO GEOLOGIST
Official with
Designation
- (iv) Date of Inspection : 10/04/2022
- (v) Prev.inspection date :

PART-I : GENERAL INFORMATION

1. (a) Mine Name : NADIDIH IRON ORE MINES (74.5 ha)
- (b) Registration NO. : IBM/329/2011
- (c) Category : A Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
- State : ORISSA
- District : SUNDARGARH
- Village : NADIKASIRA
- Taluka : KOIRA
- Post office : KOIRA
- Pin Code : 770048
- FAX No. :
- E-mail :
- Phone :
- (f) Police Station : KOIRA
- (g) First opening date : 26/11/2021
- (h) Weekly day of rest : SUN
2. Address for correspondence : NADIDIH IRON ORE MINES
RENGALIBEDA & NANDIKESARIA
KOIRA, SUNDARGARH 770048
3. (a) Lease Number :
- (b) Lease area : 74.50 ha
- (c) Period of lease : 20-11-2021 to 19-11-2071 [50 years]
- (d) Date of Expiry : 19-11-2071
4. Mineral worked : IRON ORE Main

5. Name and Address of the

Lessee : ESL STEEL LTD
 SIYALJORI PO- JOGIDIH PO-
 BANGARIA, BOKARO SREEL CITY
 KHUNTI JHARKHAND
 Phone:08651102477
 FAX :

Owner : NAVNATH LAXAMAN VHATTE
 AT- SIYALJORI PO- JOGIDIH
 TALUK BOKARO JHARKHAND
 Phone:
 FAX :

Agent : SHRI SANDEEP NAIK
 NADIDIH IRON MINES 74.5 HA
 SUNDARGARH ORISSA
 Phone:
 FAX :

Mining Engineer

Name : VIKIL N KAWALE, Full Time
 Qualification : BE MINING
 Appointment/ : 20/01/2022
 Termination date

Geologist

Name : BISWANATH SAHOO, Full Time
 Qualification : MSC GEOLOGY
 Appointment/ : 20/01/2022
 Termination date

6. Date of approval of Mining Plan/Scheme of Mining

: Draft Mining Plan
 Submitted on 01-04-2022 and
 is under process.

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Nil	Nil	This is an Auction Mine. Mine opened on 26.11.2021. Draft mining plan submitted on 01.04.2022. Hence no proposal for the year 2021-22.
1b	Exploration over lease area for geological axis 1 or 2	Nil	NIL	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not applicable	Nil	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	Nil	Entire area has been explored. <i>Under G, Category,</i>
1e	Balance reserve as on 01/04/20	NIL	22.522 million tonnes. (Iron	This is an Auction Mine. Mine opened on 26.11.2021. Draft mining plan submitted on 01.04.2022. Hence THE RESERVE IS SAME AS PER THE GR REPORT SUBMITTED.
1f	General remarks of inspecting officers on geology, exploration etc	NIL	NIL	This is an Auction Mine. Mine opened on 26.11.2021. Draft mining plan submitted on 01.04.2022. Hence no proposal for the year 2021-22.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	NIL	320550E to 320850E 2430100N to 2430550	No proposal as this mine is granted to lessee on 20.11.2021 through auction. However actual working location is mentioned for the period between 11.02.2022 TO 31.03.2022
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Nil	Type No. of Benches West Pit: Topsoil 0 Overburden 6 Mineral 5 Total benches 9 East pit: Topsoil 0 Overburden 7 Mineral 7 Total benches 7	No of benches provided is for existing pits as there was no proposal for the year 2021-22. Bottom benches submerged under water.
2c	Stripping ratio or ore to OB ratio	Nil	1:0.04	
2d	Quantity of topsoil generation in m3	Nil	Nil	
2e	Quantity of overburden generation in m3	Nil	11964 cubic Meter	This is an Auction Mine. Mine opened on 26.11.2021. Draft mining plan submitted on 01.04.2022. Hence no proposal for the year 2021-22.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			This is an Auction Mine. Mine opened on 26.11.2021. Draft mining plan submitted on 01.04.2022. Hence no proposal for the year 2021-22.

