

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

MCDR INSPECTION REPORT

Bhubaneshwar regional office

Mine file No : ORI/IRON/KJR/MCDR-16/BBS

Mine code : 30ORI08015

- (i) Name of the Inspecting : **SRM**) **SHRI SUDIP RANJAN MAZUMDAR**
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Shri B.B.Nayak, Mines Manager
Official with
Designation
- (iv) Date of Inspection : 23/10/2019
- (v) Prev.inspection date : 11/07/2019

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **DAITARI**
- (b) **Registration NO.** : **IBM/4269/2011**
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
- State : ORISSA
- District : KEONJHAR
- Village : TALAPADA
- Taluka : GHATGAON
- Post office : TALAPADA
- Pin Code : 758026
- FAX No. : 0674-2391629
- E-mail : planningcellomc@gmail.com
- Phone : 0674-2393431
- (f) Police Station : Daitari
- (g) First opening date : 18/02/1967
- (h) Weekly day of rest : SUN
2. Address for : DAITARI IRON ORE MINE, OMC,
correspondance
3. (a) Lease Number : ORI0085
- (b) Lease area : 1812.99
- (c) Period of lease :
- (d) Date of Expiry : 26/01/2036
4. Mineral worked : IRON ORE Main

5. Name and Address of the

Lessee : O.M.C.LTD.
 OMC House ,P.B.No.34
 BHUBANESWAR Odisha KHURDA
 ORISSA
 Phone:06742393431
 FAX :06742391629

Owner : M/S OMC LTD.
 M/S OMC LTD. OMC HOUSE,
 POST BOX NO. 34
 BHUBANESWAR-751010 KEONJHAR
 ORISSA
 Phone: 06766-233064
 FAX : 06766-233085

Agent : SHRI S K MISHRA
 JAJPUR ORISSA
 Phone:
 FAX :

Mining Engineer

Name : SHRI SAROJ KUMAR PRUSTY,Full Time
 Qualification : B E MINING
 Appointment/ : 01/11/2016
 Termination date

Geologist

Name : SHRI BIRENDRA KUMAR PANDA,Full Time
 Qualification : MSC APPLIED GEOLOGY
 Appointment/ : 02/04/2010
 Termination date

Manager

Name : SHRI B B NAYAK
 Qualification : AMIE
 Appointment/ : 21/05/2018
 Termination date

6. Date of approval of Mining	:	Mining Scheme rule 12 MCDR1988	11/07/2006
Plan/Scheme of Mining	:	Modif.of approved Mining Plan	06/10/2008
	:	Mining Scheme rule 12 MCDR1988	06/10/2008
	:	MP modif under MCR 1960	08/01/2015
	:	MP modif under MCR 1960	22/03/2016

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	In 2018-19, 70 numbers of boreholes have been proposed to be drilled.	In 2018-19, 25 numbers of boreholes have been drilled.	Exploration as per plan could not be done due to non-availability of forest clearance over the area proposed
1b	Exploration over lease area for geological axis 1 or 2	In 2018-19, 70 numbers of boreholes have been proposed to be drilled.	In 2018-19, 25 numbers of boreholes have been drilled.	Exploration as per plan could not be done due to non-availability of Forest clearance over the area proposed.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not Specified	Exploration Agency: M/s Maheshwari Mining Pvt. Ltd; Expenditure: Rs 215.904 lakh	Exploration Agency: M/s Maheshwari Mining Pvt. Ltd; Expenditure: Rs 215.904 lakh
1d	Balance area to be explored to bring Geological axis in 1 or 2	In 2018-19, 70 numbers of boreholes have been proposed to be drilled.	In 2018-19, 25 numbers of boreholes have been drilled.	Exploration as per plan could not be done due to non-availability of Forest clearance over the area proposed.

