INDIAN BUREAU OF MINES MINERALS DEVELOPMENT AND REGULATION DIVISION

MCDR INSPECTION REPORT

Bhubaneshwar regional office

Mine file No : ORI/IRON/SNG/MCDR-13/BBS Mine code : 300RI13025

(i) Name of the Inspecting : SRM) SHRI SUDIP RANJAN MAZUMDAR

Officer and ID No.

(ii) Designation : Senior Mining Geologist

(iii) Accompaning mine : Shri. C.S.Mishra, Mines Manager

Official with Designation

(iv) Date of Inspection : 18/03/2019
(v) Prev.inspection date : 30/11/2017

PART-I : GENERAL INFORMATION

1. (a) Mine Name : TANTRA

(b) Registration NO. : IBM/6694/2011

(c) Category : A Other than Fully Mech.

(d) Type of Working : Opencast

(e) Postal address

State : ORISSA

District : SUNDARGARH
Village : TANTRA
Taluka : BONAI
Post office : TENSA
Pin Code : 770042

FAX No. : 06625-236305

E-mail : korptantramines@gmail.com

Phone : 06625-236305

(f) Police Station : Koira

(g) First opening date : 01/09/1986

(h) Weekly day of rest : SUN

2. Address for : AT/PO-KOIRA

correspondance DIST- SUNDERGARH

ORISSA-770042

3. (a) Lease Number : ORI0132 (b) Lease area : 72.56 (c) Period of lease : 20

(d) Date of Expiry : 21/11/2005

4. Mineral worked : BAUXITE Associated

IRON ORE Main

5. Name and Address of the

Lessee : M/S KORP RESOURCES PVT LTD

161, RABINDRA SARANI, PS-BURRA BAZAR KOLKATTA KOLKATA WEST BENGAL

Phone: 03322683832 FAX : 03322683832

Owner : SHRI PRAHLAD ROY GOENKA

161, RABINDRA SARANI, PS-BURRA BAZAR KOLKATA KOLKATA

WEST BENGAL

Phone: 9831094640 FAX: 03322683832

Mining Engineer

Name : SHRI RUDRA MOHAN NAYAK, Full Time

Qualification : B E MINING (AMIE)

Appointment/ : 01/03/2019

Termination date

Geologist

Name : SHRI P K PATHAK, Full Time

Qualification : MSC (GEOLOGY)
Appointment/ : 05/07/2012

Termination date

Manager

Name : SHRI CHANDRA SEKHAR MISHRA

Qualification : MSC GEOLOGY (FIRST CLASS MINES MANAGER C

Appointment/ : 15/03/2016

Termination date

6. Date of approval of Mining : Existing rule 11 MCDR1988 29/03/2004
Plan/Scheme of Mining PMCP under 23B(2) for Existing 22/10/2007
Mining Scheme rule 12 MCDR1988 11/12/2008
Modif.approved Mining Scheme 03/03/2010
Mining Scheme rule 12 MCDR1988 19/04/2013
MP review under 17(1) MCR 2016 18/05/2018

PAGE : 3

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	2016-17: 10 nos. of boreholes	2016-17: Nil. In the previous inspection dated 30.11.2017, violation and subsequently showcause notice was issued for non-compliance of exploration proposal. The review of mining plan for the period 2018-19 to 2021-22 have been approved and in the said review the proposal for drilling of required number of boreholes has been incorporated. The violation was thus complied.	
1b	Exploration over lease area for geological axis or 2	nos. of	2017-18: Nil. In the previous inspection dated 30.11.2017, violation and subsequently showcause notice was issued for non-compliance of exploration proposal. The review of mining plan for the period 2018-19 to 2021-22 have been approved and in the said review the proposal for drilling of required number of boreholes has been incorporated. The violation was thus complied.	

1c Exploration
Agencies and
Expenditure in
lakh rupees
during the year

Not applicable as not specified

Proposed boreholes for 2017-18 have not been drilled.

In the previous inspection dated 30.11.2017, violation and subsequently showcause notice was issued for non-compliance of exploration proposal. The review of mining plan for the period 2018-19 to 2021-22 have been approved and in the said review the proposal for drilling of required number of boreholes has been incorporated. The violation was thus complied.

