

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

**MCDR INSPECTION REPORT**

**Bhubaneswar regional office**

Mine file No : ORI/IRON/KJR/MCDR-13/BBS

Mine code : 30ORI08014

- (i) Name of the Inspecting : SRM ) SHRI SUDIP RANJAN MAZUMDAR  
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Shri Sukant Kumar Dash, Mines Manager  
Official with  
Designation
- (iv) Date of Inspection : 18/01/2020
- (v) Prev.inspection date : 22/01/2019

**PART-I : GENERAL INFORMATION**

1. (a) Mine Name : CHAMAKPUR
- (b) Registration NO. : IBM/4639/2011
- (c) Category : A Other than Fully Mech.
- (d) Type of Working : Opencast
- (e) Postal address
- State : ORISSA
- District : KEONJHAR
- Village : CHAMAKPUR
- Taluka : CHAMPUA
- Post office : CHAMAKPUR
- Pin Code : 758034
- FAX No. : 0674-2394794
- E-mail : sp@kcp.in
- Phone : 0674-2392078
- (f) Police Station : Champua
- (g) First opening date : 30/01/1971
- (h) Weekly day of rest : THU
2. Address for : AT/PO. CHAMAKPUR  
correspondance : DIST. KEONJHAR, ORISSA  
PIN. 758034, POLICE STATION. CHAMPUA
3. (a) Lease Number : ORI0062
- (b) Lease area : 31.693Ha
- (c) Period of lease : ~~to~~ leave expiry on 29.01.2021
- (d) Date of Expiry : 29/01/2021
4. Mineral worked : IRON ORE Main

## 5. Name and Address of the

Lessee : K. C. PRADHAN  
 K.C.PRADHAN, MINES  
 OWNER, PLOT NO.1262 ROAD-  
 8, UNIT-9 BHUBNESHWAR ORISSA  
 Phone:0674-2394794  
 FAX :0674-2392078

Owner : K.C.PRADHAN  
 K.C.PRADHAN, MINES OWNER  
 PLOT NO-1262, ROAD-8 UNIT-9  
 BHUBNESHWAR ORISSA  
 Phone: 0674-2394794  
 FAX : 0674-2392078

Agent : SHRI SIDDARTHA PRADHAN  
 PLOT NO-1262 ROAD-8, UNIT-9  
 BHUBANESWAR KEONJHAR ORISSA  
 Phone: 0674-2392078  
 FAX : 0674-2394794

Mining Engineer  
 Name : SHRI DIPAK KUMAR DEO, Full Time  
 Qualification : B-TECH (MINING ENGG)  
 Appointment/ : 01/09/2011  
 Termination date

Manager  
 Name : S.K.DAS  
 Qualification : DME(MINING)  
 Appointment/ : 01/03/1996  
 Termination date

6. Date of approval of Mining Plan/Scheme of Mining	:	Mining Scheme rule 12 MCDR1988	23/06/2004
		Mining Scheme rule 12 MCDR1988	05/05/2010
		Modif.of approved Mining Plan	06/05/2013
		MP modif under MCR 1960	05/01/2015
		MP review under 17(1) MCR 2016	14/11/2017
		FMCP under 23C(1)	14/02/2019

## PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	In 2018-19, there is no proposal for drilling.	Entire mining lease area of 31.693 Ha is already explored in G1 level of UNFC.	Entire mining lease area of 31.693 Ha is already explored in G1 level of UNFC.
1b	Exploration over lease area for geological axis 1 or 2	In 2018-19, there is no proposal for drilling.	Entire mining lease area of 31.693 Ha is already explored in G1 level of UNFC.	Entire mining lease area of 31.693 Ha is already explored in G1 level of UNFC.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not Proposed	Nil. In 2018-19, there was no proposal for drilling. Entire mining lease area of 31.693 Ha is already explored in G1 level of UNFC.	Nil. In 2018-19, there was no proposal for drilling. Entire mining lease area of 31.693 Ha is already explored in G1 level of UNFC.
1d	Balance area to be explored to bring Geological axis in 1 or 2	Not Proposed	Nil. Entire mining lease area of 31.693 Ha is already explored in G1 level of UNFC.	Nil. Entire mining lease area of 31.693 Ha is already explored in G1 level of UNFC.