1e	Balance reserve as on 01/04/20	As per the modified mining plan approved dated 22.03.2016, the reserve and resource as on 01.08.2015 is as follows. Reserve is 154.96 million tones and Remaining resources is 32.25 million tones. Total Reserve and Resource is 187.21 million tones.	Reserve as on 01.04.2019 is 144 million tones and remaining resources at 33 million tones. Total reserve and resource is 177 million tones. Data as furnished in annual return for 2018-19.	Reserve as on 01.04.2019 is 144 million tones and remaining resources at 33 million tones. Total reserve and resource is 177 million tones. Data as furnished in annual return for 2018-19.
1f	General remarks of inspecting officers on geology, exploration etc	In 2018-19, 70 numbers of boreholes have been proposed to be drilled.	In 2018-19, 25 numbers of boreholes have been drilled. Violation was issued during previous inspection dated 11.07.2019 which was subsequently complied on 23.08.2019.	In 2018-19, 25 numbers of boreholes have been drilled. Violation was issued during previous inspection dated 11.07.2019 which was subsequently complied on 23.08.2019.

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	In 2018-19, development proposed in Hilltop Quarry between coordinates 50N to -600N & -300E to 200E	In 2018-19, development done in Hilltop Quarry between coordinates 50N to -600N & -300E to 200E	In 2018-19, development done in Hilltop Quarry between coordinates 50N to -600N & -300E to 200E

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	In 2018-19, there was no proposal for top soil and OB generation. Only benches in mineral are proposed with bench height of 10 m	Only benches in mineral are maintained with bench height of 10m	Only benches in mineral are maintained with bench height of 10m
2c	Stripping ratio or ore to OB ratio	Not Applicable	Nil	There was proposal for OB generation during the year 2018-19. Also, no OB generated during the year 2018-19
2d	Quantity of topsoil generation in m3	Not Proposed	Nil	Nil
2e	Quantity of overburden generation in m3	Not Proposed	Nil	Nil
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	In 2018-19, development proposed in Hilltop Quarry to between coordinates 50N to -600N & -300E to 200E	In 2018-19, development done in Hilltop Quarry between coordinates 50N to -600N & -300E to 200E	In 2018-19, development done in Hilltop Quarry between coordinates 50N to -600N & -300E to 200E

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	In 2018-19, one number of pit proposed for production namely Hilltop Quarry	In 2018-19, one number of pit put for production namely Hilltop Quarry	In 2018-19, one number of pit put for production namely Hilltop Quarry
3b	Quantity of ROM mineral production proposed	In 2018-19, ROM production proposal was 1.432 M.cum	In 2018-19, ROM production was 2.986714 million tonne	ROM production restricted with EC limit of 3.0 MTPA

3c	Recovery of sailable/usable mineral from ROM production	In 2018-19, Recovery of salable/usable mineral from ROM production proposal was 4.52million tonne	In 2018-19, Recovery of salable/usable mineral from ROM production was 2.986714 million tonne	ROM production restricted with EC limit of 3.0 MTPA
3d	Quantity of mineral reject generation	In 2018-19, Quantity of mineral reject generation proposal was 0.02 M.cum	There is no generation of mineral rejects	Nil
3e	Grade of mineral rejects generation and threshold value declared.	45% Fe to below 55% Fe, Threshold value for iron is 45% Fe.	There is no generation of mineral rejects	Nil
3f	Quantity of sub grade mineral generation.	In 2018-19, Quantity of subgrade generation proposal was 0.02 M.cum	There is no generation of subgrade	Nil
3g	Grade of sub grade mineral generation	45% Fe to below 55% Fe	There is no generation of subgrade	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized	Mechanized	Mechanized
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No beneficiation proposed during the year 2018-19	Nil	Nil

