

**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 : **RAM** ) **RAMKISHAN R**  
Officer and ID No.
- (ii) Designation : Sr. Asst. Contrl. Mines
- (iii) Accompanying mine : Dr. Khageswar Mahanta, AVP (Geo) & Qualified Person  
Official with  
Designation
- (iv) Date of Inspection : 06/05/2019
- (v) Prev.inspection date : 12/04/2018

**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](mailto: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
	:	MP review under 17(1) MCR 2016	05/09/2017
	:	FMCP under 23C(1)	28/09/2018

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

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Nil	Not applicable.	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 179.495 ha, area has been explored under G1 level and 14.701 ha under G3 level of Total lease area 194.196 ha. 10 nos of boreholes were proposed during the year 2017-18.	presently the mine is not under operation, so no exploration work carried out during the year 2018-19 as mine operations were stopped w.e.f. 22.11.2012 by the order of Divisional Forest Officer, Keonjhar.	Nil
1c	Exploration Agencies and Expenditure in lakh rupees during the year	M/s Essel Mining & Industries was the exploration agency for this mine.	No exploration work carried out during the year 2018-19.	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 179.495 ha, area has been explored under G1 level and 14.701 ha under G3 level of Total lease area 194.196 ha.	No exploration work carried out as mine operations were stopped w.e.f. 22.11.2012 by order Divisional Forest Officer, Keonjhar.	Nil

1e	Balance reserve as on 01/04/20	As per the approved document on 05.09.2017 the iron ore reserves are under Category 111: 145.31 million tonnes and resources under category 211: 16.81 million tonnes and 221: 66.8 million tonnes.	No change in balance reserves as on 01.04.2019 as No production carried out during the year. iron ore reserves are under Category 111: 145.31 million tonnes and resources under category 211: 16.81 million tonnes and 221: 66.8 million tonnes.	Nil
1f	General remarks of inspecting officers on geology, exploration etc		The Kasia Iron & Dolomite deposit falls with in the Singhbhum-Keonjhar-Bonai range of hills roughly aligned from north east to south west.	Nil

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Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	North block and South block pits are proposed for developemnt during the year 2018-19.	presently the mine is not under operation, so no development work carried out during the year.	mine operations were stopped w.e.f. 22.11.2012 by the order of Divisional Forest Officer, Keonjhar.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	No top soil generation is proposed for the year 2018-19 as it not exists in the proposed developement area. seperate benches for OB and mineral are proposed.	No development work carried out, so formation of new benches in OB and mineral.	Nil

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2c	Stripping ratio or ore to OB ratio	1:0.017 t/cu.m. for the year 2018-19.	No development work carried out as mine operations were stopped w.e.f. 22.11.2012 by the order of Divisional Forest Officer, Keonjhar.	Nil
2d	Quantity of topsoil generation in m3	No top soil generation is proposed for the year 2018-19 as it not exists in the proposed developement area	Nil	Nil
2e	Quantity of overburden generation in m3	55000 cu.m.	Nil	No development work carried out as mine operations were stopped w.e.f. 22.11.2012 by the order of Divisional Forest Officer, Keonjhar.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc		No development work carried out as mine operations were stopped w.e.f. 22.11.2012 by the order of Divisional Forest Officer, Keonjhar.	Nil.

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### Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	two pits called North block and south block are proposed for production dueing the year 2018-19.	presently the mine is not under operation, so no production carried out as mine operations were stopped w.e.f. 22.11.2012 by the order of Divisional Forest Officer, Keonjhar.	Nil

3b	Quantity of ROM mineral production proposed	3.17 million tonnes for the year 2018-19.	No development work carried out as mine operations were stopped w.e.f. 22.11.2012 by the order of Divisional Forest Officer, Keonjhar.	Nil
3c	Recovery of sailable/usable mineral from ROM production	91.47% as furinshed in the approved mining plan dated 05.09.2017	No production carried out as mine operations were stopped w.e.f. 22.11.2012 by order Divisional Forest Officer, Keonjhar.	Nil
3d	Quantity of mineral reject generation	No generation of mineral reject	Nil	sub grade material generation is proposed.
3e	Grade of mineral rejects generation and threshold value declared.	Not applicable	Not applicable	Nil
3f	Quantity of sub grade mineral generation.	97000 tonnes	Nil	No production carried out as mine operations were stopped w.e.f. 22.11.2012 by order Divisional Forest Officer, Keonjhar.
3g	Grade of sub grade mineral generation	45% Fe-54% Fe	Not applicable.	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	mechanised method by mobile screnning is proposed for segregation of ROM	No segregation of ROM carried out as mine operations were stopped w.e.f. 22.11.2012 by the order of Divisional Forest Officer, Keonjhar.	Nil
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	None	Nil	Nil

