

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

MCDR INSPECTION REPORT

Jabalpur regional office

Mine file No : MP/KATNI/BX-41

Mine code : 07MPR47008

- (i) Name of the Inspecting : **S021**) **GIRISH SHRIVASTAVA**
Officer and ID No.
- (ii) Designation : Assistant Mining Geologis
- (iii) Accompanying mine : Shri P .C. Sharma, Lessee
Official with
Designation
- (iv) Date of Inspection : 23/06/2016
- (v) Prev.inspection date : 17/01/2013

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **AMOCH (16.187 H)**
- (b) **Registration NO.** :
- (c) Category : B Manual
- (d) Type of Working : Opencast
- (e) Postal address
State : MADHYA PRADESH
District : KATNI
Village : Amoch
Taluka : Bahoriband
Post office :
Pin Code : 483504
FAX No. : N. A.
E-mail : N. A.
Phone : N. A.
- (f) Police Station :
- (g) First opening date : 28/02/1986
- (h) Weekly day of rest : SUN
2. Address for : DR. PRAMOD CHAND SHARMA
correspondance : 9, HOUSING BOARD COLONY,
KATNI (M.P.) 483501
3. (a) Lease Number : MPR0815
(b) Lease area : 16.19
(c) Period of lease : 20
(d) Date of Expiry : 06/10/2002
4. Mineral worked : BAUXITE Main

5. Name and Address of the

Lessee : PRAMOD CHAND SHARMA
9, HOUSING BOARD COLONY,
KATNI MADHYA PRADESH
Phone:N. A.
FAX :N. A.

Owner : PRAMOD CHAND SHARMA
9, HOUSING BOARD COLONY,
KATNI MADHYA PRADESH
Phone: N. A.
FAX : N. A.

6. Date of approval of Mining : Existing rule 11 MCDR1988 27/07/2009
Plan/Scheme of Mining Mining Scheme rule 12 MCDR1988 30/07/2015

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	10 borholes were proposed during 15-16	None	Voilation of 13(1) of MCDR ,88 was issued
1b	Exploration over lease area for geological axis 1 or 2	About 4.5 ha area situated towards southern side has been categorised under G-2 based on the existing pit of 190mx145-45m x2- 20 m size	Since the recovery of bauxite varies between 10 to 20 %, and size of existing pit is 190mx 165m x2- 20 m therefore based on such data ,the categorization of 4.5 ha area under G-2 seems to be correct . The remaining northern part falling under lateritic zone which is still to be proved for bauxite mineralisation .	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	None	None	
1d	Balance area to be explored to bring Geological axis in 1 or 2	10 boreholes during 15-16	No boreholes were given during 15-16	
1e	Balance reserve as on 01/04/20	The Balance reserves as on 01/04/16 - 126333 tonnes .	127891 tonnes as on 01/04/2016 . If the production for remaining 01 year of proposals achieved , the balance reserves as on 01/04/17 will be 113989 tonnes .	
1f	General remarks of inspecting officers on geology, exploration etc	None	The deposit having very low recovery of bauxite i.e. 10 to 20 % and in such deposit the intersection of pockets of bauxite in boreholes / incidence of mineralisation or success rate of exploration by borehole may not be easy task . Therefore, drilling and logging, collction of sludge , etc need to be done very carefully .	

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	The advancement of NW face of the existing pit which is situated on the southern part of ML area . (S50 to S30 and W200 to W80)	The working has been done at the proposed site .
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	One bench in ob of 2m height and two bench in mineral of 3m height .	Separate bench in OB and mineral has been developed .
2c	Stripping ratio or ore to OB ratio	1:5.42	1:5.6
2d	Quantity of topsoil generation in m3	None	None, There is no top soil , The OB is consist of lateritic soil .
2e	Quantity of overburden generation in m3	7276 cu m during 15-16	5500 cu m
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	One Ob bench and two mineral bench	One OB bench of 2m height and two mineral bench of 3 m height has been developed . The height of old faces varies between 5-6 m . Since the recovery of mineral is 10 to 20 % and waste handling is on heigher side , the regular faces has not been developed in all around the pit .

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One	One	
3b	Quantity of ROM mineral production proposed	ROM -25614 cu m during 15-16 , production of bauxite-- 10758 tonnes .	ROM - 25000 cu m during 15-16 , production of bauxite-- 9200 tonnes .	

3c	Recovery of sailable/usable mineral from ROM production	10758 tonnes during 15-16	9200 tonnes during 15-16
3d	Quantity of mineral reject generation	None	None
3e	Grade of mineral rejects generation and threshold value declared.	None	There is no reject generation , the required grade achieved through blending .
3f	Quantity of sub grade mineral generation.	None	No sub grade generated .
3g	Grade of sub grade mineral generation	None	None
3h	Manual / Mechanised method adopted for segregating from ROM	Manual	The mineral segregation has been done manually/sreenining .
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	None	None
3j	Provision of drilling and blasting in mineral benches	None	None
3k	Provision of mining machineries in mineral benches	There is no proposal of mining machineries in mineral benches .	None
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	The Ob bench of 2m height and mineral benches of 3m height were prposed during 15-16 .	It is a 'B' manual mine and proposed height of OB and mineral benches are suitable for manual method of mining by hand tools .
3m	Total area covered under excavation/pits	2.55 ha at the end of proposal of 15-16	2.5 ha et end of 15-16 .
3n	Ore to OB ratio for the pit/mine during the year.	1:5.42	1: 56

3o	Total area put in use under different heads at the end of year	Pit -2.55 ha , dumps - 4.32 ha ,mineral storage -4.27 ha	pit - 2.5 ha , mineral storage - 4.27 ha
3p	Production of ROM mineral during the last five year period as applicable	15-16 - 10758 during 15-16 (first year)	15-16 - 9200 tonnes , during 12-13 to 14 -15 - Nil production .
3q	General remarks of inspecting officers on method of mining etc.	Manual method of mining	It is 'B' manual mine and manual mining with the help of hand tools has been proposed . No blasting has been done . Thus the development of 2m height of OB bench and 3m height of mineral bench manually with the help of hand tools is suitable method of mining in such deposit . Manual mining as proposed is also suitable considering the poor recovery of bauxite i.e 10 to 20 % .

