

MCDR Insp. Report

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| 1) Name of Inspecting officer:                 | : Mr. Prem Prakash   |
| 2) Designation                                 | : Sr. Asst. Controller of Mines  |
| 3) Accompanying mine official with designation | : Dr. Khageswar Mahanta (Asst. Vice President)<br>Mr. Ajit Patra (A.G.M. –Mines & Mines Manager).<br>Mr. Prafulla Kumar Parida (Sr. Manager Geology) |
| 4) Date of Inspection                          | : 25.11.2015   |
| 5) Date of Previous Inspection                 | : 17.08.2014 (DCOM)  |

**PART –I GENERAL INFORMATION**

|  |   |
|--|---|
| 1. Name of mine  | : Jilling Langalota Iron & Manganese Mines  |
| a. Category of mine<br>( A-Fully mechanized, B-Other than fully mechanized ) | : A-Fully mechanized  |
| b. Mode of working (OC/UG/Both o/c & u/g)                                    | : OC  |
| c. Postal address  | : At: Jilling, Po: Jajang, Dist: Keonjhar, Odisha,<br>PIN:758034                  |
| d. State   | : Odisha  |
| e. District  | : Keonjhar  |
| f. Tehsil/ Taluka  | : Barbil  |
| g. Police station  | : Bamebari  |
| h. Village   | : Jajang, Jalahuri, Jurudi, Khuntpani, Bholebeda,<br>Banspani and Baitarani R. F. |
| i. Post  | : Jajang  |
| j. Pin Code  | : 758034  |
| k. FAX   | : (06767 ) 279218, 275367   |
| l. E-mail  | : emilbbl@adityabirla.com   |
| m. Phone   | : (06767) 279209  |
| n. Date of first opening   | : 1.10.1954   |
| o. Weekly day of rest  | : Sunday  |

|  |   |
|--|---|
| 2. a) Lease No.                            | : 952   |
| b) Lease area in hect.                     | : 456.100 hect.   |
| c) Period of lease                         | : 20 Years (01.10.1984 to 30.09.2004). RML applied.<br>The lease deemed to be valid up to 31.03.2020 as per<br>MMDR (Amendment), Act, 2015. |
| 3.a) Mineral(s) included in the lease deed | : Iron & Manganese Ore  |
| b) Mineral(s) worked                       | : Iron Ore  |

|  |   |
|--|---|
| 4. Name and address of (including FAX/ E-mail, if any) |   |
| a) Lessee/ owner                                       | : ESSEL MINING & INDUSTRIES LTD.<br>At/Po: Barbil Dist: Keonjhar, Odisha, PIN:758035<br>FAX: 06767275367 E-mail:<br>emilbbl@adityabirla.com   |
| b) Nominated owner                                     | : Ashwin Kothari<br>Gold Cornet, Flat no-4,1 <sup>st</sup> Floor<br>2, Nawrojee, Campia Road, Mumbai<br>Email: ashwin.kothari@adityabirla.com |
| c) Agent with date of appointment                      | : Ravindra Gajanan Sathe/Dt. Of Appointment:<br>15.07.2011  |

|  |  |
|--|--|
|  | At/Po: Barbil Dist: Keonjhar, Odisha, PIN:7580.<br>FAX: 06767275367<br>E-mail: Ravindra.Sathe@adityabirla.com  |
| d) Mining Engineer and geologists appointed under rule 42 of MCDR, 1988 with date of appointment and whether full/ part time with qualification. | : Ajit Kumar Patra, B.E. (Mining) with 1 <sup>st</sup> class Mines Manager Certificate of competency<br>Date of Appointment:13.12.2011<br>Full time Mining Engineer<br>Email: ajit.patra@adityabirla.com<br>Prafulla Kumar Parida, M. Sc (Geology)<br>Date of Appointment: 10.12.2011<br>Full time Geologist<br>Email: Prafulla.parida@adityabirla.com |
| e) Mine Manager with qualification and date of appointment   | : Ajit Kumar Patra, B.E. (Mining) with 1 <sup>st</sup> class Mines Manager Certificate of competency<br>Date of Appointment:13.12.2011<br>Full time Mining Engineer<br>Email: ajit.patra@adityabirla.com   |

A note on deployment of  
Not being rec  
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5. Details about Mining Plan/ Mining Scheme

|  |   |
|--|---|
| a) Letter No. and date of approval of mining plan    | : Letter No 314(3)/2004-MCCM(CZ)/MP/S-19 dated 06.06.2005   |
| b) Letter No. and date of approval of mining scheme. | : Letter No. MS/FM/19-ORI/BHU/2013-14/1066 dated 13.06.2014 |
| c) Period of mining plan/ mining scheme in force     | : Mining Scheme w.e.f. 01.04.2014 to 31.03.2019 (5years)    |

