# INDIAN BUREAU OF MINES MINERALS DEVELOPMENT AND REGULATION DIVISION

### Review and updation of Mining Plan REPORT

#### Hyderabad regional office

Mine file No: 659(483)/MC/2002/NLR Mine code: 62APR15027

(i) Name of the Inspecting :  ${\tt M001}$  )  ${\tt S}$  K  ${\tt MUDULI}$ 

Officer and ID No.

(ii) Designation : Junior Mining Geologist

(iii) Accompaning mine : Sri Sivaiah, Sri PR Mishra

Official with Designation

(iv) Date of Inspection : 06/01/2020

(v) Prev.inspection date :

PART-I : GENERAL INFORMATION

. (a) Mine Name : POKKANDLA

(b) Registration NO. :

(c) Category : B Manual
(d) Type of Working : Opencast

(e) Postal address

State : ANDHRA PRADESH

:

District : NELLORE

Village :
Taluka :
Post office :
Pin Code :
FAX No. :
E-mail :
Phone :

(f) Police Station

(g) First opening date : 09/07/2018

(h) Weekly day of rest :

2. Address for :

correspondance

3. (a) Lease Number : (b) Lease area :

(c) Period of lease

(d) Date of Expiry

4. Mineral worked : VERMICULITE Main

5. Name and Address of the

Lessee : R NARENDRA KUMAR

D.No.12-13-143 Old Police Line, Islam Pet Vijayawada NELLORE ANDHRA PRADESH

Phone: FAX :

6. Date of approval of Mining : Plan/Scheme of Mining

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

# Exploration :

Sl.No.	Item	Proposals	Actual	work	Remarks
1a	Backlog of previous year	No proposal approved for 2018-19.	Nil		The Mining plan was approved by IBM on 10.04.2002.
1b	Exploration over lease area for geological axis 1 or 2	No proposal approved for 2018-19.	Nil		There is a pit over an extent of about 1.75 Ha with dimension 252mx78mx16m.7 trial pits with dimension ranging from 6 to 10 m X 3 to 6 m X 2m have been made during 2019-20.Vermiculite found within the trial pits and also in mining pit at places in pocket.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No proposal approved for 2018-19.	Nil		
1d	Balance area to be explored to bring Geological axis in 1 or 2	No proposal approved for 2018-19.	Entire	e lease area	
le	Balance reserve as on 01/04/20	In the approved mining plan dated 10.04.2002, there is no approved reserves/reso urces of Vermiculite. As per the last approved Mining Plan by IBM the Mica Reserve-33173 tonnes(10%), Quartz Reserve-66545 tonnes(20%), Feldspar Reserve-66545(20%)			Vermiculite occurence is incidental.

1f General remarks of inspecting officers on geology, exploration etc

Vermiculite occurs as pocket within the pegmatite.Schist is the country rock.

## Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	No proposal approved for 2018-19.	Mining pit has been developed atPortion of the lease.	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	approved for	Benches have been developed in Mineralised zone only.	
2c	Stripping ratio or ore to OB ratio	No proposal approved for 2018-19.	Nil	
2d	Quantity of topsoil generation in m3	approved for	Nil	
2e	Quantity of overburden generation in m3	No proposal approved for 2018-19.	Nil	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Mining by mechanised method is suitable.

## Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	No proposal approved for 2018-19.	One	
3b	Quantity of ROM mineral production proposed	No proposal approved for 2018-19.	During 2018-19 No vermiculite mineral has been produced. However as reported by the Lessee's representative and register minor mineral like Feldspar and Mica has been produced.	

