

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

MCDR inspection REPORT

Hyderabad regional office

Mine file No : AP/ADB/LST-29/HYD

Mine code : 38APR01012

- (i) Name of the Inspecting : **M001**) **S K MUDULI**
Officer and ID No.
- (ii) Designation : Junior Mining Geologist
- (iii) Accompanying mine : Sri N.P.SAHARE-SR GM(MINES) & SRI JAYANT V. MOHGAONKA
Official with
Designation
- (iv) Date of Inspection : 20/03/2020
- (v) Prev.inspection date : 11/03/2019

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **DEVAPUR**
- (b) **Registration NO.** : **IBM/981/2011**
- (c) **Category** : **A Mechanised**
- (d) **Type of Working** : **Opencast**
- (e) **Postal address**
- State : **TELANGANA**
- District : **ADILABAD**
- Village : **DEVAPUR**
- Taluka : **KAZIPET**
- Post office : **DEVAPUR CEMENT WORKS**
- Pin Code : **504218**
- FAX No. : **91-8736-40522**
- E-mail :
- Phone : **(08736)40661**
- (f) **Police Station** :
- (g) **First opening date** : **14/11/1981**
- (h) **Weekly day of rest** : **SUN**
2. **Address for** : **DEVAPUR CEMENT WORKS**
correspondance : **DISTRICT ADILABAD-504218**
: **ANDHRA PRADESH**
3. (a) **Lease Number** : **APR0006**
- (b) **Lease area** : **210**
- (c) **Period of lease** :
- (d) **Date of Expiry** : **04/10/2029**
4. **Mineral worked** : **LIMESTONE** **Main**

5. Name and Address of the

Lessee : M/S TSMDC LIMITED
 4TH FLOOR, HMWSSB PREMISES
 KHAIRTABAD HYDERABAD
 HYDERABAD TELANGANA
 Phone:
 FAX :

Owner : M/s TSMDC Ltd
 Rear Block, 4 th Floor,
 HMESSB Premises,
 Khairatabad Hyderabad-500
 004 HYDERABAD TELANGANA
 Phone:
 FAX :

Agent : K.Rajasekhar Reddy
 M/s TSMDC Ltd.,Rear Block,
 4th floo HMWSSB Premises,
 Khairatabad, Hyderabad-500
 004 HYDERABAD TELANGANA
 Phone:
 FAX :

Mining Engineer

Name : Shri. Kamalesh B.Tembhurne,Full Time
 Qualification : B.E(Mining)
 Appointment/ : 02/11/2011
 Termination date

Geologist

Name : Shri. Jayanth V. Mohgaonkar,Full Time
 Qualification : M.Sc(Geo)
 Appointment/ : 30/07/2015
 Termination date

6. Date of approval of Mining	:	Renewal under rule 22 MCR1960	09/03/1995
Plan/Scheme of Mining		Renewal under rule 22 MCR1960	05/11/1999
		Mining Scheme rule 12 MCDR1988	26/08/2005
		Modif.approved Mining Scheme	08/01/2008
		Mining Scheme rule 12 MCDR1988	02/12/2010
		Renewal under rule 24 MCR1960	17/11/2011
		MP modif under 17(3) MCR 2016	06/10/2016