1d Balance area to
 be explored to
 bring Geological
 axis in 1 or 2

Area under G3 level of exploration is 15.042 ha There was no exploration work carried out in 2017-18.

In the previous inspection dated 30.11.2017, violation and subsequently showcause notice was issued for non-compliance of exploration proposal. The review of mining plan for the period 2018-19 to 2021-22 have been approved and in the said review the proposal for drilling of required number of boreholes has been incorporated. The violation was thus complied.

1e Balance reserve as on 01/04/20

Reserve under 111 category as per approved scheme of mining dated 19.04.2013 was 2001000 tonnes and resources under 211 category was 699000 tonnes

ROM Production during the year 2017-18 was 106200 tonnes. Reserve under 111 category as per review of mining plan approved dated 18.05.2018 is 3.918 million tonnes and resources under 211 category is 1.010 million tonnes.

Annual Return for 2016-17 and 2017-18 have not been submitted to IBM. Violation is thus issued under rule 45 (5)(c) of MCDR, 2017.

1f General remarks
 of inspecting
 officers on
 geology,
 exploration etc

2016-17 and 2017-18: 10 nos. of boreholes per year In the previous inspection dated 30.11.2017, violation and subsequently showcause notice was issued for noncompliance of exploration proposal for the year 2016-17 and 2017-18. The review of mining plan for the period 2018-19 to 2021-22 have been approved and in the said review the proposal for drilling of required number of boreholes has been incorporated. The violation was thus complied. Violation is thus issued under rule 45 (5)(c) of MCDR, 2017 for non-submission of

Nil

Development :

Sl.No. Item Propasals Actual work Remarks

annual returns.

Location of In 2017-18, In 2017-18, the location 2a Nil development the proposal of development was w.r.t.lease area for between coordinates 311720E to 311930 E and development 2420570N to 2421020N . was between coordinates The pit has also been 311720E to developed in the 311930 E and northern part along the 2420570N to lease boundary of M/s PTA and M/s JSPL beyond 2420950N. It was proposed the approved proposal. to develop pit In the previous towards inspection dated southern side 30.11.2017, violation and subsequent showcause along the lease was issued for boundary. developemnt beyond the approved proposal which was duly complied with the proposal in the review of mining plan approved on 18.05.2018. 2b Separate benches No such Not applicable as in the Nil in topsoil, deposit iron ore is proposal of overburden and separate bench mixed with waste minerals (Rule in overburden materials. These waste as in the 15) materials are regarded deposit iron as subgrade ore. ore is mixed with waste materials. These waste materials are regarded as subgrade ore. 2c Stripping ratio No such In 2017-18, actual waste Nil or ore to OB generation was 696.97 proposal as ratio there is no m3. The waste generated overburden during the course of mining was utilised in proposal in the lease road making for area. As far beneficiation plant. as the deposit is concerned, iron ore is mixed with waste materials.

> These waste materials are regarded as subgrade ore.

2d	Quantity of topsoil generation in m3	2400 m3	Nil. The pit has been developed in the northern part along the lease boundary of M/s PTA and M/s JSPL beyond the approved proposal instead of southern side of the lease. Therefore, top soil generation was nil.	Nil
2e	Quantity of overburden generation in m3	overburden in the lease area. As far	In 2017-18, actual waste generation was 696.97 m3. The waste generated during the course of mining was utilised in road making for beneficiation plant.	Nil
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	and overburden, top soil generation and no generation	Location of development towards northern side with separate benches in overburden and ore. In 2017-18, 696.97 m3 of waste generated was utilised in road making for beneficiation plant. No top soil was generated as development was towards northern side of the lease. In the previous inspection dated 30.11.2017, violation and showcause was issued which was duly complied with proposal in review of mining plan.	Nil

Actual work

Remarks

Exploitation:

Item

Propasals

Sl.No.