3j	Provision of drilling and blasting in mineral benches	provision of drilling and blasting is proposed in mineral benches as per the approved mining plan dated 05.09.2017.	No production carried out as mine operations were stopped w.e.f. 22.11.2012 by the order of Divisional Forest Officer, Keonjhar. hence no drilling and blasting is carried out.	Nil
3k	Provision of mining machineries in mineral benches	provision of mining machineries in mineral benches are proposed for the year 2018-19.	No production carried out as mine operations were stopped w.e.f. 22.11.2012 by the order of Divisional Forest Officer, Keonjhar. hence no machinery deployed.	Nil
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	separate benches in Ob and mineral are proposed. 9 m height benches are proposed.	Nil	No production carried out as mine operations were stopped w.e.f. 22.11.2012 by the order of Divisional Forest Officer, Keonjhar.
3m	Total area covered under excavation/pits	70.943 ha till the end of plan period 2019-20.	No additional degradation of land was carried out as mine operations were not carried out.	mine operations were stopped w.e.f. 22.11.2012 by the order of Divisional Forest Officer, Keonjhar. 70.943 ha covered under excavation as per approved mining plan dated 05.09.2017
3n	Ore to OB ratio for the pit/mine during the year.	1:0.017 t/cu.m.	Not applicable	No production carried out as mine operations were stopped w.e.f. 22.11.2012 by the order of Divisional Forest Officer, Keonjhar.

3o	Total area put in use under different heads at the end of year	the land use pattern propped as per the approved mining plan till end of plan period 2019-20 is Mining: 70.943 ha, mineral storage: 5.94 ha, waste dumping: 9.754 ha, raods: 7.609 ha, township: 4.481 ha, magazine: 0.053 ha, reclaimed area 7.099 ha.	No additional degraded as the existing land use pattern at the end of year 2018-19 is sames as existing in the minnig plan as No mine operations were carried out as mine operations were stopped w.e.f. 22.11.2012 by the order of Divisional Forest Officer, Keonjhar.	Nil
3p	Production of ROM mineral during the last five year period as applicable	2014-15: 7.5 mil.t 2015-16: 7.5 mil.t 2016-17: No valid proposal 2017-18: 2.68 mil.t 2018-19: 3.17 mil.t	2014-15: Nil 2015-16: Nil 2016-17: Nil 2017-18: Nil 2018-19: Nil	No production carried out as mine operations were stopped w.e.f. 22.11.2012 by the order of Divisional Forest Officer, Keonjhar.
3q	General remarks of inspecting officers on method of mining etc.		No production carried out as mine operations were stopped w.e.f. 22.11.2012 by the order of Divisional Forest Officer, Keonjhar.	Nil

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Solid Waste Management - Dumping:

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Sl.No.	Item	Propasals	Actual work	Remarks
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4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	seperate dumping for OB and subgrade are proposed and No top soil generation is proposed for the year 2018-19 as it not exists in the proposed developement area.	presently the mine is not under operation as Mine operations were stopped w.e.f. 22.11.2012 by the order of Divisional Forest Officer, Keonjhar.	Nil
4b	Location of topsoil, OB and mineral reject dumps	location of proposed dump is 331836E, 2440143N.	No dumping has been carried out as mine operations were stopped w.e.f. 22.11.2012 by the order of Divisional Forest Officer, Keonjhar.	Nil
4c	Number of dumps within lease area and outside of lease area	one no of waste dumping is proposed during the year 2018-19.	No dumping carried out as mine operations were stopped w.e.f. 22.11.2012 by the order of Divisional Forest Officer, Keonjhar.	Nil
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	with in UPL.	Not applicable	Nil
4e	Number of active and alive dumps.	one no of active waste dumping is proposed during the year 2018-19.	No active waste dumping is carried out as mine operations were stopped w.e.f. 22.11.2012 by the order of Divisional Forest Officer, Keonjhar.	Nil
4f	Number of dead dumps.	No dead dumps are proposed during the year 2018-19.	Nil	Nil
4g	Number of dumps established.	No dumps establishment is proposed during the year 2018-19.	Nil	Nil

4h	Whether Retaining wall or garland drain all along dumps are there.	No retaining wall & garland drain constrction was proposed during the year 2018-19.	Nil	Nil
4i	Length of Retaining wall or garland drain all along dumps	Not applicable	Not applicable	Nil
4j	Number of settling ponds	None	Nil	Nil
4k	Specific comments of inspecting officer on waste dump management		mine operations were stopped w.e.f. 22.11.2012 by the order of Divisional Forest Officer, Keonjhar.	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 area has been matured for reclamation so no proposal given during the year 2018-19.	Not applicable	Nil
5b	Area under backfilling of mined out area	Not applicable as no area has been matured for reclamation.	Not applicable	Nil
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No top soil generation proposed during the year 2018-19.	Not applicable.	Nil
5d	Total area fully reclaimed and rehabilitated	Not applicable.	Nil	Nil

