

**INDIAN BUREAU OF MINES
MINES CONTROL AND CONSERVATION OF MINERAL DIVISION**

MCDR INSPECTION REPORT

Bhubaneshwar regional office

Mine file No : ORI/MN/SNG/MCDR-5/BBS-24.5.2K

Mine code : 400RI13014

- (i) Name of the Inspecting : **DJ03**) **DILIP JAIN**
Officer and ID No.
- (ii) Designation : Junior Mining Geologist
- (iii) Accompanying mine :
Official with
Designation
- (iv) Date of Inspection : 03/05/2014
- (v) Prev.inspection date : 03/06/2012

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **MAHULSUKHA**
- (b) Category : A Manual
- (c) Type of Working : Opencast
- (d) Postal address
State : ORISSA
District : SUNDARGARH
Village : BHUTRA
Taluka : BONAI
Post office : BHUTRA
Pin Code :
FAX No. : 033-2325689
E-mail :
Phone : 033 - 2395661,09437005097
- (e) Police Station :
- (f) First opening date : 03/02/1945
2. Address for : MAHULSUKHA MN MINES, M/S AMTC(P) LTD
correspondance P.O.BHUTRA, DIST:SUNDERGARH
ORISSA-770041
3. (a) Lease Number : ORI0169
- (b) Lease area : 399.84
- (c) Period of lease : 20
- (d) Date of Expiry : 24/02/2005
4. Mineral worked : MANGANESE ORE Main

5. Name and Address of the

Lessee : M/S A.M.T.C.(P) Ltd.
 61, Strand Road KOLKATA
 WEST BENGAL
 Phone:
 FAX :

Owner : Aryan Mining & Trading Corporation P ltd
 Sri.H.Kakad 61, STRAND ROAD
 KOLKATA WEST BENGAL
 Phone: 033-2395661
 FAX : 033-2325689

Mining Engineer
 Name : P.K.CHAKRABARTI, Full Time
 Qualification : DIPLOMA IN MINING
 Appointment/ : 17/07/2000
 Termination date

Mining Engineer
 Name : A.MANNA, Full Time
 Qualification : DIPLOMA IN MINING
 Appointment/ :
 Termination date

Geologist
 Name : P.K.MUKHERJEE, Full Time
 Qualification : M.Sc (GEOLOGY)
 Appointment/ :
 Termination date

6. Date of approval of Mining : 11/06/2010
 Plan/Scheme of Mining

PART - II : TECHNICAL DETAILS/COMMENTS

1. Details about Average employment :
 Maximum number of persons employed on any day during the year

Employment category	No.of employment	Av. yearly working days
DIRECT		
Managerial	2	306
Supervisory	2	306
Workers	30	306
CONTRACT		
Others	160	306

2. Community Development Plan (in and around the mines) : Proposed action and expenditure towards socio-economic development.

Action during the year	Expenditure in Rs. Lakhs for				Remarks
	previous year		current year		
	Proposed	Incurred	Proposed	Incurred	
General					
Infrastructure					
Sub total					
Sub total					
Total					

3. Status of compliance of MCDR, 1988, including therewith the rectification of the outstanding violation of rules.

On the basis of scrutiny of office record violation of Rule 13(1) and 23E(2) were observed and communicated to party vide this office letter of even number dated 22.10.2013. Accordingly lessee has complied violation vide latter dated 30.11.2013.

During current inspection violation of rule 45(5)(a) has been observed and later on found to be complied as monthly return for the month March-14 has been submitted by lessee. No violation letter issued.

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

Not applicable.

5. Scientific Mining

Items	Proposal	Actual work done	Remarks
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A. Exploration (Rule 13)

a.Type of prospecting : Proposal: and exploration i.e. 2010-13: 30 BH pitting, drilling	Exploration as proposed could not be achieved due to not obtaining tree felling permission from concern authority.
b.Total area covered : Not specified.	No information.

B. Working (Rule 13)

a.Number and size of : Total 16 number of each pit (LxWxH) pits. (Including small pits)	Work was going in quarry 1N.
b.Bench : regular. size(LxWxH)length can be defined as regular/irregular	regular.
d.Total area covered : 26.997 Hectare. under excavation/pits	26.997 Hectare.

C. Waste disposal (Rule 13)

a.Location of dumps : As proposed.	As proposed.
e.Yearly generation : 2013-14: 543450 of waste quantity. CuM	2013-14: 217380 CuM
b.Method of dumping : Advancing. whether advancing/retreat	Advancing.
c.Total area covered : 19.023 hectare. under waste dump.	19.023 hectare.
d.No.and size of each : Total 6 Dumps waste dump with No of steps/lift/bench	As per proposal. Dump-1 350x180 Dump-2 140x50 Dump-3 700x70 Dump-4 360x140 Dump-5 90x60 Dump-6 76x40 Dwum lengthxwidth

D. Production

b.Year wise : Proposed: production of last five year. 2010-11:42822 MT 2011-12: 63336 MT 2012-13:74882 MT 2013-14: 72150 MT	Achieved: 2010-11:33614 MT 2011-12:17118 MT 2012-13:10559 MT 2013-14:17023 MT
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D. Reserve

a.Reserve position as : per latest MP/MS and at the time of inspection.	As per approved MSM dt 26/04/2013
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RESERVE POSITION AS ON 01/04/2014

MANGANESE ORE

Category	Quantity in Tonnes	Grade
Proved	363864	+20% Mn
Probable	219180	+20% Mn
Possible	229320	+20% Mn
Total	812364	+20% Mn

PRODUCTION FOR THE PREVIOUS YEAR 2013 - 2014

Mineral	Production	Unit
MANGANESE ORE	17103.16	TON

6. Conservation of Mineral - both quantitative and qualitative**Beneficiation (Rule 20 and 26)**

Efforts for improving low grade and sub grade mineral. : Manual sorting.