PART II-TECHNICAL DETAILS

1. Details about employment.

Maximum number of persons employed on any day during the year(i) below ground (ii) above ground and (iii) in all in the mines.

| Classification         | Average daily employment |          |       | Average No. of days worked in a year | Remarks  |
|------------------------|--------------------------|----------|-------|--------------------------------------|--|
|                        | Direct                   | Contract | Total |                                      |  |
| OPENCAST               |                          |          |       |                                      | The mine reported non-working/ discontinued/ stopped since 12.01.2014 abiding the order of State Govt. due to not having statutory/forest clearance. |
| a) Managerial person   | 25                       | --       | 25    | 305                                  |  |
| b) Supervisory persons | 20                       | --       | 20    | 305                                  |  |
| c) Workers             | 30                       | --       | 30    | 305                                  |  |
| d) Ministerial persons | 17                       | --       | 17    | 305                                  |  |
| e) Employment in plant | --                       | --       | --    | --                                   |  |
| f) Others              | 60                       | --       | 60    | 305                                  |  |
| UNDERGROUND            | Not Applicable           |          |       |                                      |  |

2. Community Development Plan (in and around the mines) (Rs. in lakhs)  
Enclosed as Annex.

3. Status of compliance of MCDR, 88 including therewith the rectification of outstanding violation of the rules.

|                         |                       |                     |
|-------------------------|-----------------------|---------------------|
| Date of last inspection | Violation pointed out | Compliance reported |
| 17.08.2014              | Nil                   | Not applicable      |

During current inspection, Violations of rule 13(1) is observed and being communicated to the party.

4. A note on justification in case of suspension of mining operations under rule 13(2) or prohibition of deployment of any person under rule 56 of MCDR, 1988 if recommended.

Not being recommended at present.

5. Scientific Mining (As per latest approved mining Plan/Scheme)

| Item  | Proposal (2014-15)   | Actual work done (2014-15) | Remarks   |
|---|--|----------------------------|---|
| <b>i) Exploration (Rule 13)</b>   |  |                            |   |
| a) Type of prospecting and exploration i.e. pitting, drilling etc.      | 25 no of DH  | Nil                        | The mine reported non-working/ discontinued/ stopped since 12.01.2014 abiding the order of State Govt. due to not having statutory/forest clearance.  |
| b) Total area covered   | 12.5 Ha  | Nil                        |   |
| <b>ii) Workings (Rule 13)</b>   |  |                            |   |
| a) Opencast/ underground  | Opencast   | --                         | The mine reported non-working/ discontinued/ stopped since 12.01.2014 abiding the order of State Govt. due to not having statutory/forest clearance. Hence, the proposed mine development work reported as not carried out during year 2014-15. |
| b) Manual/ mechanized   | mechanized   | --                         |   |
| c) No. and size of each pit   | 03 pits/quarries, namely : Jajang-Langalota, Jilling-Gangaigora & Appahatu-Behera quarry                                       | Nil                        |   |
| d) Bench size (1 x w x h) length can be defined as regular or irregular | 15-20 m width x 6-9m height  | --                         |   |
| e) Ore to waste ratio pit wise if possible otherwise for mine.          | 1:0.18   | Nil                        |   |
| f) Total area covered under excavation/pits                             | 146.596 Ha. as per approved SoM. (Existing)  |                            |   |
| <b>iii) Waste disposal (Rule 13)</b>                                    |  |                            |   |
| a) Location of dumps  | a) Jajang Langalota waste is to be kept at Jajang Langalota Dump<br>b) Jilling Gangaigora waste is to be kept at Jilling Dump. | --                         | The mine reported non-working/ discontinued/ stopped since 12.01.2014 abiding the order of State Govt. due to not having statutory/forest clearance. Hence, the proposed mine development work reported as not carried out during year 2014-15. |
| b) Method of dumping whether advancing/ retreat                         | Retreat  | --                         |   |
| c) Total area covered under waste dump                                  | 41.328 Ha. as per approved SoM. (Existing)   | Nil                        |   |
| d) No. & size of each waste dump with number of steps lift/ bench.      | 02 nos. of waste dumps was proposed at Jilling & Jajang location.  | --                         |   |
| e) Yearly generation of waste quantity.                                 | 1082848.95 Cum   | Nil                        |   |
| f) Year-wise quantity of top soil removed, utilized & stacked.          | Nil  | Nil                        |   |