Exploitation:

Sl.No.	Item	Proposals	Actual work	Remarks
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3a	Number of pit proposed for production	As it is an Auction Block (Brown Field) Mining to be carried as per the proposals of previous lessee.	There exists two pits worked by previous lessee. The present lessee has worked in Barrier Between two pits (west & East pit). Also area above pit head was levelled to prepare stockpile area.	No proposal as this mine is granted to lessee on 20.11.2021 through auction. However actual working location is mentioned for the period between 11.02.2022 TO 31.03.2022
3b	Quantity of ROM mineral production proposed	As it is an Auction Block (Brown Field) Mining to be carried as per the proposals of previous lessee.	273206 Metric Tonnes	No proposal as this mine is granted to lessee on 20.11.2021 through auction. However actual ROM produced is for the period between 11.02.2022 upto 31.03.2022.
3c	Recovery of sailable/usable mineral from ROM production	As it is an Auction Block (Brown Field) Mining to be carried as per the proposals of previous lessee.	226014 Metric Tonnes	Mobile Screening plant is used to recover saleble mineral. For Feed quantity of 226014 tonnes, Lumps generated are 39444 tonnes & fines are 186570 tonnes.
3d	Quantity of mineral reject generation	As it is an Auction Block (Brown Field) Mining to be carried as per the proposals of previous lessee.	Nil	
3e	Grade of mineral rejects generation and threshold value declared.	As it is an Auction Block (Brown Field) Mining to be carried as per the proposals of previous lessee.	Nil	No mineral reject generated.

3f	Quantity of sub grade mineral generation.	As it is an Auction Block (Brown Field) Mining to be carried as per the proposals of previous lessee.	Nil	
3g	Grade of sub grade mineral generation	Not applicable	Nil	
3h	Manual / Mechanised method adopted for segregating from ROM	As it is an Auction Block (Brown Field) Mining to be carried as per the proposals of previous lessee.	Mechanised	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Nil	Fresh proposal to be incorporated in the submitted draft Mining Plan submitted on 01.04.2022.	Draft Mining Plan submitted on 01.4.2022
3j	Provision of drilling and blasting in mineral benches	Nil	No drilling blasting carried.	
3k	Provision of mining machineries in mineral benches	As it is an Auction Block (Brown Field) Mining to be carried as per the proposals of previous lessee.	Excavator: 2 nos, Dumpers: 8 nos,	Excavator Capacity: 2.1 m3 bucket capacity; 320TPH. Dumpers capacity: 35 tonnes
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	As it is an Auction Block (Brown Field) Mining to be carried as per the proposals of previous lessee.	Draft Mining Plan submitted on 01.04.2022 and height of benches in overburden and mineral suitable for Mechanised method of mining proposed	

3m	Total area covered under excavation/pits	As it is an Auction Block (Brown Field) Mining to be carried as per the proposals of previous lessee.	34.32 Ha	
3n	Ore to OB ratio for the pit/mine during the year.	Not applicable as Auctioned Block.	1:0.044	
3o	Total area put in use under different heads at the end of year	As it is an Auction Block (Brown Field) Mining to be carried as per the proposals of previous lessee.	Area under Mining-34.32 Ha O/B waste dumping- 14.29 Ha Infrastructure- 0.05 Ha Roads-0.80 Ha Garland Drain, retaining wall, Settling tank- 2.229 Ha	
3p	Production of ROM mineral during the last five year period as applicable	As it is an Auction Block (Brown Field) Mining to be carried as per the proposals of previous lessee.	Not applicable	Mine is granted to lessee on 20.11.2021 through auction. Date of Notice of opening of mine is 26.11.2021.
3q	General remarks of inspecting officers on method of mining etc.	Mine is granted to lessee on 20.11.2021 through auction. Date of Notice of opening of mine is 26.11.2021.	Mining carried from 11.02.2022 upto 31.03.2022.	Mine is granted to lessee on 20.11.2021 through auction. Date of Notice of opening of mine is 26.11.2021.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
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- 4a Separate dumping of topsoil, OB and mineral rejects (Rule 32,33) Mine is granted to lessee on 20.11.2021 through auction. Date of Notice of opening of mine is 26.11.2021. Work to be carried as per proposal of previous lrssee. No Topsoil encountered. OB is dumped separately.
- 4b Location of topsoil, OB and mineral reject dumps Mine is granted to lessee on 20.11.2021 through auction. Date of Notice of opening of mine is 26.11.2021. Work to be carried as per proposal of previous lrssee. North part of lease area 320500E to 320600E 2430750 N to 2430850 N
- 4c Number of dumps within lease area and outside of lease area 1 no. of dump in lease area. 1 no. of dump is present within lease area.
- 4d Location of dumps w.r.t. ultimate pit limit (Rule 16) North part of lease area 320500E to 320600E 2430750 N to 2430850 N North part of lease area 320500E to 320600E 2430750 N to 2430850 N
- 4e Number of active and alive dumps. One One