1e	Balance reserve as on 01/04/20	As per review of mining plan approved dated 14.11.2017, Reserve and Resource as on 31.07.2017 are as follows: Reserve is 0.351 million tones and Remaining resources is 0.028 million tones Total reserves & resources is 0.379 million tones	Reserve and Resource as on 01.04.2019 are as follows as furnished in annual return for 2018-19: Reserve is 0.315 million tones and Remaining resources is 0.028 million tones. Total reserves & resources is 0.343 million tones	Reserve and Resource as on 01.04.2019 are as follows as furnished in annual return for 2018-19: Reserve is 0.315 million tones and Remaining resources is 0.028 million tones. Total reserves & resources is 0.343 million tones
1f	General remarks of inspecting officers on geology, exploration etc	In 2018-19, there was no proposal for exploration.	Entire mining lease area of 31.693 Ha is already explored in G1 level of UNFC.	Entire mining lease area of 31.693 Ha is already explored in G1 level of UNFC.

#### Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	In 2018-19, development proposed in Departmental Pit, Lucky Pit, Top pit, Hill point Pit and South Pit	In 2018-19, development done in Departmental Pit, Lucky pit, Top Pit and Hill Point Pit.	In 2018-19, development done in Departmental Pit, Lucky pit, Top Pit and Hill Point Pit.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches in over burden and mineral proposed	Separate benches in over burden and mineral maintained.	Separate benches in over burden and mineral maintained.

2c	Stripping ratio or ore to OB ratio	In 2018-19, the proposed stripping ratio was 1: 0.105 t/m3	In 2018-19, the proposed stripping ratio was 1: 0.029 t/m3. Due to less production the proposed development was less.	In 2018-19, the proposed stripping ratio was 1: 0.029 t/m3. Due to less production the proposed development was less.
2d	Quantity of topsoil generation in m3	In 2018-19, there was no proposal for top soil generation.	In 2018-19, no top soil generated.	In 2018-19, no top soil generated.
2e	Quantity of overburden generation in m3	In 2018-19, the proposal of overburden generation was 5255 m3	In 2018-19, the of overburden generated was 680 m3. Due to less production the proposed development was less.	In 2018-19, the of overburden generated was 680 m3. Due to less production the proposed development was less.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	In 2018-19, development proposed in Departmental Pit, Lucky Pit, Top pit, Hill point Pit and South Pit. In 2018-19, the proposed stripping ratio was 1: 0.105 t/m3	In 2018-19, development done in Departmental Pit, Lucky pit, Top Pit and Hill Point Pit. Due to less production the proposed development was less. In 2018-19, the proposed stripping ratio was 1: 0.029 t/m3	In 2018-19, development done in Departmental Pit, Lucky pit, Top Pit and Hill Point Pit. Due to less production the proposed development was less. In 2018-19, the proposed stripping ratio was 1: 0.029 t/m3

### Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Five nos of pits namely Departmental Pit, Lucky Pit, Top pit, Hill point Pit and South Pit were prposed for production.	Four nos of pits namely Departmental Pit, Lucky pit, Top Pit and Hill Point Pit were put in production.	Four nos of pits namely Departmental Pit, Lucky pit, Top Pit and Hill Point Pit were put in production.

