

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

**MCDR INSPECTION REPORT**

**Bhubaneshwar regional office**

**Mine file No :** ORI/IRON/KJR/MCDR-50/BBS-2/6/1

**Mine code :** 300RI08066

- (i) Name of the Inspecting : **CCHHA** ) **SHRI L H CHHANGTE**  
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : Sri J Prakash Mishra, Mines Manager  
Official with  
Designation
- (iv) Date of Inspection : 08/06/2015
- (v) Prev.inspection date : 20/11/2013

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **ROIDA 'C'**
- (b) **Registration NO.** :
- (c) **Category** : A Manual
- (d) **Type of Working** : Opencast
- (e) **Postal address**
- State : ORISSA
- District : KEONJHAR
- Village : KOLHO-ROIDA
- Taluka : BARBIL
- Post office : BHADRASAHI
- Pin Code : 758036
- FAX No. : 06767-275637
- E-mail :
- Phone : 06767-285168,85263
- (f) **Police Station** :
- (g) **First opening date** : 10/04/1996
- (h) **Weekly day of rest** : SUN
2. **Address for** : VILL-KOLHO ROIDA  
**correspondance** PO-MATKAMBEDA  
DIST-KEONJHAR
3. (a) **Lease Number** : ORI0038
- (b) **Lease area** : 96.77
- (c) **Period of lease** : 20
- (d) **Date of Expiry** : 07/02/2017
4. **Mineral worked** : IRON ORE Main  
MANGANESE ORE Associated

## 5. Name and Address of the

Lessee : O.M.C.LTD.  
 SRI.G.K.DHAL,MD OMC House  
 ,P.B.No.34 BHUBANESWAR  
 KHURDA ORISSA  
 Phone:  
 FAX :0674-401629(BBSR),06767-30257

Owner : m/s ORISSA MINING CORPORATION LTD  
 OMC HOUSE P.B.No.34  
 BHUBNESHWAR ORISSA  
 Phone:  
 FAX :

Agent : A.K.MISHRA  
 KEONJHAR ORISSA  
 Phone:  
 FAX :

## Mining Engineer

Name : A.B.BEHERIA,Full Time  
 Qualification : Degree in Mining Engineering A.M.I.E  
 Appointment/ : 08/11/1994  
 Termination date

## Geologist

Name : T.PANDA,Full Time  
 Qualification : M.Sc GEOLOGY  
 Appointment/ :  
 Termination date

## Manager

Name : A.BEHURIA  
 Qualification : F.C.C (Metal)  
 Appointment/ : 08/11/1994  
 Termination date

|                               |   |                                |            |
|-------------------------------|---|--------------------------------|------------|
| 6. Date of approval of Mining | : | Mining Scheme rule 12 MCDR1988 | 05/07/2005 |
| Plan/Scheme of Mining         | : | Modif.of approved Mining Plan  | 08/12/2009 |
|                               | : | Mining Scheme rule 12 MCDR1988 | 12/06/2013 |
|                               | : | Modif.approved Mining Scheme   | 17/03/2015 |

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

## Exploration :

| Sl.No. | Item                                                               | Proposals                                                  | Actual work                                                  | Remarks                           |
|--------|--------------------------------------------------------------------|------------------------------------------------------------|--------------------------------------------------------------|-----------------------------------|
| 1a     | Backlog of previous year                                           | 10 bore holes                                              | Actually drilled 29 bore holes                               |                                   |
| 1b     | Exploration over lease area for geological axis 1 or 2             | 50 ha                                                      | 43.75 ha covered under G 1 & 2                               |                                   |
| 1d     | Balance area to be explored to bring Geological axis in 1 or 2     |                                                            | 43.60 ha to be brought under G 1 & 2 till date of inspection |                                   |
| 1e     | Balance reserve as on 01/04/20                                     | 6977603 MT of Iron ores and another 168200 MT of Mnaganese | Same as projected                                            |                                   |
| 1f     | General remarks of inspecting officers on geology, exploration etc |                                                            |                                                              | Area has been adequately explored |