3j	Provision of drilling and blasting in mineral benches	Drilling will be carried out using 150mm & 115 mm diameter drill. Holes will be charged with slurry/SME explosives & will be initiated with NONEL	Drilling & blasting have been carried as per requirement as proposed.	Drilling & blasting have been carried as per requirement as proposed.
3k	Provision of mining machineries in mineral benches	Excavator and dumper combination have been proposed for mining in mineral benches	Excavator and dumper combination have been deployed for mining in mineral benches	Excavator and dumper combination have been deployed for mining in mineral benches
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Height of the benches proposed is 6m	Height of benches in overburden and mineral is suitable for method of mining proposed in mining plan. Bench height is maintained	Height of benches in overburden and mineral is suitable for method of mining proposed in mining plan. Bench height is maintained
3m	Total area covered under excavation/pits	Area under mining at the end of plan period will be 63.2371 Ha	Area under mining at the end of 2018-19 is 61.63Ha as reported in annual return for 2018-19	Area under mining at the end of 2018-19 is 61.63Ha as reported in annual return for 2018-19
3n	Ore to OB ratio for the pit/mine during the year.	Not Applicable	Nil	Neither there was proposal for OB generation nor any OB generated during the year
3o	Total area put in use under different heads at the end of year	Total area put in use under different heads at the end of plan period will be 99.6357 Ha	Total area put in use under different heads at the end of 2018-19 is 96.48 Ha	Total area put in use under different heads at the end of 2018-19 is 96.48 Ha

3p	Production of ROM mineral during the last five year period as applicable	Year wise Production proposal 2016-17 : 1.277 M.cum 2017-18 : 1.263 M.cum	Year wise ROM production 2016-17 : 2824235 MT 2017-18 : 3000000 MT 2018-19 : 2986714 MT	Year wise ROM production 2016-17 : 2824235 MT 2017-18 : 3000000 MT 2018-19 : 2986714 MT
3q	General remarks of inspecting officers on method of mining etc.	In 2018-19, one number of pit proposed for production namely Hilltop Quarry	In 2018-19, one number of pit put for production namely Hilltop Quarry. Production carried out through open cast method of mining as proposed	In 2018-19, one number of pit put for production namely Hilltop Quarry. Production carried out through open cast method of mining as proposed

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	In 2018-19, there was no proposal for top soil and OB generation. Mineral reject will be blended with high grade ore. Separate dumping of top soil, OB and mineral reject thus not proposed	No OB or top soil generated during 2018-19. There was no generation of mineral reject.	No OB or top soil generated during 2018-19. There was no generation of mineral reject.
4b	Location of topsoil, OB and mineral reject dumps	Not Proposed	No OB or top soil generated during 2018-19. There was no generation of mineral reject.	No OB or top soil generated during 2018-19. There was no generation of mineral reject.
4c	Number of dumps within lease area and outside of lease area	No OB/ waste generation envisaged in 2018-19	No OB/waste generated during 2018-19	Nil

4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	No dumping and no waste generation from the mine as envisaged in the approved document	No OB generated during the year 2018-19	Nil
4e	Number of active and alive dumps.	No dumping and no waste generation from the mine as envisaged in the approved document	No OB generated during the year 2018-19	Nil
4f	Number of dead dumps.	None	Nil	Nil
4g	Number of dumps established.	None	Nil	Nil
4h	Whether Retaining wall or garland drain all along dumps are there.	No OB/waste generation envisaged and no dumping proposed in 2018-19, thereby no retaining wall & garland drain proposed	Nil	Nil
4i	Length of Retaining wall or garland drain all along dumps	No OB/waste generation envisaged and no dumping proposed in 2018-19, thereby no retaining wall & garland drain proposed	Nil	Nil
4j	Number of settling ponds	Not Proposed	Nil	Nil

4k	Specific comments of inspecting officer on waste dump management	In 2018-19, there was no proposal for top soil and OB generation. Mineral reject will be blended with high grade ore. Separate dumping of top soil, OB and mineral reject thus not proposed	No OB or top soil generated during 2018-19. There was no generation of mineral reject.	No OB or top soil generated during 2018-19. There was no generation of mineral reject.
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Solid Waste Management - Backfilling:

Sl.No.	Item	Propasals	Actual work	Remarks
5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	Not Proposed	Nil	The mine is not matured for reclamation and rehabilitation
5b	Area under backfilling of mined out area	Not Proposed	Nil	The mine is not matured for reclamation and rehabilitation
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Not Proposed	Nil	The mine is not matured for reclamation and rehabilitation
5d	Total area fully reclaimed and rehabilitated	Not Proposed	Nil	The mine is not matured for reclamation and rehabilitation
5e	General remarks of inspecting officers on backfilling and reclamation etc.	There is no proposal for reclamation and rehabilitation	The mine is not matured for reclamation and rehabilitation	The mine is not matured for reclamation and rehabilitation

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).	Annual report on PMCP to be submitted as per Rule 26 (2) of MCDR, 2017	Annual report on PMCP for the year 2018-19 have been submitted	Annual report on PMCP for the year 2018-19 have been submitted
6b	Area available for rehabilitation (ha) .	Not Proposed	Nil	Nil
6c	afforestation done (ha).	Not Proposed	1.4 Ha	Nil
6d	No. of saplings planted during the year	5000 nos of saplings proposed for plantation outside the lease area	2000 nos of saplings planted within the lease & 3412 saplings distributed to the nearby villagers	Violation was issued during previous inspection dated 11.07.2019 which was subsequently complied on 23.08.2019
6e	Cumulative no .of plants	Not Specified	12,100 nos of saplings planted within lease area	Nil
6f	Any other method of rehabilitation	Not Proposed	Nil	Nil
6g	Cost incurred on watch and care during the year	Rs 5.0 Lakh	Rs 18.0 Lakh	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	Not Proposed	Nil	Nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Not Proposed	Nil	Nil

6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	Not Proposed	Nil	Nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Not Proposed	Nil	Nil
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	Not Proposed	Nil	Nil
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	Not Proposed	Nil	Nil
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	Not Proposed	Nil	Nil
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Not Proposed	Nil	Nil
6p	Compliance of environmental monitoring (core zone and buffer zone)	Quarterly monitoring of environmental parameters proposed	Quarterly monitoring of environmental parameters is being done	Quarterly monitoring of environmental parameters is being done

6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	Annual report on PMCP to be submitted as per Rule 26 (2) of MCDR, 2017	Annual report on PMCP for the year 2018-19 have been submitted	Annual report on PMCP for the year 2018-19 have been submitted
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Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade-wise sorting within lease area and also ROM is fed to double deck screen at Baliparbat processing plant	Grade-wise sorting within lease area and also ROM is dispatched from mine lease hold area through belt conveyor system to Baliparbat stack yard which is situated outside ML area for further processing.	Nil
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical	Mechanical	Nil
7c	Different grade of mineral sorted out at mines.	45% Fe to -55% Fe and +55% Fe	+55% Fe	There was no generation of mineral reject.
7d	Any beneficiation process at mines .	No beneficiation proposed during the year 2018-19	Nil	Nil
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	Grade-wise sorting within lease area and also ROM is fed to double deck screen at Baliparbat processing plant	Grade-wise sorting within lease area and also ROM is dispatched from mine lease hold area through belt conveyor system to Baliparbat stack yard which is situated outside ML area for further processing.	Grade-wise sorting within lease area and also ROM is dispatched from mine lease hold area through belt conveyor system to Baliparbat stack yard which is situated outside ML area for further processing.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Not Proposed	Nil	Nil
8b	Concurrent use or storage of topsoil	Not Proposed	Nil	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Not Proposed	Nil	Nil
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not Proposed	Nil	Nil
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not Proposed	Nil	Nil
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	No of saplings proposed to be planted outside lease area : 5000	2,000 Nos of saplings planted inside the lease area & 3,412nos distributed to the near by villagers.	Violation was issued during previous inspection dated 11.07.2019 which was subsequently complied on 23.08.2019
8g	Survival rate	Not specified	99.99% within lease area	Data as furnished in annual return of 2018-19
8h	Water sprinkling on roads to control airborne dust	Sprinkling of water by water sprinkler on haul to control airborne dust	Water sprinkling is being done on haul roads to control dust	Water sprinkling is being done on haul roads to control dust