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No exploration proposal approved for 2018-19	Nil	Entire Lease area is explored under G1 level.
1b	Exploration over lease area for geological axis 1 or 2	No such exploration proposal approved for 2018-19	210 Ha	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No exploration proposal approved for 2018-19	Nil	
1d	Balance area to be explored to bring Geological axis in 1 or 2	No exploration proposal approved for 2018-19	Nil	Entire Lease area is explored under G1 level.
1e	Balance reserve as on 01/04/20	7.14 Million Tonnes	10.35 Million Tonnes	
1f	General remarks of inspecting officers on geology, exploration etc			General strike of the beds in the lease area varies from North 40 degree East - South 45 degree East and Dip is towards West varying from 5 to 12 degrees. Lessee has carried out 36 no. of core bore holes during the year 2017-18. Thus, entire lease area has been explored in G1 level by drilling 196 nos of bore holes with total drilling meterage of 5867.17m.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	Section Line 29 to 37	Section Line 29 to 37	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	To be maintained	Maintained	-
2c	Stripping ratio or ore to OB ratio	1:0.15	1:0.25	
2d	Quantity of topsoil generation in m3	2437cum	4341 cum	
2e	Quantity of overburden generation in m3	Quantity: 256088 Cum.	Quantity: 440989 Cum	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			The Limestone beds are contineous and extended over long distance. The Limestone deposit in the lease area are co-related with the upper Limestone of the regional geological succession. The area is part of doubly plunging syncline on the regional structure. Pits are developed up to contact zone by maintaining bench height of 8meters and width 20 meters.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	1	1	Pit is developed by maintaining bench of 8 meters and width of about 20 meters.

3b	Quantity of ROM mineral production proposed	4149280 tonnes (Excavation) and 200010 tonnes dump rehandling totaling to 4349290 Tonnes for 2018-19	3854770 tonnes (Excavation)and 375215 tonnes dump rehandling totaling to 4229985 Tonnes for 2018-19	
3c	Recovery of sailable/usable mineral from ROM production	95%	100%	
3d	Quantity of mineral reject generation	No proposal for mineral reject generation	Nil	
3e	Grade of mineral rejects generation and threshold value declared.	Nil	Threshold value declared- CaO%>34%,MgO%<5%.	
3f	Quantity of sub grade mineral generation.	Nil	Nil	
3g	Grade of sub grade mineral generation	Not applicable	Nil	No proposal for Sub grade mineral generation
3h	Manual / Mechanised method adopted for segregating from ROM	No segregation of Low grade/ High grade ore as entire Ore is considered as ROM for its utilisation in cement manufacturing	NA	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No such proposal was approved	Not applicable	

3j	Provision of drilling and blasting in mineral benches	Deep drilling (HRB 150 mm dia, Ingersol Rand 115mm dia) & blasting with 5m burden x 8m spacing x 8m bench height. Blasting is being proposed to be carried out using ANFO with milli second delay detonators.	Blast Hole Drill Machine- HRB 150 mm dia, Ingersol Rand 115mm dia Blasting pattern 5m burden x 8m spacing x 8m bench height
3k	Provision of mining machineries in mineral benches	Hydraulic Excavator-2.0 Cu.mtr Front End Loader-1.7 Cu.mtr Tippers-20 tonnes Dozer-400 HP	Hydraulic Excavator-2.0 Cu.mtr- 8 nos Front End Loader-1.7 Cu.mtr-2 nos Tippers-20 tonnes-24 nos Dozer-335 HP-2 nos
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Boom length of 2 cum capacity excavator is suitable to maintain the bench height of 8 meters.	Bench height of 8m is suitable for Mining by 2m ³ excavator.
3m	Total area covered under excavation/pits	99.805 Ha	99.805 Ha
3n	Ore to OB ratio for the pit/mine during the year.	1:0.15	1:0.25
3o	Total area put in use under different heads at the end of year	i) OC Working- 101.147 Ha ii) Infrastructure & Road - 3.770Ha iv) Other(Sg Stacking and Water Reservoir)-26 HA	i) OC Working- 99.805 Ha iii) Infrastructure & Road -3.770Ha iv) Other(Sg Stacking and Water Reservoir)-26 HA

3p	Production of ROM mineral during the last five year period as applicable	Opencast Opencast Excavation and Dump Excavation and Rehandling Dump Rehandling 2015-16: 4945984 tonnes , Nil 2016-17 : 4135545 tonnes, 200010 tonnes 2017-18 : 4146100 tonnes, 200010 tonnes 2018-19: 4149280 toones, 200010 tonnes 2019-20: 3890540 tonnes, 460020 tonnes	Opencast Excavation and Dump Rehandling 2015-16: 3935000 tonnes , Nil 2016-17 : 3403929 tonnes, 449053 tonnes 2017-18 : 3570177 tonnes, 447820 tonnes 2018-19: 3854770 toones, 375215 tonnes 2019-20: 3298417 tonnes, 418647 tonnes
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3q General remarks of inspecting officers on method of mining etc.