Number of pit Nil 3a One One proposed for production Quantity of ROM 2017-18: 2017-18: 106200 tonnes The environmental 3b mineral 600000 tonnes clerance is production accorded for production proposed capacity of 1,20,000 TPA of iron ore only. 3с Recovery of Recovery of ROM production in 2017-ROM production was sailable/usable saleable ore 18 was 106200 tonnes less due to EC mineral from ROM is 40% of ROM against proposal of limit of 120000 production at +58% Fe 600000 tonnes. Less ROM TPA. production was due to EC limit of 120000 TPA. Out of 106200 tonnes of ROM production, 28700 tonnes was processed and remaining 77500 tones was in closing balance for 2017-18. In 28700 of ROM processed, the recovery of saleable ore i.e, +58% Fe was 4.9%. 3d 360000 tonnes ROM production in 2017-ROM production was Quantity of mineral reject 18 was 106200 tonnes less due to EC limit of 120000 generation against proposal of 600000 tonnes. Less ROM TPA. production was due to EC limit of 120000 TPA. Out of 106200 tonnes of ROM production, 28700 tonnes was processed and remaining 77500 tones was in closing balance for 2017-18. In 28700 of ROM processed, the mineral reject (+45% fe to 58% Fe) generation was 27290 tonnes. Grade of mineral +45% Fe to 58% +45% Fe to 58% Fe 3e Nil rejects generation and threshold value declared.

3f	Quantity of sub grade mineral generation.	360000 tonnes	ROM production in 2017- 18 was 106200 tonnes against proposal of 600000 tonnes. Less ROM production was due to EC limit of 120000 TPA. Out of 106200 tonnes of ROM production, 28700 tonnes was processed and remaining 77500 tones was in closing balance for 2017-18. In 28700 of ROM processed, the mineral reject (+45% fe to 58% Fe) generation was 27290 tonnes.	ROM production was less due to EC limit of 120000 TPA.
3g	Grade of sub grade mineral generation	+45% Fe to 58% Fe	+45% Fe to 58% Fe	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised	Mechanised	Nil
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Mineral reject/subgrad e of +45% Fe to 58% Fe was proposed for beneficiation in the beneficiation plant within the lease area.	Beneficiation could not be carried out due to want of environment clearance.	Nil

3j Provision of drilling and blasting in mineral benches

Hard rock mass Hard rock mass have will be been drilled by the help drilled by the of jack hammer drills as help of jack well as DTH drills hammer drills depending ypon the as well as DTH hardness of the rock and drills bench height. Nitrate depending ypon mixtures and nitro the hardness compound explosives have of the rock been used for blasting and bench of hard rocks in the height. Jack mine. Safety/detonating hammer drills fuse and detonators will be having have been used for the burden and ignition of the explosives for blasting. spacing of 1.0m and 1.2mrespectively while the same for DTH drill will be 2.5m and 3.0m respectively. Nitrate mixtures and nitro compound explosives will be used for blasting of hard rocks in the mine. Safety/detonat

ing fuse and
detonators
will be used
for ignition

explosives for

of the

blasting.

3k Provision of mining machineries in mineral benches

Shovels of Shovels of 0.9m3
0.9m3 capacity capacity have been
will be utilised for excavation
utilised for and loading of blasted
excavation and rocks.
loading of
blasted rocks.

Nil

Nil

Bench height Nil 31 Whether height Bench height is of benches in 6.0m suitabley matched with overburden and loading excavator. mineral suitable for method of mining proposed in MP/SOM 3m Total area Total area As per review of mining Nil covered under under plan approved dated excavation/pits excavation at 18.05.18.05.2018, area the end of under mining is 6.651 schme period Ha. The lesse has not 2017-18 will submitted annual return be 6.8 Ha. for 2017-18 for whih violation has been issued under rule 45 (5)(c) of MCDR, 2017 for non-submission of annual return. Ore to OB ratio Not proposed. Not applicable. In 2017-Nil for the pit/mine No such 18, actual waste during the year. proposal as generation was 696.97 there is no m3. The waste generated during the course of overburden proposal in mining was utilised in the lease road making for area. As far beneficiation plant. as the deposit is concerned, iron ore is mixed with waste materials. These waste materials are regarded as subgrade ore. Total area put Total area put As per review of mining 30 Nil in use under in use under plan approved dated different heads different 18.05.18.05.2018, total at the end of heads at the area put in use at the year end of scheme end of scheme period is period 2017-18 22.269 Ha. The lesse will be 26.90 has not submitted annual return for 2017-18 for Ha. whcih violation has been issued under rule 45 (5)(c) of MCDR, 2017 for non-submission of annual

return.