## Development :

| Sl.No. | Item                                                           | Propasals   | Actual work                                                 | Remarks |
|--------|----------------------------------------------------------------|-------------|-------------------------------------------------------------|---------|
| 2a     | Location of development w.r.t.lease area                       | 1 large pit | 1 Main Pit has been developed in the Ventral part of the ML |         |
| 2b     | Separate benches in topsoil, overburden and minerals (Rule 15) | Yes         | Seperate benches in OB and Ores                             |         |
| 2c     | Stripping ratio or ore to OB ratio                             | 1:0.61      | Actual for the year was 1:1.14                              |         |
| 2d     | Quantity of topsoil generation in m3                           | nil         | none                                                        |         |
| 2e     | Quantity of overburden generation in m3                        | 277500 CuM  | Actual was 1,30,995 CuM                                     |         |

|    |                                                                                         |                                                                       |
|----|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------|
| 2f | General remarks of inspecting officers on development of pit w.r.t. type of deposit etc | The deposit has been developed in the most scientific manner possible |
|----|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------|

### Exploitation:

| Sl.No. | Item                                                                                            | Propasals                  | Actual work                                       | Remarks |
|--------|-------------------------------------------------------------------------------------------------|----------------------------|---------------------------------------------------|---------|
| 3a     | Number of pit proposed for production                                                           | 1                          | 1 pit developed                                   |         |
| 3b     | Quantity of ROM mineral production proposed                                                     | 150000 MT                  | Actual was 114637.740 MT                          |         |
| 3c     | Recovery of sailable/usable mineral from ROM production                                         | 80%                        | 80% of ROM recovered                              |         |
| 3f     | Quantity of sub grade mineral generation.                                                       | 289548 MT                  | Sub grade produced ( 45-55% Fe) was 163262 MT     |         |
| 3h     | Manual / Mechanised method adopted for segregating from ROM                                     | Both Manual and Mechanised | Mostly Mechanised                                 |         |
| 3i     | Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects. | Yes                        | Analysed samples on a routine basis               |         |
| 3j     | Provision of drilling and blasting in mineral benches                                           | Yes                        | Controlled blasting in vogue                      |         |
| 3k     | Provision of mining machineries in mineral benches                                              | Yes                        | Machineries have been deployed in benches as well |         |

|    |                                                                                                      |                            |                                                                                               |                                             |
|----|------------------------------------------------------------------------------------------------------|----------------------------|-----------------------------------------------------------------------------------------------|---------------------------------------------|
| 3l | Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM | Bench dimensions specified | 6 m hig and 10-12m wide benches developed                                                     |                                             |
| 3m | Total area covered under excavation/pits                                                             | 30 ha                      | Actual are covered by Pits was 26.90 ha                                                       |                                             |
| 3o | Total area put in use under different heads at the end of year                                       | Details given in MP        | Land use pattern was :<br>Pits - 26.90 ha, Dump- 13.50 ha, roads - 4.164 ha, Plants- 0.965 ha |                                             |
| 3q | General remarks of inspecting officers on method of mining etc.                                      |                            |                                                                                               | Method os mining is found a suitable method |

#### 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 for OB, SG and Fines |         |
| 4b     | Location of topsoil, OB and mineral reject dumps                   | Norther side of Main pit | Developed as proposed                  |         |
| 4c     | Number of dumps within lease area and outside of lease area        | Yes                      | Dump is within the ML                  |         |
| 4d     | Location of dumps w.r.t. ultimate pit limit (Rule 16)              | Yes                      | Dump is outside the UPL                |         |
| 4h     | Whether Retaining wall or garland drain all along dumps are there. | Yes                      | Dump has been strongly retained        |         |

|    |                                                                  |     |                                                                               |                                            |
|----|------------------------------------------------------------------|-----|-------------------------------------------------------------------------------|--------------------------------------------|
| 4i | Length of Retaining wall or garland drain all along dumps        | Yes | Approximately 1350m retaining wall has ben erected along the base of the dump |                                            |
| 4k | Specific comments of inspecting officer on waste dump management |     |                                                                               | No problem with waste dump management here |

