

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

MCDR INSPECTION REPORT

Goa regional office

Mine file No : MAH/SDG/FE-43/GOA

Mine code : 30MSH28013

- (i) Name of the Inspecting : **J003**) **JANGID G K**
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : Sh Suresh Kulal, G.M. (Mines)
Official with
Designation
- (iv) Date of Inspection : 15/05/2014
- (v) Prev.inspection date : 20/03/2013

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **SATELI (52.12 HECTS.)**
- (b) Category : A Mechanised
- (c) Type of Working : Opencast
- (d) Postal address
- State : MAHARASHTRA
- District : SINDHUDURG
- Village : SATELI
- Taluka : SAWANTWADI
- Post office : SATARDA
- Pin Code : 416530
- FAX No. : 022-22854417
- E-mail : srivastva@bom5.vsnl.net.in
- Phone : 022-22025893
- (e) Police Station : Sawantwadi
- (f) First opening date : 16/01/2012
2. Address for : Deccan Minerals Pvt Ltd
correspondance Nirmal, Central Wing, 18th floor,
Nariman Point, Mumbai-400021
3. (a) Lease Number : MSH0053
- (b) Lease area : 58.68
- (c) Period of lease : 20
- (d) Date of Expiry : 28/06/2001
4. Mineral worked : IRON ORE Main

5. Name and Address of the

Lessee : DECCAN MINERALS PVT. LTD.
32, ASHUTOSH, NEPEAN SEA
ROAD, MUMBAI GREATER BOMBAY
MAHARASHTRA
Phone:
FAX :

Owner : SANDEEP SRIVASTAVA
NIRMAL, 16th Floor NARIMAN
POINT GREATER BOMBAY
MAHARASHTRA
Phone: 022-22025893, 2
FAX : 022-22854417

Agent : MANOJ THAKUR
WSH 4, W BLOCK, SUNSET
BOULVARD, ALTO
DHULER, MAPUSA-GOA 403507
SINDHUDURG MAHARASHTRA
Phone:
FAX :

Mining Engineer

Name : RAVI KIRAN, Full Time
Qualification : B.E.(Mining) with second class
Appointment/ : 20/09/2013
Termination date

Geologist

Name : NILESH K. JOSHI, Full Time
Qualification : M.SC (GEOLOGY)
Appointment/ : 03/03/2014
Termination date

6. Date of approval of Mining : 17/03/2014
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	254
Supervisory	9	254
CONTRACT		
Plant	0	0
Ministrial	0	0
Others	0	0
Workers	42	254

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					
Housing	0.00	0.00			
Water supply	2.00	1.50			
Health	2.00	4.00			
Sanitation	0.50	0.00			
Medical facility	10.00	5.00			
Safety	10.00	2.50			
Sub total	24.50	13.00			
Infrastructure					
Electricity	0.00		0.00		
Public transport	0.00		0.00		
Roads	0.00		0.00		
Communication	0.00		0.00		
Sub total	0.00		13.00		
Sports activities	0.00		0.00		
Recreation	5.00		0.00		
Employment	25.00		18.00		
Environment management	26.00		0.00		
Others	12.00		0.00		
Training	10.00		0.00		
Total	102.50		31.00		

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

Mine was last inspected on 20.03.2013 and violation for rules Rule 13(1) and 42(1)(C)(I) was issued on 03.09.2013. Both rules are complied. Violation of rule 13(1) and 45(5)(b) was issued after current inspection.

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.

Suspension of mining operations under rule 13(2) or prohibition of deployment of any person under rule 56 of MCDR, 1988 is not recommended. However, if lessee failed to comply rule 13(1) within stipulated time, followup action will be initiated for logical end.

5. Scientific Mining

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

- a.Type of prospecting and exploration i.e. pitting, drilling : It was proposed to drill six boreholes during 2013-14. Three boreholes are drilled during 2013-14.
- b.Total area covered : Exploration was proposed over 100m X 100m grid interval. Exploration was carried out on 50m X 50m grid interval covering three boreholes for quality aspects.