Mining operations are being carried out by fully mechanised method with heavy earth moving machines. Bench height is being maintained is of 8 meters by deploying drilling machine of 150 mm dia dia bore holes and blasting operations are being carried out with burden and spacing of 5m and 8m using ANFO in combination of mili second delay detonators, the powder factor is 8.5 Tonnes/Kg.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
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4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	It is proposed to utilised the waste generated for backfilling in the mined out area	Dumping is being carried out in the earmarked area after complete excavation of ore.
4b	Location of topsoil, OB and mineral reject dumps	Waste generated is proposed to be dumped in between Section ML36A & Section ML38 Mineral reject: Nil Generated Top soil is proposed to be used directly for plantation	Waste dumping is being carried out at Section ML 36A to ML38
4c	Number of dumps within lease area and outside of lease area	Nil	Nil, as waste generated is being used fro backfilling
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Waste dumping has been proposed to be carried out within lease arae after complete exploitation of ore between Sec line ML 36A to ML 38	Waste dump is being carried out in mined out area within approved area
4e	Number of active and alive dumps.	Nil	440989 m3 of waste generated during the year is utilised for backfilling.
4f	Number of dead dumps.	No proposal	Nil
4g	Number of dumps established.	No proposal	Nil
4h	Whether Retaining wall or garland drain all along dumps are there.	No proposal	Nil
4i	Length of Retaining wall or garland drain all along dumps	No proposal	Nil
4j	Number of settling ponds	No proposal	Nil

4k	Specific comments of inspecting officer on waste dump management	Waste material generated has been utilised for backfilling in the mined out area of lease. The area of dumping will be properly stabilised.
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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.	Mineral to be fully extracted in between section line ML 36A to ML 38	All the minerals in proposed dump area is extracted in full	
5b	Area under backfilling of mined out area	Waste is to used for backfilling within section line ML 36A to ML 38 in 3.98 Ha in 2017-18 and 2018-19.	440989 m3 waste has been utilised for back filling in an area of 0.95 Ha in 2018-19 in the already earlier backfilled area.	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	2347 m3	Directly Utilized for Plantation	
5d	Total area fully reclaimed and rehabilitated	No part of the lease area will be fully reclaimed and rehabilitataed	Nil	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			Backfilling of waste material is under progress in mined out area and no area is fully rehabilitated so for.

Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
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6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	Annual report on PMCP to be submitted regularly	Annual Report on PMCP submitted for 2018-19
6b	Area available for rehabilitation (ha) .	No area is available for rehabilitation	Nil
6c	afforestation done (ha).	No proposal over mined out land	Nil
6d	No. of saplings planted during the year	No proposal over mined out land	Nil
6f	Any other method of rehabilitation	No proposal	Nil
6g	Cost incurred on watch and care during the year	No proposal	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	Backfilling has been carried out over the previous same partial backfilled area	Backfilling is being carried out as per proposal
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Entire waste generated is to be backfilled	440989 m3 of waste generated during the year is utilised for backfilling.
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	No proposal of afforestation on backfilled area as it is not matured	Nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal of reclamation and rehabilitation by making water reservoir	How ever about 18 Ha completely mined out area is being used for storing water.