3b	Quantity of ROM mineral production proposed	In 2018-19, ROM Production proposal was 50122 MT	In 2018-19, ROM production was 23828 MT	In 2018-19, ROM production was 23828 MT
3c	Recovery of sailable/usable mineral from ROM production	In 2018-19, generation of salable mineral from ROM was 44684.5 MT	In 2018-19, generation of salable mineral from ROM was 22473 MT due to less ROM production than proposed.	In 2018-19, generation of salable mineral from ROM was 22473 MT due to less ROM production than proposed.
3d	Quantity of mineral reject generation	Nil	In 2018-19, the generation of subgrade was 1467 MT. The recovery was less due to less ROM production.	In 2018-19, the generation of subgrade was 1467 MT. The recovery was less due to less ROM production.
3e	Grade of mineral rejects generation and threshold value declared.	Nil	Grade of subgrade : +45-52% Fe	Grade of subgrade : +45-52% Fe
3f	Quantity of sub grade mineral generation.	In 2018-19, the generation of subgrade proposed was 2252.5 m3	In 2018-19, the generation of subgrade was 1467 MT. The recovery was less due to less ROM production.	In 2018-19, the generation of subgrade was 1467 MT. The recovery was less due to less ROM production.
3g	Grade of sub grade mineral generation	+45-52% Fe	+45-52% Fe	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	The ore raised from the mining lease area will undergo manual sizing & sorting at quarry site.	Manual	Manual
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Not proposed	Nil	Nil

3j	Provision of drilling and blasting in mineral benches	Owing to weathered and exposed nature of ore body both in float and insitu iron ore zone, no drilling and blasting proposal has been envisaged in the ensuing plan period.	Nil	Nil
3k	Provision of mining machineries in mineral benches	Manual Method of mining proposed	Manual method of mining	Manual method of mining
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Bench height proposed is 3 m	Bench height is suitable for method of mining proposed.	Bench height is suitable for method of mining proposed.
3m	Total area covered under excavation/pits	Area under excavation at the end of plan period will be 7.11 Ha	Area under excavation at the end 2018-19 as furnished in annual return submitted is 7.11 Ha	Area under excavation at the end 2018-19 as furnished in annual return submitted is 7.11 Ha
3n	Ore to OB ratio for the pit/mine during the year.	In 2018-19, the proposed stripping ratio was 1: 0.105 t/m <sup>3</sup>	In 2018-19, the proposed stripping ratio was 1: 0.029 t/m <sup>3</sup>	Due to less production the proposed development was less.
3o	Total area put in use under different heads at the end of year	Area put in use under different heads at the end of plan period will be 31.693 Ha	Total area put in use under different heads at the end of 2018-19 as furnished in annual return is 31.693 Ha	Total area put in use under different heads at the end of 2018-19 as furnished in annual return is 31.693 Ha

3p	Production of ROM mineral during the last five year period as applicable	Year wise ROM Production Proposal: 2014-15: 68,132.30 MT 2015-16: 78,593.50 MT 2016-17: 79,459.50 MT 2017-18: 77,470.50 MT 2018-19: 50,122.00 MT	Year wise ROM Production: 2014-15: 47,750 MT 2015-16: 16,635 MT 2016-17: 7,277 MT 2017-18: 15,113 MT 2018-19: 23,828 MT	Year wise ROM Production: 2014-15: 47,750 MT 2015-16: 16,635 MT 2016-17: 7,277 MT 2017-18: 15,113 MT 2018-19: 23,828 MT
3q	General remarks of inspecting officers on method of mining etc.	Five nos of pits namely Departmental Pit, Lucky Pit, Top pit, Hill point Pit and South Pit. In 2018-19, ROM Production proposal was 50122 MT.	Four nos of pits namely Departmental Pit, Lucky pit, Top Pit and Hill Point Pit were put in production. In 2018-19, ROM production was 23828 MT.	Four nos of pits namely Departmental Pit, Lucky pit, Top Pit and Hill Point Pit were put in production. In 2018-19, ROM production was 23828 MT.

## Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	No Top soil, Waste material, OB and mineral rejects dumped separately	There was no generation of top soil. Waste material dumped separately	There was no generation of top soil. Waste material dumped separately
4b	Location of topsoil, OB and mineral reject dumps	Waste material dump located in the west side of ML area.	Waste material dump located in the west side of ML area.	Waste material dump located in the west side of ML area.
4c	Number of dumps within lease area and outside of lease area	Inside the lease area six nos. waste dumps	Inside the lease area six nos. waste dumps	Inside the lease area six nos. waste dumps
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Dumps are outside the ultimate pit limit.	Dumps are outside the ultimate pit limit.	Dumps are outside the ultimate pit limit.
4e	Number of active and alive dumps.	One no of active dump	One no of active dump	One no of active dump



4f	Number of dead dumps.	Five no of dead dump	Five no of dead dump	Five no of dead dump
4g	Number of dumps established.	Five no of dead dump	Five no of dead dump	Five no of dead dump
4h	Whether Retaining wall or garland drain all along dumps are there.	Retaining wall already developed has to be maintained.	Retaining wall already developed has been maintained.	Retaining wall already developed has been maintained.
4i	Length of Retaining wall or garland drain all along dumps	Retaining wall already developed has to be maintained.	Retaining wall already developed has been maintained.	Retaining wall already developed has been maintained.
4j	Number of settling ponds	Not Proposed during 2018-19	Nil	Nil
4k	Specific comments of inspecting officer on waste dump management	No Top soil, Waste material, OB and mineral rejects dumped separately. Retaining wall already developed has to be maintained.	There was no generation of top soil. Waste material dumped separately. Retaining wall already developed has been maintained	There was no generation of top soil. Waste material dumped separately. Retaining wall already developed has been maintained.

#### 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	Mine is not matured for reclamation and subsequent rehabilitation.
5b	Area under backfilling of mined out area	Not Proposed	Nil	Mine is not matured for reclamation and subsequent rehabilitation.

5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Not Proposed	Nil	Mine is not matured for reclamation and subsequent rehabilitation.
5d	Total area fully reclaimed and rehabilitated	Not Proposed	Nil	Mine is not matured for reclamation and subsequent rehabilitation.
5e	General remarks of inspecting officers on backfilling and reclamation etc.	There is no proposal for reclamation and subsequent rehabilitation	Mine is not matured for reclamation and subsequent rehabilitation.	Mine is not matured for reclamation and subsequent 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	Nil	Nil
6d	No. of saplings planted during the year	247 nos. of saplings	5000 nos of saplings have been planted.	5000 nos of saplings have been planted.
6e	Cumulative no .of plants	Not Proposed	18295 numbers of saplings	18295 numbers of saplings
6f	Any other method of rehabilitation	Not Proposed	Nil	Nil
6g	Cost incurred on watch and care during the year	Not Proposed	Nil	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)	Not Proposed	Nil	Nil
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	In 2018-19, 247 nos. of saplings were proposed to be planted	In 2018-19, 5000 nos of saplings have been planted. Aesthetic beauty in and around mines is maintained.	In 2018-19, 5000 nos of saplings have been planted. Aesthetic beauty in and around mines is maintained.

#### Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade wise sorting	Grade wise sorting	Grade wise sorting
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Manual	Manual	Manual
7c	Different grade of mineral sorted out at mines.	Grade wise sorting	Lumps and Fines of Grades below 55% Fe content.	Lumps and Fines of Grades below 55% Fe content.
7d	Any beneficiation process at mines	Not Proposed	Nil	Nil
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	Grade wise sorting. Manual method of sorting practiced.	Grade wise sorting. Manual method of sorting practiced.	Grade wise sorting. Manual method of sorting practiced.

## Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	In 2018-19, there was no proposal for top soil generation.	No top soil generated during the year 2018-19.	No top soil generated during the year 2018-19.
8b	Concurrent use or storage of topsoil	In 2018-19, there was no proposal for top soil generation.	No top soil generated during the year 2018-19.	No top soil generated during the year 2018-19.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumping of overburden has been proposed.	Separate dumping of overburden done as per proposal.	Separate dumping of overburden done as per proposal.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not proposed	Nil	Mine is not matured for reclamation and subsequent rehabilitation.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not proposed	Nil	Mine is not matured for reclamation and subsequent rehabilitation.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	247 nos. of saplings proposed for plantation in 2018-19	5000 nos of saplings have been planted in 2018-19	5000 nos of saplings have been planted in 2018-19
8g	Survival rate	Survival Rate: 80 %	Survival Rate: 82 %	Data as furnished in annual return for 2018-19

