

### Annexure -I

**Self –Appraisal Note** to be submitted by Owner of the Mine under Rule 63 of MCDR'1988 Stating extent of implementation of Approved Mining Plan/ Scheme of Mining during the reporting year of **01/04/2013 to 31/03/2014** along with supporting plans / section, representative photographs in hard as well as soft copy.

#### 1. Mine Details

a) Mine Registration No Taken from IBM	IBM/602/2011
b) Mine Code	07CHG09002
c) Mineral	Bauxite
d) Name of Mine	Bodai Daldali Bauxite Mines
e) Lessee	Bharat Aluminum Company Limited
f) Lease No of State Govt. (TC No. for Goa)	Nil (Area : 626.117 hectare)

#### 2. Detail of Mining Plan/ Scheme of Mining Approved on last occasion

a) Reference No. of Approval letter	No. RNG/BX/MPLN-396/NGP dated 25.03.2009		
b) Approving Authority	Regional Controller Mines (CZ)		
i) IBM	Nagpur Region (CZ), IBM		
ii) State Govt.	-		
c) Five Year implementation period (Financial Year)	From	To	For the five year period from 2009-2010 to 2013-2014
	01.04.2009	31.03.2014	

#### 3. Details of Modification sought/approved During the Reporting Year

a) Whether modification sought?	Yes
b) If yes, state reasons of seeking such modifications	The production planning proposed in approved scheme of mining could not achieved and lowering the acceptance grade cutoff from +44% Al <sub>2</sub> O <sub>3</sub> to +42% Al <sub>2</sub> O <sub>3</sub> , henceforth balance reserve and life of mine has been increased as stated earlier approved scheme of mining for the period of 2009-10 to 2013-14.

#### 4. Compliance of silent features of the Mining Plans/ Scheme of Mining during the year

##### ACTIVITY

EXPLORATION	Proposal made in Approved MP/SOM for the reporting year	Actual implementation during the year
A) Type of Exploration	Nil	Nil
i) Surface Samplings	Nil	Nil
ii) Pitting	Nil	Nil
iii) Trenching	Nil	Nil
iv) Borehole drilling	Nil	Nil
B) Expenditure in lakh rupees	Nil	Nil
C) Reserve Estimation (Including additional reserve estimation if any)	15.44	30.60
D) Resource Identification (Including additional reserve estimation if any)	32.30	21.68
E) Total Reserve and Resources	47.74	52.28

Deekay 17/05/2014

**MINING**

a) Method of Mining Opencast / Underground / Combination of both	Opencast	Opencast
b) Category A/B	A	A
c) Site of Mining (Mention position of working and R.L.)	Mundadadar, Kesmarda, Rabda, Semsata	Mundadadar, Kesmarda, Rabda, Semsata
d) Quantum of Waste (tonnes)	3688272	1435475
e) ROM Production (tonnes)	1923023	689630
f) Grade-wise mineral production (same as given in MCDR return form)	1249996 (tonnes) (45% Al <sub>2</sub> O <sub>3</sub> to below 50% Al <sub>2</sub> O <sub>3</sub> )	472155 (tonnes) (45% Al <sub>2</sub> O <sub>3</sub> to below 50% Al <sub>2</sub> O <sub>3</sub> )

**MINE DEVELOPMENT**

OPENCAST (Pitwise)	Mundadadar	
Bench formation with R.L.	02 Not state in MP/SOM	02 OB : 2.5 Mtr ORE: 0.8 Mtr
Stripping ratio	1:2.75	1:1.85
Top R.L. Bottom R.L.	Not state in MP/SOM	915 Mtr 912 Mtr
<b>Underground</b>	NA	NA
Proposed development in mine	NA	NA
Name and number of slope to be operated	NA	NA
Stopping operations	NA	NA
Production in tonnes Development, Stopping Total	NA	NA

OPENCAST (Pitwise)	Kesmarda	
Bench formation with R.L.	02 Not state in MP/SOM	02 OB : 4.5 Mtr ORE: 2.2 Mtr
Stripping ratio	1:4.90	1: 4.37
Top R.L. Bottom R.L.	Not state in MP/SOM	923 Mtr 920 Mtr
<b>Underground</b>	NA	NA
Proposed development in mine	NA	NA
Name and number of slope to be operated	NA	NA
Stopping operations	NA	NA
Production in tonnes Development, Stopping Total	NA	NA