3c	Recovery of sailable/usable mineral from ROM production	No proposal approved for 2018-19. As per the last approved document by IBM the approved rewcovery of Mica - 10%, Quartz-20%, Feldspar-20%. Vermiculit e occurrence is incidental and no reserves was estimated.	Minor mineral like quartz, feldspar and mica is being recovered.	
3d	Quantity of mineral reject generation	No proposal approved for 2018-19.	Nil	
3e	Grade of mineral rejects generation and threshold value declared.	No proposal approved for 2018-19.	Not applicable.	
3f	Quantity of sub grade mineral generation.	No proposal approved for 2018-19.	Nil	
3g	Grade of sub grade mineral generation	No proposal approved for 2018-19.	Not applicable.	
3h	Manual / Mechanised method adopted for segregating from ROM	No proposal approved for 2018-19.	Crushing and screening is being done to get different sizes of mineral.	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal approved for 2018-19.	Except size reduction there is no beneficiation.	
3j	Provision of drilling and blasting in mineral benches	No proposal approved for 2018-19.	8m bench heght,Wagon drill-115mm dia	HEMM and deep hole blasting permission u/r 106(2)(b) of MMR-1961 obtained.
3k	Provision of mining machineries in minoral benghos	No proposal approved for 2018-19.	Excavator-0.9m3-1no, Tippers-10 tonners-2 nos	

mineral benches

31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	No proposal approved for 2018-19.	Suitable for mining by mining machinery deployed.	
3m	Total area covered under excavation/pits	No proposal approved for 2018-19.	1.75 На	
3n	Ore to OB ratio for the pit/mine during the year.	No proposal approved for 2018-19.	Nil	
30	Total area put in use under different heads at the end of year	No proposal approved for 2018-19.	About 4 Ha.	
3p	Production of ROM mineral during the last five year period as applicable	r-3806.4 tonnes,Quartz- 3806.4 tonnes 2015-16-Scrap Mica-1869.8 Tonnes,Feldspa r-3739.60 tonnes,Quartz- 3739.6 tonnes 2016-17-Scrap Mica-590 Tonnes,Feldspa r-1180 tonnes,Quartz- 1180 tonnes	2014-15-Vermiculite- Nil,Scrap Mica-330 tonnes,Feldspar-220 tonnes,Quartz-60 tonnes 2015-16-Vermiculite- Nil,Scrap Mica-Nil ,Feldspar-Nil ,Quartz- Nil 2016-17-Vermiculite- Nil,Scrap Mica-Nil ,Feldspar-Nil ,Quartz- Nil 2017-18-Vermiculite- Nil,Scrap Mica-Nil ,Feldspar-Nil ,Quartz- Nil 2017-18-Vermiculite- Nil,Scrap Mica-Nil ,Feldspar-Nil ,Quartz- Nil 2018-19-Vermiculite- Nil,Scrap Mica-2874.80 tonnes,Feldspar-4930 tonnes,Quartz-Nil	
3q	General remarks of inspecting officers on method of mining etc.			Mechanised Opencast Method of mining has been adopted.

## Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	approved for	Separate dumping of Mineral Reject(2nos), Waste(2 no) and ROM (2nos) observed to be carried out as on date of inspection.	

4b	Location of topsoil, OB and mineral reject dumps	No proposal approved for 2018-19.	Within the lease	
4c	Number of dumps within lease area and outside of lease area	No proposal approved for 2018-19.	Two nos Mineral Reject dump and Two nos Waste dump found to be dumped inside thwe lease area as on date of inspection.	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	No proposal approved for 2018-19.	Out side UPL.	
4e	Number of active and alive dumps.		Two nos Mineral Reject dump and Two nos Waste dump as on date of inspection.	
4f	Number of dead dumps.	No proposal approved for 2018-19.	Nil	
<b>4</b> g	Number of dumps established.	No proposal approved for 2018-19.	Nil	
4h	Whether Retaining wall or garland drain all along dumps are there.	No proposal approved for 2018-19.	Nil.Advised to make retaining wall and garland drain	
4i	Length of Retaining wall or garland drain all along dumps	No proposal approved for 2018-19.	Not applicbale	
4j	Number of settling ponds	No proposal approved for 2018-19.	Nil.Advised to construct.	
4k	Specific comments of inspecting officer on waste dump management			Retaining wall and Garlan drain to be constructed.

# 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.	No approved proposal for the period 2018-19.	No part of the mining lease area is exhausted of mineral, hence not maturd to start back filling.	