8h	Water sprinkling on roads to control airborne dust	Water will be sprinkled on haulage roads, dump & mine face to suppress the generation of dust	Water sprinkling is done regularly.	Water sprinkling is done regularly.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	In 2018-19, there was no proposal for top soil generation. 247 nos. of saplings proposed for plantation. Water will be sprinkled on haulage roads, dump & mine face to suppress the generation of dust.	No top soil generated during the year 2018-19. 5000 nos of saplings have been planted. Water sprinkling is being done regularly.	No top soil generated during the year 2018-19. 5000 nos of saplings have been planted. Water sprinkling is being done regularly.

#### Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Monthly returns and annual return for 2018-19 have been submitted.	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 Mining engineer and Manager has been furnished in annual return submitted for 2018-19.	Information on Mining engineer and Manager has been furnished in annual return submitted for 2018-19.	Information on Mining engineer and Manager has been furnished in annual return submitted for 2018-19.

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: 7.11 ha, Used for waste disposal: 5.024 Ha, Occupied by plant buildings, residential, welfare buildings & roads: 3.93 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: 7.11 ha, Used for waste disposal: 5.024 Ha, Occupied by plant buildings, residential, welfare buildings & roads: 3.93 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: 7.11 ha, Used for waste disposal: 5.024 Ha, Occupied by plant buildings, residential, welfare buildings & roads: 3.93 Ha etc
9d	Scrutiny of Annual return on afforestation	In 2018-19, number of saplings planted within lease area in 247 nos.	In 2018-19, number of saplings planted within lease area is 5000 nos.	Data as furnished in annual return for 2018-19
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Below 55% Fe lump generation was 22473 tones whereas below 55% Fe fines generation was 1467 tones.	Below 55% Fe lump generation was 22473 tones whereas below 55% Fe fines generation was 1467 tones.	Below 55% Fe lump generation was 22473 tones whereas below 55% Fe fines generation was 1467 tones.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Closing stock of ROM at the mine head at the end of year 2018-19 is 2093.00 tones	Closing stock of ROM at the mine head at the end of year 2018-19 is 2093.00 tones	Closing stock of ROM at the mine head at the end of year 2018-19 is 2093.00 tones

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex-Mines price (in Rs per tonne) of Lump of grade below 55% Fe is Rs. 2115.90 and fines below 55% Fe is Rs 400. Production Cost: Rs 1130.35	Ex-Mines price (in Rs per tonne) of Lump of grade below 55% Fe is Rs. 2115.90 and fines below 55% Fe is Rs 400. Production Cost: Rs 1130.35	Ex-Mines price (in Rs per tonne) of Lump of grade below 55% Fe is Rs. 2115.90 and fines below 55% Fe is Rs 400. Production Cost: Rs 1130.35
9h	Scrutiny of Annual return on fixed assets	Rs.6959500/-	Rs.6959500/-	Data as furnished in annual return for 2018-19
9k	Scrutiny of Annual return on mining machineries	Hydraulic shovel (0.9 cum capacity): 2 Nos; Backhoe (1.2 cum capacity): 1 no; wheel loader (2.5 cum capacity): 1 no etc.	Hydraulic shovel (0.9 cum capacity): 2 Nos; Backhoe (1.2 cum capacity): 1 no; wheel loader (2.5 cum capacity): 1 no etc.	Hydraulic shovel (0.9 cum capacity): 2 Nos; Backhoe (1.2 cum capacity): 1 no; wheel loader (2.5 cum capacity): 1 no 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
Rule 45(7)	20/01/2020	20/04/2020			
Rule 26(2)	20/01/2020	20/04/2020			

Date :

*Samaajudan*  
02/07/2020  
(SHRI SUDIP RANJAN MAZUMDAR)

Indian Bureau of Mines