

**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 : **CHHA** ) **SHRI L H CHHANGTE**  
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : Dr. Khageswar Mahanta , AVP ( Geo)  
Official with  
Designation
- (iv) Date of Inspection : 11/03/2015
- (v) Prev.inspection date : 18/07/2014

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **KASIA**
- (b) **Registration NO.** :
- (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 :
- (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 : RAVINDRA GAJANAN SATHE  
 KASIA IRON & DOLOMITE MINES  
 M/S ESSEL MINING &  
 INDUSTRIES LTD KASIA, PO-  
 BARBIL, KEONJHAR KEONJHAR  
 ORISSA  
 Phone:  
 FAX : 06767 275367

## Mining Engineer

Name : Rajesh Kumar Patel, Full Time  
 Qualification : B E Mining, FCC  
 Appointment/ : 09/07/2013  
 Termination date

## Geologist

Name : Subbaraya Sarma Chilumuru, Full Time  
 Qualification : M Sc GEOLOGY  
 Appointment/ : 10/12/2011  
 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	None	
1d	Balance area to be explored to bring Geological axis in 1 or 2	104.148 ha	None	
1e	Balance reserve as on 01/04/20	145 MMT ( 111 & 121) as on 1/4/2013		
1f	General remarks of inspecting officers on geology, exploration etc			The mine was closed since November 2012 due to legal issues

## Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	1 large pit each in North and South block	Developed as proposed	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Yes	Separate benches in OB and Ore maintained	
2c	Stripping ratio or ore to OB ratio	Proposed for the year 2014-15 was 1:0.75	None	The mine was closed during the year
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			he mine was closed since November 2012 due to legal problem

## Exploitation:

Sl.No.	Item	Proposals	Actual work	Remarks
3a	Number of pit proposed for production	2 nos , 1 each in North and South block	Developed as proposed	

3b	Quantity of ROM mineral production proposed	7,500,000 MT	NIL	the mine was closed during the year
3c	Recovery of sailable/usable mineral from ROM production	100 %	None during the year	The mine was closed
3g	Grade of sub grade mineral generation	Sub grade is 45-55% Fe	Same as proposed	
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanical method	Practised as proposed	
3j	Provision of drilling and blasting in mineral benches	Yes	Scientific and controlled blasting in vogue	
3k	Provision of mining machineries in mineral benches	Yes	All types of heavy mining amchinerics deployed in this mine	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes , bench dimensions given	Benches of 9m high, 15-20m wide have been developed	
3m	Total area covered under excavation/pits	75.00 ha	Actual area covered by 2 pits were 70.943 ha	
3n	Ore to OB ratio for the pit/mine during the year.	1:0.7	NIL	As the mine was closed during the period

3o	Total area put in use under different heads at the end of year	Mining - 70.943 ha, Stacking- 5.940 ha, Dumping- 9.574 ha, Roads - 7.609 ha, Safety zone- 30.621 ha, Reclaimed area- 7.099 ha, Private land - 3.968 ha, Unexplored area- 44.321 ha	Developed / exploited as proposed
3q	General remarks of inspecting officers on method of mining etc.		The mine was closed since November 2012, hence practically NO development/ exploitation as per their approved MP/SoM

#### Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Yes	Seperate dumpings/ sctakings for OB, Ores, Rejects in vogue in this mine	
4b	Location of topsoil, OB and mineral reject dumps	2 Dumps	As proposed 2 dumps developed in areas lying W400-580 in Northern block as Dump-6 and another Dump- SE-1 in the Southern block lying in an area covered by W 145-387 and S 673-1006	
4c	Number of dumps within lease area and outside of lease area	Proposed within ML	Both the dumps are within the ML area only	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Within UPL	Developed as proposed	

4g	Number of dumps established.	2 nos	There are 2 no of dumps as on date, both active dumps	
4i	Length of Retaining wall or garland drain all along dumps	Specific given in MP	Dump 6 is protected by a retaining wall measuring about 750m and Dump SE-1 by 400m long as proposed	
4k	Specific comments of inspecting officer on waste dump management			There has been no problem of solid waste management here in this mine

#### 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.	15 ha approx	Only 8 ha approx has been reclaimed so far	Under development mainly due to the mine being closed from November 2012 itself
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Non specific	Practically no top soil generated here. The mine has been suspended	
5d	Total area fully reclaimed and rehabilitated	NIL	None	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			As proposed under normal circumstances , about 15 ha was to be reclaimed but since the mine has been closed since November 2012 the reclamation could not be achieved

#### Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
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6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	Yes	Submitted on a regular basis	
6b	Area available for rehabilitation (ha) .	15 ha	Actual area turned out to be 7.099 ha only	
6e	Cumulative no .of plants	5,00,000 saplings	Actual cumulative plants so far 2,21,495 covering an area of 28.677 ha within the ML and another 0.35 ha outside the ML. Survival rate is 85% both within and outside the ML	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Proposed	Apart from routine monitoring , the same is carried out as and when need base	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			There has been no problem in implementing the PMCP. However, this mine being closed since November 2012, the same couldnot be carried out practically

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Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	7,500, 000 MT for the year 2013-14	NIL	The mine was non operational
7c	Different grade of mineral sorted out at mines.	Specifics given in the approved MP	Couldnot be implemented	

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7d	Any beneficiation process at mines .	Yes	Mechanical dry process in vogue in this mine	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			No mining activity during the last 3 years or so

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**Environment :**

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	NIL	No top soil was to be generated during the year	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes	Seperate dumping of OB, Wastes, fines in vogue here	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not specified	Not practically started in this mine	
8g	Survival rate	90%	Axtual survival rate was 85% both within and outside the ML	
8h	Water sprinkling on roads to control airborne dust	Yes	Routine sprinkling of water in haul road	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			There has been no adverse effect on the environment in general due to this mining activity

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## Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	YES	Monthly and Annual returns submitted to IBM on a regular basis	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Yes	It has been found that all statutory employment has been made satisfactorily in this mine	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Yes	All land use pattern followed practically as proposed.	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Given in the AR	Production NIL during the year 2014-15, Closing stock remains at 6872 MT	
9h	Scrutiny of Annual return on fixed assets	Not specified	Fixed assets have been found to be commensurate as given in their AR	
9k	Scrutiny of Annual return on mining machineries	Given in the AR	Machineries procured and deployed have been as proposed in the MP	

**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 L H CHHANGTE)

Indian Bureau of Mines