

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

MCDR INSPECTION REPORT

Bhubaneshwar regional office

Mine file No : ORI/IRON-DOL/KJR/MCDR-34/BBS

Mine code : 30ORI08033

- (i) Name of the Inspecting : **S010**) **SHRI G.C. SETHI**
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : Dr. Khageswar Mahanta, AVP (Geo) & Qualified Person
Official with
Designation
- (iv) Date of Inspection : 24/06/2017
- (v) Prev.inspection date : 01/02/2016

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **KASIA**
- (b) **Registration NO.** : **IBM/1289/2011**
- (c) Category : A Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
- State : ORISSA
- District : KEONJHAR
- Village : KASIA
- Taluka : BARBIL
- Post office : KASIA
- Pin Code : 758035
- FAX No. : 06767-75367
- E-mail : kjr_emilbbi@sancharnet.in
- Phone : 06767-75224,75489(O),75095
- (f) Police Station : BARBIL
- (g) First opening date : 14/09/1955
- (h) Weekly day of rest : SUN
2. Address for : KASIA IRON DOLOMITE MINE
correspondance PO-KASIA DIST-KEONJHAR,PIN-758035
ORISSA
3. (a) Lease Number : ORI0094
- (b) Lease area : 134.73
- (c) Period of lease : 30
- (d) Date of Expiry : 13/09/1985
4. Mineral worked : DOLOMITE Associated
IRON ORE Main

5. Name and Address of the

Lessee : ESSEL MINING& INDUSTRIES LTD.
 AT/PO: BARBIL KEONJHAR
 ORISSA
 Phone:06767-30437
 FAX :06767-75367

Owner : Essel mining & Industries Ltd
 Barbil KEONJHAR ORISSA
 Phone: 06767-30437, 30
 FAX : 06767-30367

Agent : SHRI V SRIKANTH
 BARBIL KEONJHAR ODISHA
 KEONJHAR ORISSA
 Phone: 06767-275367
 FAX : 06767-275367

Mining Engineer

Name : BAIKUNTH KALO,Full Time
 Qualification : B E MINING
 Appointment/ : 15/11/2016
 Termination date

Geologist

Name : SUBBARAYA SARMA CHILUMURU,Full Time
 Qualification : M SC GEOLOGY
 Appointment/ : 10/12/2011
 Termination date

Manager

Name : BISWAJIT NAYAK
 Qualification : DIPLOMA MINING
 Appointment/ : 15/11/2016
 Termination date

6. Date of approval of Mining	:	Mining Scheme rule 12 MCDR1988	06/05/2005
Plan/Scheme of Mining	:	Renewal under rule 24 MCR1960	08/12/2005
	:	Modif.of approved Mining Plan	22/05/2007
	:	Modif.of approved Mining Plan	05/03/2009
	:	Mining Scheme rule 12 MCDR1988	29/03/2011
	:	Mining Scheme rule 12 MCDR1988	14/03/2012

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Nil	Nil	Nil
1b	Exploration over lease area for geological axis 1 or 2	As per the review of mining plan approved on 05.09.2017, an extent of 179.495ha of area has been explored upto G1 level & 14.701ha upto G3 level.	An extent of 179.495ha of area has been explored upto G1 level & 14.701ha upto G3 level, as envisaged in the review of mining plan approved on 05.09.2017. There is no valid approved document for the year 2016-17.	There is no valid approved document for the year 2016-17.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	M/s Essel Mining & Industries Ltd. was the exploration agency for this mine.	M/s Essel Mining & Industries Ltd. was the exploration agency for this mine & no information no exploration was done during the year 2016-17 as the mine was not under operation. The expenditure on account of exploration is Nil.	Nil
1d	Balance area to be explored to bring Geological axis in 1 or 2	As per the review of mining plan approved on 05.09.2017, an extent of 179.495ha of area has been explored upto G1 level & 14.701ha upto G3 level.	An extent of 179.495ha of area has been explored upto G1 level & 14.701ha upto G3 level, as envisaged in the review of mining plan approved on 05.09.2017.	Nil