3p	Production of ROM mineral during the last five year period as applicable		2013-14: 119800 MT 2014-15: 114000 MT 2015-16: 115600 MT 2016-17: 119300 MT 2017-18: 106200 MT	Proposed production could not be achieved due to want of EC . EC accorded for 120000 TPA of iron ore production.
3q	General remarks of inspecting officers on method of mining etc.	proposed for production. ROM production proposed was 600000 tonnes. There is provision of drilling and	One pit put for production. ROM production was 106200 tonnes. Drilling and balsting have been carried out in mineral benches. ROM production was less than proposal due to environmental clerance of 120000 TPA.	Nil

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	proposal of separate dumping of overburden as in the deposit	during the course of	Nil

4b Location of topsoil, OB and mineral reject dumps

Proposal for stacking of top soil between coordinates 2120850 N to 242105N and 311710 E to 311860 E. Tailings to be disposed in western side of the benficiation plant between coordinates 242720 N to 2420940 N and 310860E to 3101050E.

There was no generation of top soil in 2017-18 and since the wet beneficiation plant is still not operational due to environmental clearance, therefore there is no disposal of tailings.

4c Number of dumps within lease area and outside there is no of lease area

No such proposal as overburden proposal in the lease area. As far iron ore is mixed with waste materials. These waste materials are regarded as subgrade ore. However, one tailing dump has been proposed.

There is no waste dumping in 2017-18 and the waste generated i.e, 696.97 m3 was utilised in road making for beneficiation plant. There was no disposal of as the deposit tailings as the wet is concerned, beenficiation plant was not operation due to want of statutory clearance.

Nil

Nil

4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	There was no proposal for waste dump. However, the proposal for tailings disposal was outside the UPL.	There is no waste dumping in 2017-18 and the waste generated i.e, 696.97 m3 was utilised in road making for beneficiation plant. There was no disposal of tailings as the wet beenficiation plant was not operation due to want of statutory clearance.	Nil
4e	Number of active and alive dumps.		Not applicable	Nil
4f	Number of dead dumps.	No such proposal	Not applicable	Nil
4 g	Number of dumps established.	No such proposal	Not applicable	Nil
4h	Whether Retaining wall or garland drain all along dumps are there.	Not Proposed	Not Applicable	There was no proposal for waste dump.
4i	Length of Retaining wall or garland drain all along dumps	Not Proposed	Not Applicable	There was no proposal for waste dump.

4 j	Number of settling ponds	Not Proposed	Not Applicable	Nil
4k	Specific comments of inspecting officer on waste dump management	overburden as in the deposit iron ore is mixed with waste materials.	There is no waste dumping in 2017-18 and the waste generated i.e, 696.97 m3 was utilised in road making for beneficiation plant. There was no disposal of tailings as the wet beenficiation plant was not operation due to want of statutory clearance.	Nil

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 matured for	Not applicable	Nil
5b	Area under backfilling of mined out area	No such proposal as the area is not matured for backfilling	Not applicable	Nil
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No such proposal as the area is not matured for backfilling	Not applicable	Nil

5d	Total area fully reclaimed and rehabilitated	No such proposal as the area is not matured for backfilling	Not applicable	Nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.	the area is not matured	The area is not matured for reclamation and rehabilitation	Nil

Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
ба	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	The holder of mining lease shall submit to the competent authority a yearly report as per the format specified by the Indian Bureau of Mines, before 1st day of July every year setting forth the extent of protective and rehabilitative works carried out as envisaged in the approved mine closure plan		Nil
6b	Area available for rehabilitation (ha) .	Not applicable as no such proposal for 2017-18	Not Applicable	Pit is not matured for reclamation and rehabilitation
6c	afforestation done (ha).	0.5 На	0.5 Ha	Nil

6d	No. of saplings planted during the year	1250 nos of saplings proposed for plantation	520 nos of saplings have been planted.	Nil
6e	Cumulative no .of plants	Not applicable as no such proposal	Cummulative nos of plantation till 2017-18 done by lessee is 35080 nos. of saplings	Nil
6f	Any other method of rehabilitation	Not proposed	Not Applicable as teh area is not matured for reclamation and rehabilitation	nil
6g	Cost incurred on watch and care during the year	No such proposal	Not applicable	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No such proposal as the area is not matured for reclamation	Not Applicable	Nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No such proposal as the area is not matured for reclamation	Not Applicable	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on on backfilled area		Not Applicable	Nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No such proposal as the area is not matured for reclamation and rehabilitation	Not Applicable	Nil