Efforts for improving percentage of recovery of ore. : Manual sorting.

Mineral Rule 15

Percentage of recovery of ore : 34% of ROM.
pitwise w.r.t. ROM and total material

Number of benches in ore and waste. : Not specified quarry wise.

Sub-grade mineral/fines (Rule 16)

Qty of yearly generation and total qty available during inspection with grade : As threshold value of manganese ore is 10% Mn, the material between 10% Mn to 25% Mn has been considered as sub grade ore. The 4% material of ROM is considered as a sub-grade ore. Total quantity of Sub-grade material available as on end of year 2012-13 is 85.037 MT (grade 10 to 25% Mn).

Number and size of each stack : Not specified.

Location of stacking. : Temporary in nature.

Separate stacking from waste : yes.

Total area covered for stacking : Not specified.

Exploration data as on 31/03/ 2014

No. of Boreholes	No. of Pits	No. of Trenches
163		

OVERBURDEN HANDLED DURING PREVIOUS YEAR 2013 - 2014**Utilisation of Sub Grade Mineral and Mineral Rejects**

Generated	Utilised	Stacked	(In Ton.)

7. Environment Management - both quantitative and qualitativ

A. Land environment

- a. Landscape. : Undulated Hilly.
- b. Aesthetic environment : Good.
- c. Soil and land use pattern : Area under Excavation : 26.997 Ha
Storage for Top soil: 0.05 Ha
Overburden dump:17.784 Ha
Mineral Storage: 3.75 Ha
Infrastructure (workshop, administrative building, hutting etc): 3.984 Ha
Roads: 10.16 Ha
Green Belt 41.4
Forest land: 340.332
Non-forest land:59.506 Ha
All data as per MSM dated 26.06.2013
- d. Agriculture : Limited.
- e. Forest(flora and fauna) : Local species of flora and fauna.
- f. Vegetation : Small bushes and trees are observed.
- h. Public building, places and monuments (protected, historical), place of worship and places of tourist : Not observed.

B Water environment.

- a. Surface water : Seasonal nala which is observed middle of the lease area flows from South to North. The natural water course of perennial nature does exist along its northeastern and eastern flanges of the lease area.
- b. Ground water : Tube wells and dug wells are the source of Ground water.
- c. Quality of water : Potable.

C. Air environment

- a. Noise : The source of the noise in the ML area and buffer zone is due to the movement of vehicles. However, noise level is felt to be below prescribed limit.
- b. Air : There is no industry in ML area. Hence, air pollution in the lease area is negligible.
- c. Climatic condition : Sub-tropical.

D. Socio economic environment

- a. Social and demographic profile. : Not specified.
- b. Recommending health and safety. : Ambulance services etc were provided.
- c. Human settlement : Observed.
- d. Recreational facility. : Drinking water provision, Distribution of sewing machines to SHG groups, Sponsoring village level football and hockey tournaments etc. activities undertaken by M/s Aryan Mining & Trading Corporation Ltd.

7.1 Comments on the steps taken by the lessee towards maintaining environment and monitoring of environmental parameters to ensure the qualitative improvement in the environment and ecology.

<u>Water Management</u>				
Season	Station type	Station name	Parameter	Value
				Actual Excess

<u>Air data for excess parameters</u>				
Season	Station name	Type of area	Parameter	Value
				Actual Excess

<u>PLANTATION DURING THE PREVIOUS YEAR</u>		<u>2013 - 2014</u>
		Area in Hect.

<u>TOP SOIL MANAGEMENT</u>	
Quantity as on 31/03/2014	

8. Scrutiny of annual returns on cost of production, reserve, production, pit mouth value, stock, land use pattern and fixed assets.

Annual return 2013-14.

Cost of Production: 3663.86 Rs.

Reserve: 565941.007 MT

Resource: 411060.00 MT

Production: 17103.164 MT

Area In forest: 340.322 Ha

Area in Non-forest: 59.506 Ha

PART - III : PERFORMANCE OF MINE OWNER
(In case of lease expiring within 2 years - as per guidelines)

PART - IV : PROPOSALS FOR FURTHER ACTION FOR :

Indian Bureau of Mines (any issue related to CGPB, SGPB, Assistance, Consultancy, Annual Programme and studies, etc.)

NIL.

State Government (Illegal mining, mining dispute, infrastructure, Mineral based industry, Mineral policy, etc.)

NIL.

The Central Government (Infrastructure, Development, Mineral policy and Legislation, Mineral based industry, etc.)

NIL.

Date :

(DILIP JAIN)

Indian Bureau of Mines