1e	Balance reserve as on 01/04/20	In the review of mining plan, dated 05.09.2017, the reserves/resources have been estimated as on 01.04.2017 & the same is as given below:- Iron ore- Proved reserves (111): 145.31 million tonnes & total remaining mineral resources 83.61 million tonnes.	The available reserves/resources as on 01.04.2017 & the same is as given below:- Iron ore- Proved reserves (111): 145.31 million tonnes & total remaining mineral resources 83.61 million tonnes.	In the review of mining plan, dated 05.09.2017, the reserves have been updated as on 05.09.2017.
1f	General remarks of inspecting officers on geology, exploration etc	In the review of mining plan, dated 05.09.2017, the reserves/resources have been estimated as on 01.04.2017.	The Kasia iron & dolomite deposit falls within the Singhbhum-Keonjhar-Bonai range of hills roughly aligned from north east to south west and the area is extremely rich in minerals resources especially iron & manganese ore. The mine is not under operation since November 2012 due to legal entanglement.	The mine is not under operation since November 2012 due to legal entanglement & no exploration has been done after the November 2012.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	No valid proposal for the year 2016-17. The previous scheme of mining was approved for the period from 2011-12 to 2015-16 and the present review of mining plan was approved on 05.09.2017 for the period from 2017-18 to 2019-20.	There was no valid proposal for the year 2016-17 & the mine is not under operation since November 2012.	Nil
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	No valid proposal.	No topsoil in the mine.	Nil
2c	Stripping ratio or ore to OB ratio	No valid proposal.	The mine was not under operation during the year 2016-17 and the Ore:OB ratio could not be coumpted.	Nil
2d	Quantity of topsoil generation in m3	Nil	Nil	Nil
2e	Quantity of overburden generation in m3	No valid proposal for 2016-17.	Nil	Nil
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	No valid proposal for the development of the pit for the year 2016-17.	The mine is not under operation since November 2012.	The mine is not under operation since November 2012.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
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3a	Number of pit proposed for production	No valid proposal for the year 2016-17. The previous scheme of mining was approved for the period from 2011-12 to 2015-16 and the present review of mining plan was approved on 05.09.2017 for the period from 2017-18 to 2019-20.	There was no valid proposal for the year 2016-17 & the mine is not under operation since November 2012.	Nil
3b	Quantity of ROM mineral production proposed	No valid proposal for production for the year 2016-17. The previous scheme of mining was approved for the period from 2011-12 to 2015-16 and the present review of mining plan was approved on 05.09.2017 for the period from 2017-18 to 2019-20.	There was no valid proposal for the year 2016-17 & the mine is not under operation since November 2012, thereby no production was reported during the year 2016-17.	Nil
3c	Recovery of sailable/usable mineral from ROM production	The recovery of iron ore is about 89.59% as indicated in the review of mining plan approved on 05.09.2017.	The mine is not under operation since November 2012 due to legal entanglement, thereby recovery percentage of iron ore dose not arise.	Nil
3d	Quantity of mineral reject generation	Nil	Nil	The mine is not under operation since November 2012.

3e	Grade of mineral rejects generation and threshold value declared.	No valid proposal.	Not applicable.	Nil
3f	Quantity of sub grade mineral generation.	Nil	Nil	Nil
3g	Grade of sub grade mineral generation	Nil	Not applicable.	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	The ROM generated is screened by deploying mobile screening plant at the pit head itself as envisaged in the review of mining plan approved on 05.09.2017.	No segregation of ore is practised at present as the mine is not under operation since November 2012.	Nil
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Nil	Nil	Nil
3j	Provision of drilling and blasting in mineral benches	Provisions for drilling & blasting is proposed in the review of mining plan approved on 05.09.2017 for the period from 2017-18 to 2019-20.	The drilling & blasting is not in practice as the mine is not under operation.	Nil