B. Working (Rule 13)

- a.Number and size of each pit (LxWxH) : Proposal of development was in existing pit from E-369550 to E-369858, N-1741320 to N-1741500 Between E-3691102, N-1741540&E-369220 N-1741640 over 300m×100m area. There is one working pit and its dimension is 720m X 110m X 30m.
- b.Bench size(LxWxH)length can be defined as regular/irregular : Proposal to maintain bench height of 6m with 9m width. Bench size is regular and No of benches in OB /Waste are 3 Nos (Height - 6 mtrs, Width - 9 mtrs). No of benches in mineral are 2 Nos (Height - 6 mtrs, Width - 9 mtrs)
- c.Ore to waste ratio pit wise if possible otherwise for mine : Planned ore to OB ratio Ore was 1:1.33. Actual ore to OB ratio Ore was 1:1.34.
- d.Total area covered under excavation/pits : Total area proposed under excavation/pits was 7.0ha by advancing existing pit. The area covered under pit is 6.75ha.

C. Waste disposal (Rule 13)

- a.Location of dumps : Old dumps are located outside the lease area and backfilling was proposed inside pit. Backfilling was started during 2013-14 in eastern part of pit. Old dumps are located in south-western direction.
- e.Yearly generation of waste quantity. : Proposal was for 382965t waste generation. Actual waste generation was 303188t.
- b.Method of dumping whether advancing/retreat : Backfilling was proposed from one end of pit i.e. NE face. Backfilling is started from one end of pit i.e. NE face.

c.Total area covered : Old dumps are
under waste dump. there over 4.0ha
area.

Old dumps outside lease
area are there over
4.0ha area. Backfilling
started during 2013-14
over 0.25ha.

d.No.and size of each : Old dump is of
waste dump with No of 400m X 100m width.
steps/lift/bench

Old dump is of 400m X
100m width.

D. Production

b.Year wise
production of last
five year.

: Target for last
five years 2009-10
to 2013-14 was
109406, 0, 45820t,
135660t and
286834t.

Actual production during
last five years from
2009-10 to 2013-14 was
0, 0, 41477t, 13556t and
226334t.

D. Reserve

a.Reserve position as : Reserves estimated
per latest MP/MS and as per latest
at the time of MP/MS is 1349060t
inspection. (111), 1067612t
(211) and 1022140t
(333).

Balance reserves at the
time of inspection were
1280000t (111)

RESERVE POSITION AS ON 01/04/2014

IRON ORE		
Category	Quantity in Tonnes	Grade
Proved	1349060	
Probable		
Possible		
Total	1349060	

PRODUCTION FOR THE PREVIOUS YEAR 2013 - 2014

Mineral	Production	Unit
IRON ORE	226334	TON

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

Efforts for improving low grade and sub grade mineral. : All efforts are made to recover salable mineral. Separate benches are maintained for better recovery.

Efforts for improving percentage of recovery of ore. : All efforts are made to improve recovery of mineral. Separate benches are maintained for better recovery.

Mineral Rule 15

Percentage of recovery of ore pitwise w.r.t. ROM and total material : Recovery percentage is almost 100%.

Number of benches in ore and waste. : No of benches in top soil : nil
 No of benches in OB /Waste : 3Nos(Height - 6 mtrs, Width - 9mtrs)
 No of benches in mineral : 2 Nos (Height - 6 mtrs, Width - 9 mtrs)

Sub/grd mineral/fines (Rule16)

Qty of yearly generation and total qty available during inspection with grade : Total quantity available is 226334 t.

Number and size of each stack : Mobile screen plants are there for iron ore separation as per grade and stacks formed are loaded for despatch. Overall one stack is there.

Location of stacking. : Mineral stacks are located outside lease area.

Separate stacking from waste : Yes, mineral is separately stacked before final despatch.

Total area covered for stacking : Not applicable, as it is common for two leases.