5e	General remarks of inspecting officers on backfilling and reclamation etc.	presently the mine is not under operation, as mine operations were stopped w.e.f. 22.11.2012 by order Divisional Forest Officer, Keonjhar.	Nil
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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).	has to be submitted by 01/07/2019 for the year 2018-19.	Not submitted till the date of inspection. advised to submit the same before stipulate time period.	presently the mine is not under operation, as mine operations were stopped w.e.f. 22.11.2012 by the order of Divisional Forest Officer, Keonjhar.
6b	Area available for rehabilitation (ha) .	Not applicable as the area not matured for reclamation.	Nil	Nil
6c	afforestation done (ha).	2500 nos of sapling plantation on dump as gap filling proposed during the year 2018-19.	presently the mine is not under operation, so not carried out as mine operations were stopped w.e.f. 22.11.2012 by the order of Divisional Forest Officer, Keonjhar.	Nil
6d	No. of saplings planted during the year	2500 nos of sapling plantation on dump as gap filling proposed during the year 2018-19.	Not carried out as mine operations were stopped w.e.f. 22.11.2012 by the order of Divisional Forest Officer, Keonjhar.	Nil
6e	Cumulative no .of plants	5000 nos.	Not carried out as mine operations were stopped w.e.f. 22.11.2012 by the order of Divisional Forest Officer, Keonjhar.	Nil

6f	Any other method of rehabilitation	Not applicable.	Nil	Nil
6g	Cost incurred on watch and care during the year	Rs.200000/-	Nil	mine operations were stopped w.e.f. 22.11.2012 by the order of Divisional Forest Officer, Keonjhar.
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( L x B x D	Not applicable	Nil	Nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Not applicable	Nil	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	Not applicable.	Nil	Nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Not applicable	Nil	Nil
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	Not applicable	Nil	mine operations were stopped w.e.f. 22.11.2012 by the order of Divisional Forest Officer, Keonjhar.
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	Not applicable	Nil	Nil

6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	Not applicable	Nil	Nil
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Not applicable	Nil	Nil
6p	Compliance of environmental monitoring (core zone and buffer zone)	proposed.	carried out.	Nil
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.		mine operations were stopped w.e.f. 22.11.2012 by the order of Divisional Forest Officer, Keonjhar.	Nil

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#### Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM mineral grade wise sorting is proposed.	presently the mine is not under operation, as mine operations were stopped w.e.f. 22.11.2012 by the order of Divisional Forest Officer, Keonjhar.	Nil
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	mechanical	Not carried out as mine operations were stopped w.e.f. 22.11.2012 by the order of Divisional Forest Officer, Keonjhar.	Nil

7c	Different grade of mineral sorted out at mines.	Not aplicable as mine operations were stopped w.e.f. 22.11.2012 by the order of Divisional Forest Officer, Keonjhar.	Nil	Nil
7d	Any beneficiation process at mines .	Not applicable	Nil	Nil
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		mine operations were stopped w.e.f. 22.11.2012 by the order of Divisional Forest Officer, Keonjhar.	Nil

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**Environment:**

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No top soil generation is proposed for the year 2018-19 as it not exists in the proposed developement area.	Not applicable.	Nil
8b	Concurrent use or storage of topsoil	Not applicable	Nil	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	seperate dumps for OB and stacking for subgrade and fines are proppoed.	presently the mine is not under operation, as mine operations were stopped w.e.f. 22.11.2012 by the order of Divisional Forest Officer, Keonjhar.	Nil

8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not applicable as area not matured for reclamation	Nil	Nil
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not applicable	Nil	Nil
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)		Nil	Nil
8g	Survival rate	Not applicable	Nil	mine operations were stopped w.e.f. 22.11.2012 by the order of Divisional Forest Officer, Keonjhar.
8h	Water sprinkling on roads to control airborne dust	water sprinkling is proposed for dust suppression	mine operations were stopped w.e.f. 22.11.2012 by the order of Divisional Forest Officer, Keonjhar.	Nil
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		mine operations were stopped w.e.f. 22.11.2012 by the order of Divisional Forest Officer, Keonjhar.	Nil

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Compliance of Rule 45:

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Sl.No.	Item	Propasals	Actual work	Remarks
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9a	Status of submission of Monthly and Annual returns	lessee has to submit annual return for the year 2018-19 by 01/07/2019 and monthly returns by 10th of every month.	presently the mine is not under operation, as mine operations were stopped w.e.f. 22.11.2012 by order of Divisional Forest Officer, Keonjhar. lessee has submitted nil information in monthly returns. monthly returns were submitted. annual return for the year 2018-19 not submitted till date. so advised to submit the annual return for the year 2018-19 before stipulated time period.	Nil
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Not submitted till the time of inspection date.	Not applicable.	mine operations were stopped w.e.f. 22.11.2012 by the order of Divisional Forest Officer, Keonjhar
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Not submitted till the time of inspection date.	Not applicable.	Nil
9d	Scrutiny of Annual return on afforestation	Not submitted till the time of inspection date.	Not applicable.	Nil
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Not submitted till the time of inspection date.	Not applicable.	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Not submitted till the time of inspection date.	Not applicable.	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Not submitted till the time of inspection date.	Not applicable.	Nil



9h	Scrutiny of Annual return on fixed assets	Not submitted till the time of inspection date.	Not applicable.	Nil
9k	Scrutiny of Annual return on mining machineries	Not submitted till the time of inspection date.	Not applicable.	Nil

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

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

**Date :**

(RAMKISHAN R)

Indian Bureau of Mines