5b	Area under backfilling of mined out area	No approved proposal for the period 2018-19.	Nil	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No approved proposal for the period 2018-19.	Nil	
5d	Total area fully reclaimed and rehabilitated	No approved proposal for the period 2018-19.	Nil	No part of the mining lease area is exhausted of mineral, hence not maturd to start back filling.
5e	General remarks of inspecting officers on backfilling and reclamation etc.			No part of the mining lease area is exhausted of mineral, hence not maturd to start back filling.

## 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).	No approved proposal for the period 2018-19.	Not submitted	There is no approved mining plan document from 2017-18.
6b	Area available for rehabilitation (ha) .	No approved proposal for the period 2018-19.	Nil	No part of the mining lease area is exhausted of mineral, hence not maturd to start back filling.
6c	afforestation done (ha).	No approved proposal for the period 2018-19.	Nil	-do-
6d	No. of saplings planted during the year	No approved proposal for the period 2018-19.	Nil	-do-
6e	Cumulative no .of plants	No approved proposal for the period 2018-19.	Nil	-do-

6f	Any other method of rehabilitation	No approved proposal for the period 2018-19.	Nil	-do-
6g	Cost incurred on watch and care during the year	No approved proposal for the period 2018-19.	Nil	-do-
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	No approved proposal for the period 2018-19.	Nil	-do-
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No approved proposal for the period 2018-19.	Nil	-do-
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on on backfilled area	No approved proposal for the period 2018-19.	Nil	-do-
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No approved proposal for the period 2018-19.	Nil	-do-
61	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No approved proposal for the period 2018-19.	Nil	-do-
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	No approved proposal for the period 2018-19.	20 nos	
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No approved proposal for the period 2018-19.	Nil	

60	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No approved proposal for the period 2018-19.	Nil
6p	Compliance of environmental monitoring (core zone and buffer zone)	No approved proposal for the period 2018-19.	Nil

## Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	No approved proposal for the period 2018-19.	Except size reductionno grade wise sorting is being done.	
7b	Method of grade- wise mineral sorting i.e. manual or mechanical.	No approved proposal for the period 2018-19.	No grade wise sorting is being done.	
7c	Different grade of mineral sorted out at mines.	No approved proposal for the period 2018-19.	Nil	
7d	Any beneficiation process at mines .	No approved proposal for the period 2018-19.	Nil	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			Except size reduction and screeening of Quartz, Feldspar and Mica there is no other processing.

#### Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	proposal for	For Plantation	

Comp	liance of Rule	45:		
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Plantation has been done near site office to improve the aesthetic beauty.
8h	Water sprinkling on roads to control airborne dust	approved for	Water sprinkling being carried out.	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)			Plantation done near site office.
	rehabilitation of lands affected by mining operations (Pits, dumps etc)	2018-19.		mineral to start back filling.
8e	Phased restoration, reclamation and	No approved proposal for the period	Nil	No part of the mining lease is exhausted of
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No approved proposal for the period 2018-19.	Nil as no part of the mining lease is exhausted of mineral to start back filling.	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	No approved proposal for the period 2018-19.	There are two no waste dump, two nos mineral reject dump and two nos ROM dump as on date of inspection.	
	or storage of topsoil	No approved proposal for the period 2018-19.	Being used for plantation.	
8b	Concurrent use	37	D ' 1 C	

9a	Status of submission of Monthly and Annual returns	To be submitted	Due to lack of registration the lessee could not submit the AR return. However after issue of violation submitted the AR from 2012-13 to 2018-19 in hard copy.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Nil.	Geologist and Mining Engineer not appointed.	Advised to appoint.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	To be furnished.	Due to different format not furnished in hard copy.	
9d	Scrutiny of Annual return on afforestation	To be furnished.	Due to different format not furnished in hard copy.	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	To be furnished.	Due to different format not furnished in hard copy.	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	To be furnished.	Furnished	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	To be furnished.	Furnished	
9h	Scrutiny of Annual return on fixed assets	To be furnished.	Furnished.	
9k	Scrutiny of Annual return on mining machineries			

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

Violation observed Show couse position

Violation observed			Show couse position	
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on Compliance on

Date: (S K MUDULI)

Indian Bureau of Mines