#### 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. | NIL       | NONE                                                           |                                                             |
| 5b     | Area under backfilling of mined out area                                                      | 1.5 ha    | hardly 0.857 ha has been under partial reclalmation as on date |                                                             |
| 5c     | Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)     | Yes       | Where ever, when ever possible                                 |                                                             |
| 5d     | Total area fully reclaimed and rehabilitated                                                  | NIL       | NONE                                                           | NO matured land for the same                                |
| 5e     | General remarks of inspecting officers on backfilling and reclamation etc.                    |           |                                                                | Concrete work of reclamation has been started recently only |

#### 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).                      | Yes                                                         | submitted to IBM on a regular basis                                                                                                                                                                                                         |                                                                         |
| 6e | Cumulative no .of plants                                                                          | Within ML 25000 plants and Outside ML another 50,000 plants | Actual cummulative plantation was 19675 plants within the ML covering an area of 8 ha with 60% survival and against the target outside the ML more plants of 57928 plants have been planted covering an area of 20.932 ha with 80% survival |                                                                         |
| 6f | Any other method of rehabilitation                                                                | NIL                                                         | None                                                                                                                                                                                                                                        |                                                                         |
| 6g | Cost incurred on watch and care during the year                                                   | Not given                                                   | Details not available                                                                                                                                                                                                                       |                                                                         |
| 6p | Compliance of environmental monitoring (core zone and buffer zone)                                | Yes                                                         | Environmental parameters have been moitored on a regula r basis                                                                                                                                                                             |                                                                         |
| 6q | General remarks of inspecting officers on PMCP compliance and progressive closure operations etc. |                                                             |                                                                                                                                                                                                                                             | All rprovisions made in the PMCP have been satisfactorily complied with |

#### Mineral Conservation:

| Sl.No. | Item                                                            | Propasals             | Actual work       | Remarks |
|--------|-----------------------------------------------------------------|-----------------------|-------------------|---------|
| 7b     | Method of grade-wise mineral sorting i.e. manual or mechanical. | Manual and mechanical | Mostly mechanical |         |

|    |                                                                                        |     |                                   |                                      |
|----|----------------------------------------------------------------------------------------|-----|-----------------------------------|--------------------------------------|
| 7d | Any beneficiation process at mines .                                                   | Yes | Dry method of processing in vogue |                                      |
| 7e | General remarks of inspecting officer on Mineral conservation and beneficiation issues |     |                                   | No problem with mineral conservation |

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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                                                          |                                                                              |
| 8c     | Separate dumps for overburden, waste rock, rejects and fines (Rule 33)                                      | Yes       | Seperate dumping in vogue                                            |                                                                              |
| 8e     | Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc) | Yes       | Started phase reclamation in recent years                            |                                                                              |
| 8h     | Water sprinkling on roads to control airborne dust                                                          | Yes       | Both water tanker and fixed line water sprinkling have been in vogue |                                                                              |
| 8i     | General remarks of inspecting officer on aesthetic beauty in and around mines area                          |           |                                                                      | The aesthetic beauty of the area has not been unduly affected by this mining |

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**Compliance of Rule 45:**


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| Sl.No. | Item                                                                                          | Propasals | Actual work                                                                       | Remarks |
|--------|-----------------------------------------------------------------------------------------------|-----------|-----------------------------------------------------------------------------------|---------|
| 9a     | Status of submission of Monthly and Annual returns                                            | Yes       | M/R and A/R submitted regularly to IBM                                            |         |
| 9b     | Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager           | Yes       | All statutory employment have been made in this mine                              |         |
| 9c     | Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc. | Given     | The same land use pattern has been followed judiciously                           |         |
| 9f     | Scrutiny of Annual return on ROM stock and/or graded ore                                      | Given     | 2013-14 Prodcution was : 114637.740 MT with a closing stcok of 44628.400 MT       |         |
| 9g     | Scrutiny of Annual return on sale value, Ex. Mine price and production cost                   | Given     | PMV : Lumps 65% Fe - Rs 5921.30 per MT , Fines was ( 60-62% Fe) Rs 1177.71 per MT |         |
| 9h     | Scrutiny of Annual return on fixed assets                                                     | Given     | Assets estimated at Rs 17268774                                                   |         |

**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