Deekay 19/10/2014

OPENCAST (Pitwise)	Rabda	
	Bench formation with R.L.	02 Not state in MP/SOM
Stripping ratio	1:5.19	1: 2.85
Top R.L. Bottom R.L.	Not state in MP/SOM	940 Mtr 936 Mtr
<b>Underground</b>	NA	NA
Proposed development in mine	NA	NA
Name and number of slope to be operated	NA	NA
Stopping operations	NA	NA
Production in tonnes Development, Stopping Total	NA	NA

OPENCAST (Pitwise)	Semsata	
	Bench formation with R.L.	Nil
Stripping ratio	Nil	1: 2.27
Top R.L. Bottom R.L.	Nil	942 Mtr 938 Mtr
<b>Underground</b>	NA	NA
Proposed development in mine	NA	NA
Name and number of slope to be operated	NA	NA
Stopping operations	NA	NA
Production in tonnes Development, Stopping Total	NA	NA

#### SOLID WASTE MANAGEMENT

Site of waste disposal (Mention position & R.L.)		
Mode of waste disposal & Waste disposal configuration (Advancing/ Retreating method with num be reflects )	Concurrent backfilling system adopted	Concurrent backfilling system adopted
Waste Dump Stabilization / Garland Drain/ Retaining Wall	NA	NA
Check dams / Settling tanks	Nil	04

  
 P. K. Nayak  
 19/05/2014  
 Mines Manager  
 Gwal Daldali Bauxite Mines

**BLASTINGS**

Mode of blasting (J/H Pop, Plaster Shooting & Deep hole)	Deep hole	Deep hole
Explosive Storage	<ol style="list-style-type: none"> <li>1. Ammonium nitrate</li> <li>2. Ordinary and delay detonators</li> <li>3. Special Gelatin</li> </ol>	<ol style="list-style-type: none"> <li>1. Ammonium nitrate: 179525 KG</li> <li>2. Ordinary and delay detonators 1018 nos and 7695 nos respectively</li> <li>3. Nitrate mixture : 1200 KG</li> </ol>
Precaution against flying fragments , ground vibration	<ol style="list-style-type: none"> <li>1. Sufficient warning signals are given over the entire areas falling within the danger zone of a safe distance of 520 m.</li> <li>2. To ensure that all person have taken proper shelter.</li> <li>3. No. of holes to be blasted at a time to be kept minimum to control vibration &amp; noise by using delay detonators (DDR) of 25 millisecond. Delay detonators will be used between groups of holes and row of blasting.</li> <li>4. Proper stemming of holes will be done; no overcharging in any case.</li> <li>5. Blasting will be avoided in fogged whether and high wind velocity.</li> <li>6. Blasting will preferably be done during lunch break at 12:00 PM to 1:00 P.M.</li> <li>7. Controlled blasting will be done with proper blast design.</li> </ol>	<ol style="list-style-type: none"> <li>1. Sufficient warning signals are given in entire areas falling within the danger zone of 520 m.</li> <li>2. Ensure the all person have taken proper shelter.</li> <li>3. No. of holes blasted at a time and kept vibration &amp; noise within the permissible limit by using delay detonators (DDR) of 25 millisecond.</li> <li>4. Proper stemming of holes has been done; no overcharging in any hole.</li> <li>5. Blasting has avoided in fogged whether and high wind velocity.</li> <li>6. All blasting has been done during lunch break at 12:00 PM to 1:00 P.M.</li> <li>7. Controlled blasting has been done with proper blast design.</li> </ol>

**MINE DRAINAGE**

Likely depth of mining below water table	NA	NA
Expected pump in go of surface water	NA	NA
Mode of disposal of sub-surface water	NA	NA

**MINERAL BENEFICIATION**

Feed quantity and Grade	NA	NA
Product quantity and Grade	NA	NA
Tailing quantity and Grade	NA	NA
Site of Tailing disposal	NA	NA
Tailing Dam management Preventive measures envisaged	NA	NA

*Prakash*  
 18/05/2014  
 Mines Manager  
 Sodai Daldai Bauxite Mine

**USE OF MINERALS**

End use of Minerals produced at the Mine	Aluminium production	Aluminium production
Provision of blending with high grade/ low grade	Nil	23896 tonnes
<b>Land use pattern in Ha.</b>		
Area exploited and abandoned	65.19	18.85
Covered under O/C working	18.07	12.00
Reclaimed and Rehabilitated	78.00	23.30
Occupied by infrastructure	Nil	Nil
Others	Nil	Nil