6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No proposal of reclamation and rehabilitation by any other means	Nil	
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	760 nos sappling in 0.506 ha (within 7.5m safety zone)	2350 nos sapplings planted in 1.030 ha (within 7.5m safety zone)	
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	760 nos sappling in 0.506 ha	2350 nos sapplings planted in 1.030 ha	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Quarterly monitoring of Air,Noise,Wate r etc. is to be carried out	Regular monitoring is being done	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			Yearly report of Compliance of Proposals made in PMCP has been submitted and backfilling of waste material in mined out area, plantation are being carried out as proposed.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Entire ROM ore produced from the mine is to be dispatched.	ROM produced from the mine is being dispatched.No grade wise sorting is being done.	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	No Sorting of Mineral is proposed as entire ROM is being dispatched as Ore	Nil	
7c	Different grade of mineral sorted out at mines.	No Proposal	Nil	

7d	Any beneficiation process at mines .	No beneficiation process involved	Nil	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			Entire ROM produced from the mine is dispatched.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Yes proposed to generate 2437 Cum top soil and to be used for planation	4341 Cum generated during 2018-19 and utilised for plantation.	
8b	Concurrent use or storage of topsoil	Simultaneously Spreading for plantation	Being utilised for palantation purpose	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	No proposal of waste dump.Overburde n generated is to be utilised for backfilling in the mined out.	No dump of waste. Overburden removed is being backfilled in mined out area as proposed	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Waste generated to be utilised for backfilling in the mined out area	Waste generated is being utilised for backfilling	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Backfilling operation is to be carried out in mined out area	Backfilling operations are being carried out as proposed in the approved document.	

8f	Baseline information on existence of plantation and additional plantation done (Rule 41)		Lease area is part of Ralli reserve Forest with thick forestation.Planted 2209 nos of plants outside the ML.	
8g	Survival rate	No proposal but effort has to be made for maximum survival rate	84%	
8h	Water sprinkling on roads to control airborne dust	It is proposed to have an arrangement to suppress the air borne dust generated due to mining activity	Water sprinkler is deployed and regular sprinkling of water is being done to suppress the dust	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Waste material generated is being used for restoration of mined out area in the lease and is continuing. Quartely monitoring of Air, Noise Etc. is being done regularly and results shows that the impact due to mining is within permissibl limit. Plantation is being carried out to improve aesthetic beauty in and around lease area and dust suppression arrangement is there to reduce air pollution.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	MR and AR to be submitted as per statute	MR & AR is being submitted regularly	

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer in charge : Shri Kamlesh B Tembhurne, Geologist in charge : Shri Jayant V. Mohgaonkar Manager: Sri K.Rajasekhar Reddy	The same persons were found employed by ore raising agency.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Broken area: 99.805 Reclaimed/Rehabilitated area:51.965 Area used for waste disposal:3.980 Ha (17-19) 0.95 Ha (18-19) Occupied by plant, buildings, residential, welfare buildings & roads : 3.77 Other Purpose SG stacking & Water Reservoir)-26 Ha	Broadly matching
9d	Scrutiny of Annual return on afforestation	Number of trees planted during the year a) Within ML: 2350 (Survival Rate: 84%) b) Outside ML: 2209 (Survival Rate: 88%)	Found to be ok.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	No mineral reject produced

9f	Scrutiny of Annual return on ROM stock and/or graded ore	Closing Stock of Dump working Material 3100947 Tonnes balanced in separate stack	Stock is there.	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Production Cost Rs. 196.71/- per MT	Submitted	Previous Violation u/r 45 of MCDR-2017 is still pending and also show cause issued.
9h	Scrutiny of Annual return on fixed assets	Rs. 2019577 /-	Submitted	
9k	Scrutiny of Annual return on mining machineries	BACK HOE 2.000 CUM 8 TIPPER 14.000 CUM 24 DOZER 335.000 HP 2 BLAST HOST DRILL 115.000 MM 1 BLAST HOST DRILL 150.000 MM 2 AIR COMPRESSOR 450.000 CUM/MN 3 EXPLOSIVE VAN 3.000 TONNE 1 EXPLOSIVE VAN 6.000 TONNE 1 TRUCK 12.000 TONNE 1 Water Tanker 12 KL 3 Front End Loader 1.7 m3	Submitted.	

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

Date :

(S K MUDULI)

Indian Bureau of Mines