Exploration data as on 31/03/ 2014

No. of Boreholes	No. of Pits	No. of Trenches
3	0	0

OVERBURDEN HANDLED DURING PREVIOUS YEAR 2013 - 2014

Overburden/waste removed (in m3) :	303188
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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. : The area is located on the slope of hilly terrain with gentle to moderate slope and dissected by number of small valleys with max RL-69M and min-RL-18M.
- b. Aesthetic environment : Area is surrounded by hillocks and agriculture fields in valley/planin land. Plantation is carried out all along road and slope of dump. Good House keeping in mines office & working pits is maintained.
- c. Soil and land use pattern : Topsoil is negligible on the slope of hillock. Land use pattern is as follows:
Area under pit-6.75ha, Under dump outside ML-3.84ha, Plant/building - 1.47ha.
- d. Agriculture : Agriculture is seasonal during monsoon period and Cashew is the main cultivation.
- e. Forest(flora and fauna) : There is no forest land.
- f. Vegetation : Paddy Fields are there in the surrounding plain area.
- h. Public building, places and monuments (protected, historical), placec of worship and places of tourist : Nil

B Water environment.

- a. Surface water : The surface water is monitored (pH found in the range 7.1, and other parameters within limits)
- b. Ground water : The general ground water table is around 10mts RL.This area receives copious amount of rainfall,hence the ground levels show rise in their levels in monsoon.
- c. Quality of water : The ground water in the bore wells and dug wells, nearby ponds or lakes, were found to be good. pH values were around 7 & within limits.

C. Air environment

- a. Noise : Workzone day noise levels was found to be 64.1 dB(A) and night noise level was found to be 62.8 dB(A).
- b. Air : Air quality is monitored by HVAS twice a week & found within limits.
- c. Climatic condition : Since the lease area is located very near to the west coast, warm humid climate is experienced throughout the year. Rainfall of 3500 to 4000mm between June to September.

D. Socio economic environment

- a. Social and demographic profile. : The nature of work is mainly minng & agricultural The literacy rate is 70%.
- b. Recommending health and safety. : The noise and Dust fall is within range. The quality of the water is within permissible limit, hence there is no hazard to health. Ripper Dozer is used which cuts the insitu rock in slices without drilling and blasting. Effective dust suppression by water sprinkling arrangement on trucks is there.
- c. Human settlement : The lease area is surrounded by four villages. The

house types found are both concrete and huts. The population of sateli 784, satarda 2737, Talwane 1683, Kondura 360 respectively.

- d. Recreational facility. : There is no recreational facility available at mines. Nearby towns Sawantwadi, Vengurla, Mapusa etc are having all facilities. Dish TV is available in villages also.

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.
Within lease area			Outside lease area					
Area	Trees planted	Survival rate	Area	Trees planted	Survival rate			
2	5050	70	0	0	0			

<u>TOP SOIL MANAGEMENT</u>		
<u>Quantity as on 31/03/2014</u>		
Cumulative quantity in tonne		
Generated	Utilised	Balance
.01	.01	0

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

a) Land use pattern: 1. Exploited & abandoned by O/C mines-0 Ha, 2) Covered under O/C working - 6.75 Ha, 3) Reclaimed & Rehabilitated-0Ha, 4) Waste Disposal - 3.75Ha 5) Plants, blds, roads-1.47Ha

b) Reserves: It is as per latest approved modified SOM.

c) Quantity of overburden / waste rock generation: 303188t and used for backfilling
Cost of production was Rs. 839/-

A violation for rule 45(5)(b) was issued for not reporting grade-wise production.

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

a. Compliance of terms and conditions of lease deed.

Initial grant vide letter No. MMN-2279/66576/(2220)/IND-9 Dated-19.05.80 over 52.12 ha for 20YEARS

1st Renewal was granted vide letter No. MMN-1302/CR-300/IND-9 Dated-30.10.04 and it was executed on 28.07.2006. The date of expiry is 28.06.2021.

All the boundary pillars for the lease area wer found intact during inspection of mine.

b. Compliance of the provisions of MCDR, 88 and advise given.

Mining Plan for renewal was approved on 01.12.2005. Scheme of mining was approved on 31.05.2012.

Modified scheme of mining was approved vide letter MS/SIND/GOA (MAH)FeMn-56-SZ-313/20.03.14 for the balance period upto 2014-15.

PART - IV : PROPOSALS FOR FURTHER ACTION FOR :

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

None at present.

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

None at present.

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

None at present.

Date :

(JANGID G K)

Indian Bureau of Mines