**ENVIRONMENT MANAGEMENT PLAN**

Afforestation with Type of species	1,70,000 nos @ 2000per Ha	1,08,327 Nos (Gulmohar, aacusia, Semikesiya, Bamboo, Neem, Karanj )
Reclamation & Rehabilitation of Land	78.00	23.30
Ambient Air quality	Ambient Air Quality in the mines and surrounding areas will be monitored on quarterly basis.	Ambient Air Quality of mines and surrounding areas has been monitored on monthly basis during the period 2013-2014.
Water Quality	Water quality from company dug tube wells & nallas (during the rainy season) will be analyzed to ascertain its quality on quarterly basis.	Water quality from company dug tube wells & nallas (during the rainy season) has been analyzed on monthly basis during the period 2013-2014.
Noise Quality	Noise level will be monitored on quarterly basis in the mines and around the mines	Noise level of mines & surrounding areas has been monitored on monthly basis during the period 2013-2014.
Precaution under taking for flying fragments, ground vibration	<ol style="list-style-type: none"> <li>Sufficient warning signals are given over the entire areas falling within the danger zone of a safe distance of 520 m.</li> <li>To ensure that all person have taken proper shelter.</li> <li>No. of holes to be blasted at a time to be kept minimum to control vibration &amp; noise by using delay detonators (DDR) of 25 millisecond. Delay detonators will be used between groups of holes and row of blasting.</li> <li>Proper stemming of holes will be done; no overcharging in any case.</li> <li>Blasting will be avoided in fogged whether and high wind velocity.</li> <li>Blasting will preferably be done during lunch break at 12.00 PM to 1.00 P.M.</li> <li>Controlled blasting will be done with proper blast design</li> </ol>	<ol style="list-style-type: none"> <li>Sufficient warning signals are given in entire areas falling within the danger zone of 520 m.</li> <li>Ensure the all person have taken proper shelter.</li> <li>No. of holes blasted at a time and kept vibration &amp; noise within the permissible limit by using delay detonators (DDR) of 25 millisecond.</li> <li>Proper stemming of holes has been done; no overcharging in any hole.</li> <li>Blasting has avoided in fogged whether and high wind velocity.</li> <li>All blasting has been done during lunch break at 12.00 PM to 1.00 P.M.</li> <li>Controlled blasting has been done with proper blast design.</li> </ol>

Neeloy  
17/12/2014

## COMMUNITY SOCIAL RESPONSIBILITY

Drinking water(In Rupees)	300000	0
Transport (In Rupees)		705732825 *
Health (In Rupees)	1020000	1161000
Sanitation (In Rupees)	0	0
Education (In Rupees)	0	0
Sports (In Rupees)	500000	315000
Recreation Facility (In Rupees)	250000	825000
Employment (In Rupees)	15000000	16414000
Housing (In Rupees)	0	0
Infrastructure (In Rupees) Roads/Public transport/communication/electricity	90000000	67000000
<b>Total</b>	<b>105750000</b>	<b>791447825</b>
5. Constraints faced at the mines during reporting Year while implementing the salient features of the mining plan/scheme of mining	During 2013-14, annual production was less due to temporary suspension of mining activities from 01/03/2013 to 10/06/2014.	
6. Corrective action envisaged by mine management for rectification of the deviation in implementation of salient feature of the mining plan/scheme of mining as observed under serial no.4	Mine operation has been continued from 10/06/2014	
7. Any other information to be included		

\*Bauxite Transportation cost from Mines to SSL Lanjigarh (Formerly VAL Lanjigarh), Odisha

### VERIFICATION

I certify that the information furnished above is correct and complete in all respects.

Date: 17.05.2014

Place: Kawardha

*Pankaj*  
17/05/2014  
Mines Manager  
Sodal Daldali Bauxite Mines  
Balra, Kabirdham (C.G.)

Signature: Name in Full: PANKAJ KUMAR MAHANTA

Designation: Lessee / Agent / Manager / Mining Engineer

Note: Where ever felt necessary, copy of the relevant plan / section representative photographs with due integration with the above description is to be enclosed / uploaded.