61	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No such proposal as the area is not matured for reclamation and rehabilitation	Not Applicable	Nil
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	In 2017-18, 1250 nos of saplings to be planted	In 2017-18, 520 nos of saplings have been planted.	Nil
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	0.5 На	0.5 На	Nil
60	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Plantation	Plantation	Nil
6p	Compliance of environmental monitoring (core zone and buffer zone)	Quaterly Monitoring	Quaterly Monitoring of air, water and noise level are being monitored	Nil
6q 	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	and		Nil

Mineral Conservation:

Sl.No. Item Propasals Actual work Remarks

7a	ROM Mineral dispatch or grade-wise sorting within lease area	Gradewise sorting	Gradewise sorting	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% to 58% Fe and +58% Fe	+45% to 58% Fe and +58% Fe	Nil
7d	Any beneficiation process at mines .	process using	Beneficiation plant has been installed but due to want of EC beneficiation has not been carried out.	Nil
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	It has been proposed to beneficiate mineral reject/ subgrade ore.	Beneficiation plant has been installed but due to want of EC beneficiation has not been carried out.	Nil

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Proposal for	Nil.	Nil

8b	Concurrent use or storage of topsoil	There is proposal to scrap, collect and store the top soil for future use in the planatation site.	Nil. There was no generation of top soil in 2017-18.	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumping of overburden proposed	Waste dumping has been done separately	Nil
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not applicable as no such proposal	Nil	Nil
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not applicable as no such proposal	Nil	Nil
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Not applicable as no such proposal	Annual return for 2017-18 has not been submitted wherein the information on plantation is to be submitted. Violation has been issued for nonsubmission of annual return for 2017-18.	Nil
8g	Survival rate	Not applicable as no such proposal	Annual return for 2017-18 has not been submitted wherein the information on survival rate is to be submitted. Violation has been issued for non-submission of annual return for 2017-18.	Nil

8h	Water sprinkling on roads to control airborne dust	at the dust	Water sprinkling is done by mobile water tanker	Nil
8i 	General remarks of inspecting officer on aesthetic beauty in and around mines area		There was no generation of top soil in 2017-18. Overburden generated have been dumped separately. Water sprinkling is done at haul roads. Aesthetic beauty in and around mines is maintained.	Nil

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a		return which shall be submitted before the tenth day of every month in respect of the preceding	2. Annual return for 2017-18 have not been submitted till date. Violation has been issued under rule 45 (5) (c) for non-submission of annual return for 2017-18.	Nil

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Annual return for 2017-18 have not been submitted till date.	Violation has been issued under rule 45 (5) (c) for non-submission of annual return for 2017-18. However, Mining Engineer, Geologist and Mines Manager have been appointed.	Nil
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	have not been	Violation has been issued under rule 45 (5) (c) for non-submission of annual return for 2017-18.	Nil
9d	Scrutiny of Annual return on afforestation	have not been	Violation has been issued under rule 45 (5) (c) for non-submission of annual return for 2017-18.	Nil
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	have not been	Violation has been issued under rule 45 (5) (c) for non-submission of annual return for 2017-18.	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	have not been	Violation has been issued under rule 45 (5) (c) for non-submission of annual return for 2017-18.	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	have not been	Violation has been issued under rule 45 (5) (c) for non-submission of annual return for 2017-18.	Nil
9h	Scrutiny of Annual return on fixed assets	have not been	Violation has been issued under rule 45 (5) (c) for non-submission of annual return for 2017-18.	Nil
9k	Scrutiny of Annual return on mining machineries	have not been	Violation has been issued under rule 45 (5) (c) for non-submission of annual return for 2017-18.	Nil

PAGE: 23

Details of violations observed during curre violation pointed out	ent inspection and compliance position of
Violation observed	Show couse position

Issued on Compliance on Rule NO. Issued on Compliance on

Date :	
Date .	/ CIID T

Rule NO.

(SHRI SUDIP RANJAN MAZUMDAR)

Indian Bureau of Mines