4f	Number of dead dumps.	Nil	Nil	Mine is granted to lessee on 20.11.2021 through auction. Date of Notice of opening of mine is 26.11.2021. Work to be carried as per proposal of previous lessee.
4g	Number of dumps established.	Nil	Nil	Mine is granted to lessee on 20.11.2021 through auction. Date of Notice of opening of mine is 26.11.2021. Work to be carried as per proposal of previous lessee.
4h	Whether Retaining wall or garland drain all along dumps are there.	Work to be carried as per proposal of previous lessee.	Retaining wall and Garland drain all along Dump is there.	
4i	Length of Retaining wall or garland drain all along dumps	Work to be carried as per proposal of previous lessee.	Retaining wall: 980m, Garland drain: 500m	
4j	Number of settling ponds	Work to be carried as per proposal of previous lessee.	03 settling pond exists in the lease.	
4k	Specific comments of inspecting officer on waste dump management			Mine is granted to lessee on 20.11.2021 through auction. Date of Notice of opening of mine is 26.11.2021. Work to be carried as per proposal of previous lessee.

Solid Waste Management - Backfilling:

Sl.No.	Item	Proposals	Actual work	Remarks
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5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	Work to be carried as per proposal of previous lessee.	Not applicable as the Mine is granted to lessee on 20.11.2021 through auction. Date of Notice of opening of mine is 26.11.2021.	
5b	Area under backfilling of mined out area	Nil	Not applicable as the Mine is granted to lessee on 20.11.2021 through auction. Date of Notice of opening of mine is 26.11.2021.	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No top soil	Not applicable as the Mine is granted to lessee on 20.11.2021 through auction. Not applicable as the Mine is granted to lessee on 20.11.2021 through auction. Date of Notice of opening of mine is 26.11.2021.	
5d	Total area fully reclaimed and rehabilitated	Nil	Nil	Not applicable as the Mine is granted to lessee on 20.11.2021 through auction.
5e	General remarks of inspecting officers on backfilling and reclamation etc.	No proposal	Nil	The Mine is granted to lessee on 20.11.2021 through auction. Date of Notice of opening of mine is 26.11.2021.

Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	The Mine is granted to lessee on 20.11.2021 through auction.	Not due for submission on date of inspection.	
6b	Area available for rehabilitation (ha) .	Nil	Nil	Not applicable as the Mine is granted to lessee on 20.11.2021 through auction. Date of Notice of opening of mine is 26.11.2021.