8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Aesthetic beauty in and around mines is maintained	Aesthetic beauty in and around mines is maintained
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Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Monthly and annual returns to be submitted as per the rule 45 of MCDR 2017	Monthly returns and annual return for 2018-19 have been submitted	Monthly returns and annual return for 2018-19 have been submitted
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Information on Manager, Mining Engineer and Geologist furnished in annual return for 2018-19	Manager, Mining Engineer and Geologist have been appointed in mines.	Manager, Mining Engineer and Geologist have been appointed in mines.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Lease area (surface area) utilization at the end of the year as furnished in annual return for 2018-19. Covered under current working: 61.63 ha, Used for waste disposal: Nil, Occupied by plant buildings, residential, welfare buildings & roads: 14.47 Ha, other purposes: 19.5 Ha etc	Lease area (surface area) utilization at the end of the year as furnished in annual return for 2018-19. Covered under current working: 61.63 ha, Used for waste disposal: Nil, Occupied by plant buildings, residential, welfare buildings & roads: 14.47 Ha, other purposes: 19.5 Ha etc	Lease area (surface area) utilization at the end of the year as furnished in annual return for 2018-19. Covered under current working: 61.63 ha, Used for waste disposal: Nil, Occupied by plant buildings, residential, welfare buildings & roads: 14.47 Ha, other purposes: 19.5 Ha etc

9d	Scrutiny of Annual return on afforestation	2000 nos of saplings planted within lease area	2000 nos of saplings planted within lease area	Nil
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	There was no generation of mineral reject.	There was no generation of mineral reject.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Closing stock of ROM : 208415.90 tones	Closing stock of ROM : 208415.90 tones	Violation was issued during inspection on 11.07.2019 regarding "quantities of iron ore furnished on account of opening stock, production and closing stock in part VI of annual return for 2018-19 is not matching". Lessee has replied that 2.3 million tones of ROM has been dispatched to Baliparvat stock yard located outside ML area for further processing and there is no column in annual return to furnish dispatch of ROM quantity in item 2 of Part VI of annual return. Violation complied on 23.08.19

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex-mine price in Rs per tonne Lumps : Grades (% of Fe content): 62 % to below 65% Fe: Rs 4080.93 Fines : Grades (% of Fe content): 62 % to below 65% Fe: Rs 2184.19	Ex-mine price in Rs per tonne Lumps : Grades (% of Fe content): 62 % to below 65% Fe: Rs 4080.93 Fines : Grades (% of Fe content): 62 % to below 65% Fe: Rs 2184.19	Ex-mine price in Rs per tonne Lumps : Grades (% of Fe content): 62 % to below 65% Fe: Rs 4080.93 Fines : Grades (% of Fe content): 62 % to below 65% Fe: Rs 2184.19
9h	Scrutiny of Annual return on fixed assets	Value of Fixed Assets (in Rs) 81453017	Value of Fixed Assets (in Rs) 81453017	Nil
9k	Scrutiny of Annual return on mining machineries	Rock drill (non-electric): 1 no; shovel (hydraulic): 4 no; wheel loader: 2no; Dumper (30 tonne capacity): 19 nos etc.	Rock drill (non-electric): 1 no; shovel (hydraulic): 4 no; wheel loader: 2no; Dumper (30 tonne capacity): 19 nos etc.	Rock drill (non-electric): 1 no; shovel (hydraulic): 4 no; wheel loader: 2no; Dumper (30 tonne capacity): 19 nos etc.

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

Date :

(**SHRI SUDIP RANJAN MAZUMDAR**)

Indian Bureau of Mines