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Separate waste dump of 100mx40m x 5m was proposed	Waste dump of 100mx70mx3.5 m size was observed at NE side along the 7.5 m barrier . No top soil and mineral reject was generated .	
4b	Location of topsoil, OB and mineral reject dumps	There is no top soil, however the OB and waste dump was proposed to wards NE barrier .	The waste dump of 100m x 70 m x3.5 m was observed at NE barrier .	
4c	Number of dumps within lease area and outside of lease area	04 dumps within ML area	04 waste dumps were observed within ML area .	

4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	The waste dump has been proposed out side of influence Zone of bauxite	The waste dump has been kept at NE barrier which is falling outside of influence zone of bauxite as marked on the Surface geological Plan .
4e	Number of active and alive dumps.	One dump	One dump situated at NE barrier .
4f	Number of dead dumps.	03 dumps	03 old dumps
4g	Number of dumps established.	None	none
4h	Whether Retaining wall or garland drain all along dumps are there.	None	None
4i	Length of Retaining wall or garland drain all along dumps	None	None
4j	Number of settling ponds	None	None
4k	Specific comments of inspecting officer on waste dump management	The waste dump is proposed at NE barrier .	The waste dump of 100m x70 m x3.5 m was observed at the proposed site but some old small waste dumps are scattered in the nothern part of ML area .The retainining wall /garland drain need to proposed in next document which is due in Dec.16

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.	There is no mined out area at present .	None	
5b	Area under backfilling of mined out area	None	None	

5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	None	None
5d	Total area fully reclaimed and rehabilitated	None	None
5e	General remarks of inspecting officers on backfilling and reclamation etc.	No matured area for reclamation .	There is no matured area for reclamation/bacfilling

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).	None	None	
6b	Area available for rehabilitation (ha) .	None	None	
6c	afforestation done (ha).	None	None	
6d	No. of saplings planted during the year	None	None	
6e	Cumulative no .of plants	none	None	
6f	Any other method of rehabilitation	None	None	
6g	Cost incurred on watch and care during the year	None	None	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	None	None	

6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	None	None
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	None	None
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	None	None
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	None	None
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	None	None
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	None	None
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	None	None
6p	Compliance of environmental monitoring (core zone and buffer zone)	Monitoring station in core zone proposed	No monitoring station were observed .

6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	None	Since mineral is persisting in depth . no matured area is available for reclamation /rehabilitation
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Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	No proposal for grade-wise sorting .	The mineral sorting has been done manully and required grade has been achieved through blending . As such complete production is saleable .	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Manual	Manual sorting of mineral has been caried out .	
7c	Different grade of mineral sorted out at mines.	None	The grade of mineral is cement grade and gradewise sorting has not been done . however Low grade blended with heigh grade.	
7d	Any beneficiation process at mines .	None	Only screnining has been done. no other beneficiation has been done .	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	The completemineral is saleable . No sub grade or reject generation has been proposed	There is no prbblen in respect of conservation of mineral . Low grade belended with heigh grade and supplied to cement plant .	

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	There is no top soil	None	

8b	Concurrent use or storage of topsoil	None	None
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	The separate OB/ waste dump has been proposed . No generation of reject and fines is proposed	The separate waste dump of 100mx70m x3.5 m was observed at NE barrier . No dump of reject /fines were observed .
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	None	No matured area is available for restoration .
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	None	No matured area is available for restoration .
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	None	None
8g	Survival rate	None	None
8h	Water sprinkling on roads to control airborne dust	None	None
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	None	In order to increase the aesthetic beauty , the waste mangement in Northern part and afforestation has to be proposed in next document which is due in DEc . 16 .

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
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9a	Status of submission of Monthly and Annual returns	AR for 15-16 was not submitted .	The Monthly returns were submitted upto may 16 but AR for 15-16 was not submitted	Voilation and SCN for 45(5) (b) of MCDR ,88 was issued on the basis of previous inspection . Further action is under progress.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	AR for 15-16 was not submitted .	None	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	AR for 15-16 was not submitted .	None	
9d	Scrutiny of Annual return on afforestation	AR for 15-16 was not submitted .	None	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	AR for 15-16 was not submitted .	None	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	AR for 15-16 was not submitted .	None	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	AR for 15-16 was not submitted .	None	
9h	Scrutiny of Annual return on fixed assets	AR for 15-16 was not submitted .	None	
9k	Scrutiny of Annual return on mining machineries	AR for 15-16 was not submitted .	None	

Details of violations observed during current inspection and compliance position of violation pointed out

Violation observed			Show couse position		
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on	Compliance on
Rule 13(1)	18/07/2016				

Date :

(GIRISH SHRIVASTAVA)

Indian Bureau of Mines