3k	Provision of mining machineries in mineral benches	Provisions for deployment of mining machineries are proposed in the review of mining plan approved on 05.09.2017 for the period from 2017-18 to 2019-20.	No mining machineries are deployed in the benches as the mine is not under operation.	Nil
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	No valid proposal for the year 2016-17. However, separate benches in overburden & in ore zone are proposed in the review of mining plan approved on 05.09.2017 for the period from 2017-18 to 2019-20.	The mine is not under operation since November 2012 due to legal entanglement.	Nil
3m	Total area covered under excavation/pits	No valid proposal for the year 2016-17.	An extent of 70.943ha has been excavated by two nos. of pits.	Nil
3n	Ore to OB ratio for the pit/mine during the year.	No valid proposal for the year 2016-17.	As the mine is not under operation since November 2012, no production & waste handling was reported during the year 2016-17. Therefore, the Ore:OB ratio could not be computed.	Nil

3o	Total area put in use under different heads at the end of year	No valid proposal for the year 2016-17.	The existing land use in different heads at the end of the year 2016-17 is as given below:- (i) Mining: 70.943ha (ii) Storing of Minera/sub-grade ore: 5.940ha (iii) Dumping: 9.574ha (iv) Township/colony: 4.481ha (v) Road: 7.609ha (vi) Magazine: 0.053ha & (vii) Reclaimed area: 7.099ha as per the review of mining plan approved on 05.09.2017.	The existing status of land use furnished above are as per the review of mining plan approved on 05.09.2017.
3p	Production of ROM mineral during the last five year period as applicable	The proposed production for the period from 2012-13 to 2016-17 is as given below:- 2012-13: 5500921 tonnes, 2013-14: 7500236 tonnes, 2014-15: 7500332 tonnes, 2015-16: 7500568 tonnes & 2016-17:Nil	The actual production reported for the period from 2012-13 to 2016-17 is as given below:- 2012-13: 5500921 tonnes, 2013-14: Nil, 2014-15: Nils, 2015-16: Nil & 2016-17:Nil	The mine is not under operation since November 2012 to till date.
3q	General remarks of inspecting officers on method of mining etc.	No comment to offer.	The mine is not under operation since November 2012 to till date.	Nil

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)	There is valid proposal for the year 2016-17. However in the review of mining plan approved on 05.09.2017 for the year 2017-18 to 2019-20, the provisions for separate dumping OB & sub-grade ore has been envisaged. There is no proposal for generation of top soil & mineral rejects.	The mine is not under operation since November 2012 & no dumping/stacking is done.	Nil
4b	Location of topsoil, OB and mineral reject dumps	Not applicable.	Not applicable.	Nil
4c	Number of dumps within lease area and outside of lease area	No valid proposal for dumping during the year 2016-17.	5 nos. of sub-grade dumps are available in the mine, out of which three are in north block & two in south block.	Nil
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Out of 5 nos. of sub-grade dumps,two nos. are located in south block & 3 are in north block.	Out of 5 nos. of sub-grade dumps,two nos. are located in south block & 3 are in north block.	Nil
4e	Number of active and alive dumps.	Nil	Nil	The mine is not under operation since November 2012.
4f	Number of dead dumps.	Nil	Nil	Nil
4g	Number of dumps established.	Nil	Nil	Nil

4h	Whether Retaining wall or garland drain all along dumps are there.	No valid proposal.	No retaining wall & garland drains were constructed during the year 2016-17.	The mine was not in operation.
4i	Length of Retaining wall or garland drain all along dumps	Nil	Not applicable.	Nil
4j	Number of settling ponds	Nil	Nil	Nil
4k	Specific comments of inspecting officer on waste dump management	No comments.	The mine is not under operation since November 2012.	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.	No such valid proposal.	Nil	Nil
5b	Area under backfilling of mined out area	Nil	Nil	Nil
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Nil	Not applicable.	Nil
5d	Total area fully reclaimed and rehabilitated	Nil	Nil	Nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.	No comments.	The mine was not under operation since November 2012.	Nil