6. Conservation of mineral- both quantitative and qualitative.

|      |   |  |                  |
|------|---|--|------------------|
| i)   | Mineral (Rule 15)   |  |                  |
| (a)  | No benches in ore and waste   | Ore Bench<br>6   | Waste Bench<br>0 |
| (b)  | Percentage of recovery of ore pit-wise w.r.t. ROM and total material                                  | No Excavation/production reported carried out during year 2014-15.                       |                  |
| ii)  | Sub-grade mineral/ fines (Rule 16)  |  |                  |
| (a)  | Separate stacking from waste  | No Excavation/production reported carried out during year 2014-15                        |                  |
| (b)  | Location of stacking  |  |                  |
| (c)  | Total area covered for stacking   |  |                  |
| (d)  | No. and size of each stack  |  |                  |
| (e)  | Quantity of yearly generation, utilisation and total quantity available during inspection with grade. |  |                  |
| iii) | Beneficiation (Rule 20)   |  |                  |
| (a)  | Efforts for improving low grade and sub-grade mineral.  | No Excavation/production and mineral processing reported carried out during year 2014-15 |                  |
| (b)  | Efforts for improving percentage of recovery of ore.  |  |                  |

### 7. Environment Management both quantitative and qualitative

|      |   |  |
|------|---|--|
| i)   | Land Environment  |  |
| (a)  | Landscape   | Hilly and undulating   |
| (b)  | Aesthetic environment   | Satisfactory. Green belt is developed around the mining lease at places; also some gardens & lawns developed near colony. Avenue plantations taken up along the haul roads.  |
| (c)  | Soil and land use pattern   | No Excavation/production reported carried out during year 2014-15  |
| (d)  | Agriculture   | Nil  |
| (e)  | Forest (flora & fauna)  | Common local species   |
| (f)  | Vegetation  | scanty   |
| (g)  | Public building, places and monuments (protected monument and historical monument), places of worship and places of tourist interest. | Nil  |
| ii)  | Water Environment   | Seasonal monitoring of environmental parameters w.r.t. surface water, ground water, air & noise reported being carried out and parameters are within the permissible limit. As such, no significant effect regarding the same observed as mine is non-operative. |
| (a)  | Surface water   |  |
| (b)  | Ground water  |  |
| (c)  | Quality of water  |  |
| iii) | Air Environment   | Maximum temperature = 40 <sup>o</sup> , Minimum temperature = 5 <sup>o</sup><br>Average Relative Humidity = 58%-67% Annual Rainfall = 1534.5 mm  |
| (a)  | Noise   |  |
| (b)  | Air   |  |
| (c)  | Climatic condition  |  |
| iv)  | Socio-economic environment  |  |
| (a)  | Social and demographic profile  | Agricultural activity is not the main source of earning and most of the people are dependent on mining sector. In the economic front   |

|     |                                |   |
|-----|--------------------------------|---|
| b)  | Recommending health and safety | there is positive improvement due to mining by generation of employment both directly and indirectly. The CSR scheme of the company contributes towards the economic development the local villagers. Medical Dispensary with full facilities has been provided in mining lease premises with ambulance and full time MBBS Doctor and compounder. Also, Regular medical camp and other facilities reported being provided in nearby villages. |
| (c) | Human settlement               | Some human settlements are there like workers colony, huts. Etc.  |
| (d) | Recreational facility          | Recreational facilities have been provided to the employees & nearby villagers such as Gym, table tennis, carom boards and other indoor game facilities. Football, volleyball, badminton, ring ball etc. outdoor games and various socio-cultural programmes reported being conducted for recreation of the employees and local population.   |

8. Scrutiny of annual returns on cost of operation, reserves, production, pit mouth value, stock, etc. for the year 2014-15.

|                       |   | Year 2014-15                    |
|-----------------------|---|---------------------------------|
| (1) Cost of operation | : | --                              |
| (2) Reserve           | : | 50.70 Million Tonne             |
| (3) Production        | : | Nil                             |
| (4) Pit's Mouth Value | : | Nil                             |
| (5) Stock             | : | 9,65,772 tonnes (Processed Ore) |

9. PROPOSAL FOR FURTHER ACTION:

|    |  |   |
|----|--|---|
| a) | Indian Bureau of Mines (any issue related to CGPB, SGPB, assistance, consultancy, annual programme and studies etc.  | Nil   |
| b) | The State Government (illegal mining, mining dispute, infrastructure, mineral based industry, mineral policy & etc.) | A copy of violation letter being endorsed to Director of mines, Odisha. |
| c) | The Central Government (infrastructure development, mineral policy and legislation, mineral based industry & etc.)   | Nil   |

  
22.1.16

P. Prakash  
Senior Assistant Controller of Mines