6c	afforestation done (ha).	Date of Notice of opening of mine is 26.11.2021.	Nil	
6d	No. of saplings planted during the year	No proposal	Nil	The Mine is granted to lessee on 20.11.2021 through auction. Date of Notice of opening of mine is 26.11.2021.
6e	Cumulative no .of plants	Nil	Nil	Date of Notice of opening of mine is 26.11.2021. New auctioned mine.
6f	Any other method of rehabilitation	Nil	Nil	
6g	Cost incurred on watch and care during the year	Nil	Nil	
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	Nil	Nil	
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	Nil	Nil	
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Nil	Nil	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Notice of opening of mine is 26.11.2021.	Environmental monitoring in (core zone & buffer zone) is being carried	Mine is granted to lessee on 20.11.2021 through auction. Date of Notice of opening of mine is 26.11.2021.

6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	Nil	Mine is granted to lessee on 20.11.2021 through auction. Date of Notice of opening of mine is 26.11.2021. Environmental monitoring in (core zone & buffer zone) is being carried	Mine is granted to lessee on 20.11.2021 through auction. Date of Notice of opening of mine is 26.11.2021. Environmental monitoring in (core zone & buffer zone) is being carried
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Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Mine is granted to lessee on 20.11.2021 through auction. Date of Notice of opening of mine is 26.11.2021.	No dispatch of Mineral carried till 31.03.2022	Grade of 58-60 % Fe content of fines & lumps is sorting carried out within lease area
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical	Mechanical	
7c	Different grade of mineral sorted out at mines.		58% Fe to 60 % Fe	Mine is granted through Auction on 20.11.2021 . Date of Notice of opening of mine is 26.11.2021.
7d	Any beneficiation process at mines	As per proposal of previous lessee.	Mobile screening Plant	Mobile Screening Plant Capacity: 350TPH; Feed size: - 70mm; screen size: 30mm top deck/10mm bottom deck. Mine is granted through Auction on 20.11.2021 .

7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	Mobile Screening Plant Capacity: 350TPH; Feed size: - 70mm; screen size: 30mm top deck/10mm bottom deck.	Mine is granted through Auction on 20.11.2021 . Date of Notice of opening of mine is 26.11.2021.
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Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Nil	No top soil available.	
8b	Concurrent use or storage of topsoil	Nil	Not applicable	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Dumps and fines to be stacked separately	Dumps and fines are stacked separately. No mineral rejects is encountered during the period.	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Nil	Nil	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Nil	Nil	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Nil	5 ha is covered with plantation.	Approximately 5 ha is covered with plantation.

8g	Survival rate	Not applicable	Nil	
8h	Water sprinkling on roads to control airborne dust	Water sprinkling on roads to control airborne dust	Water sprinkling is carried out using water tanker.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Water sprinkling is carried out using water tanker. Mine is granted to lessee on 20.11.2021 through auction. Date of Notice of opening of mine is 26.11.2021. Work to be carried as per proposal of previous lessee.

Compliance of Rule 45:

Sl.No.	Item	Proposals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	AR Not submitted as it was not due	Monthly returns submitted in hard copy & Annual return is not due on date of inspection..	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	AR Not submitted as it was not due	AR Not submitted as it was not due for submission.	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	AR Not submitted as it was not due for submission.	AR Not submitted as it was not due for submission. Hence no scrutiny carried.	
9d	Scrutiny of Annual return on afforestation	AR Not submitted as it was not due for submission.	AR Not submitted as it was not due for submission.	

9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	AR Not submitted as it was not due for submission.	AR Not submitted as it was not due for submission.	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	AR Not submitted as it was not due for submission.	AR Not submitted as it was not due for submission.	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	AR Not submitted as it was not due for submission.	AR Not submitted as it was not due for submission.	
9h	Scrutiny of Annual return on fixed assets	AR Not submitted as it was not due for submission.	AR Not submitted as it was not due for submission.	
9k	Scrutiny of Annual return on mining machineries	AR Not submitted as it was not due for submission.	AR Not submitted as it was not due for submission.	No violation issued as the Mine opened on 26.11.2021

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

Violation observed		Show cause position	
Rule NO.	Issued on Compliance on	Rule NO.	Issued on Compliance on

- NO violation -

Date :

26-04-2022

संजय कुमार महापात्र
(SANJAY KUMAR MAHAPATRA)

Indian Bureau of Mines