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).	Not submitted.	The mine is not under operation since November 2012.	Nil
6b	Area available for rehabilitation (ha) .	Nil	Nil	The mine was not operating since November 2012.
6c	afforestation done (ha).	Nil	Nil	Nil
6d	No. of saplings planted during the year	Nil	Nil	Nil
6e	Cumulative no .of plants	No such valid proposal.	Nil	Nil
6f	Any other method of rehabilitation	Nil	Not applicable.	Nil
6g	Cost incurred on watch and care during the year	Nil	Nil	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	Nil	Nil	Nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Nil	Nil	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on on backfilled area	Nil	Nil	Nil

6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Nil	Nil	Nil
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	Nil	Nil	Nil
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	Nil	Nil	Nil
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	Nil	Nil	Nil
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Nil	Nil	Nil
6p	Compliance of environmental monitoring (core zone and buffer zone)	Nil	Nil	Nil
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	No comments.	The mine was not in operation since November 2012.	Nil

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
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7a	ROM Mineral dispatch or grade-wise sorting within lease area	No such valid proposal.	The mine was not under operation since November 2012 & no dispatch during the year 2016-17.	Nil
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical means.	The same practice was followed while the mine was under operation as reported during the inspection.	Nil
7c	Different grade of mineral sorted out at mines.	No such valid proposal.	No mineral sorted out during the year 2016-17 as the mine was not in operation.	Nil
7d	Any beneficiation process at mines	Nil	Nil	Nil
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	No comment.	The mine is not under operation since November 2012.	Nil

Environment:

Sl.No.	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No such valid proposal.	No topsoil was generated during the year 2016-17.	Nil
8b	Concurrent use or storage of topsoil	Nil	Not applicable.	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	No such valid proposal for the year 2016-17.	No overburden, waste, rejects & fines was generated during the year 2016-17, since the mine is not under operation from November 2012.	Nil

8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Nil	Nil	Nil
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Nil	Nil	Nil
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Nil	Nil	Nil
8g	Survival rate	Not applicable.	Nil	Nil
8h	Water sprinkling on roads to control airborne dust	Nil	Nil	Nil
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	No comments.	The mine is not under operation since November 2012, thereby no work has been done to improve the aesthetic beauty in and around the lease area.	Nil

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	The party has submitted all the monthlyy & annual returns for the year 2016-17.	As the mine is not under operation since November 2012, the party has submitted all nil returns for the year 2016-17.	Nil

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	The employment status of mining engineer, geologist & mine manager have been furnished in the annual return submitted for the year 2016-17.	As the mine falls under category -A(FM), full time mining engineer, geologist & mine managers were employed in the mine.	Nil
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	As per the annual return 2016-17, an extent of 70.943ha of area has been covered by current opencast working, an extent of 13.071ha has been reclaimed/rehabilitated, an extent of 9.574ha has been utilised for waste disposal, 26.088ha occupied by plant, building etc., and an extent of 35.613ha has been utilised for safety zone.	The land use status furnished in the annual return 2016-17 is found to be in order.	The mine was not under operation during the year 2016-17.
9d	Scrutiny of Annual return on afforestation	During the year 2016-17, no plantation was done as the mine was not under operation due to legal issues.	The status of plantation furnished in the annual return is in order.	Nil

9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	No mineral rejects was generated from the mine as the mine was not under operation during the year 2016-17.	No mineral reject was generated during the year 2016-17.	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	During the year 2016-17, no production of iron ore was reported as the mine was not under operation.	The nil production reported during the year 2016-17 was verified & found to be correct.	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	The sale value, exmine price & cost of production is mentioned to be zero in the annual return submitted for the year 2016-17.	As the mine was not under operation no production was reported, thereby the data furnished on account of sale value, ex-mine price and cost of production is in order.	Nil
9h	Scrutiny of Annual return on fixed assets	The closing balance of the total value of the fixed assets is mentioned to be for Rs. 147281800.00	The same was not available for verification during the inspection.	Nil

9k	Scrutiny of Annual return on mining machineries	No mining machinery was deployed in the mine as the mine was not in operation. However, the status of a static crusher unit of 2000t/h has been furnished against the machinery deployment the annual return submitted for the year 2016- 17.	The same was verified and found in order.	Nil
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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 G.C. SETHI)

Indian Bureau of Mines