

**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 : **25**) **SHRI IBRAHIM SARIF**
Officer and ID No.
- (ii) Designation : Sr. Asst. Contrl. Mines
- (iii) Accompanying mine : Sri N P Sahare, AVP(Mines), Sri Jayant Mahagaonkar, G
Official with
Designation
- (iv) Date of Inspection : 06/02/2021
- (v) Prev.inspection date : 20/03/2020

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** : **50**
- (d) **Date of Expiry** : **31/03/2030**
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
		MP review under 17(1) MCR 2016	31/03/2020
		MP review under 17(1) MCR 2016	27/07/2020

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	None	None	Whole 210 Ha. area is explored for Geological axis 1. The exploration is proposed in the year 2018-18 for 16 boreholes, with total meterage 480 m. While against proposed total 36 boreholes drilled with 1155.42 m.
1b	Exploration over lease area for geological axis 1 or 2	No proposal	NA	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No exploration proposal approved for 2019-20	NA	
1d	Balance area to be explored to bring Geological axis in 1 or 2	No proposal	NA	Entire Lease area is explored under G1 level.
1e	Balance reserve as on 01/04/20	Reserves as on 01.04.2020 Reserves : 111- 20.855 mT Resources : 221 -10.681 mT, REserves to be depleted 2020-21 : 4.5 mT Balance reserves to be available : 111- 16.354 mT	Reserves estimated as on 01.04.2020 : 20.855 mT Reserves Depleted 2020-21 : 3.412342 mT Balance Reserves : 17.715 million tonnes Resources : 221 -10.681 mT,	

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.
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Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Section Line 29 to 37 N2103700- 2105400, E- 323200- E 324100- 227 MRL - 315 MRL N2104800- 2105400, E- 324600- E 325100- 267 MRL - 291 MRL	Development/ Exploitation is carried out within the proposed area.	Backlog of OB.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Top Soil , Ob benches to be maintained separately	Maintained	
2c	Stripping ratio or ore to OB ratio	1:0.41	1:0.195	
2d	Quantity of topsoil generation in m3	6301 cum	Nil	
2e	Quantity of overburden generation in m3	Quantity : 814817 Cum.	Quantity : 667953 MT	

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
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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	3890540 tonnes (Excavation) and 460020 tonnes dump rehandling totaling to 4350560 Tonnes for 2019-20	3298417 tonnes (Excavation)and 418641 tonnes dump rehandling totaling to 3717058 Tonnes for 2019-20	
3c	Recovery of sailable/usable mineral from ROM production	100%	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	No proposal for sub grade mineral generation.
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 Ore	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.	Drilling & Blasting is being carried out as proposed in Mining Plan	
3k	Provision of mining machineries in mineral benches	Hydraulic Excavator-2.0 Cu.mtr- 8 No.s Front End Loader-1.7 Cu.mtr- 2 No.s Tippers- 14 cum- 24 No. Dozer-335 HP- 2 no. Blast hole Drill-115 mm(1 No.) 150 mm(2 No.)	Hydraulic Excavator-2.0 Cu.mtr- 8 No.s Front End Loader-1.7 Cu.mtr- 2 No.s Tippers- 14 cum- 24 No., Truck- 12 Tonne- 1 No. Dozer-335 HP- 2 no. Blast hole Drill-115 mm(1 No.) 150 mm(2 No.)	
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 2 m3 capacity 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.	1:0.41	1:0.195
3o	Total area put in use under different heads at the end of year	i) OC Working - 101.134 Ha. ii) Infrastructure & Road - 3.770 Ha. iii) Mineral Storage : 15.71 Ha, iv) Infrastructure workshop, Road etc.:3.770 v) Pit under water reservoir & Green Belt : 65.307 Ha	i) OC Working - 101.134 Ha. ii) Infrastructure & Road - 3.770 Ha. iii) Mineral Storage : 15.71 Ha, iv) Infrastructure workshop, Road etc.:3.770 v) Pit under water reservoir & Green Belt : 65.307 Ha
3p	Production of ROM mineral during the last five year period as applicable	Opencast Excavation and 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

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
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	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 area 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	667953 T 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	Not done	
4i	Length of Retaining wall or garland drain all along dumps	No proposal	Nil	
4j	Number of settling ponds	No proposal	Not done	
4k	Specific comments of inspecting officer on waste dump management			Waste generated is being utilised for Backfilling.

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	2.695 Ha	667953 T of waste has been utilised for back filling in the mined out area of 0.2 Ha in the year 2019-20.	

5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	23560 cum of top soil to be utilised for plantation	No top soil generated during the year.
5d	Total area fully reclaimed and rehabilitated	No part of the lease area will be fully reclaimed and rehabilitated	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 far.

Progressive Mine Closure Plan:

Sl.No.	Item	Proposals	Actual work	Remarks
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 the year 2019-20	
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	
6e	Cumulative no .of plants	No proposal	Nil	
6f	Any other method of rehabilitation	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	667953 T of waste generated during the year is utilised for backfilling.	
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation 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	Nil	However 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	Nil	
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	630 nos sappling in 0.42 ha (within 7.5m safety zone)	1230 nos sapplings planted (within 7.5m safety zone) over an area of 0.944 Ha	
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	No proposal for rehabilitation	Nil	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Quarterly monitoring of Air, Noise, Water 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 23560 Cum top soil and to be used for planation	Nil	
8b	Concurrent use or storage of topsoil	Simultaneously spreading on th dump for the plantation	No Top soil generated during the year	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	No proposal of waste dump.Overburden 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 0.20 ha area
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 of 2.695 ha area	Backfilling operations are being carried out over 0.20 Ha area
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)		Cumulative plantation : Within ML : 48182 Nos. Outside ML : 80777 Nos.
8g	Survival rate		85%
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.
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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	M.R. submitted on time up to December, 2020	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer : Sh. Kamlesh Tembhurne Geologist : Sh. Jayant Mohgaonkar Manager : K.Rajasekhar Reddy of TSMDC	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.	i) OC Working - 101.134 Ha. ii) R & R - 53.935 Ha. iii) Infrastructure & Road - 3.770 Ha. iv) Other (Sg stacking and water reservoir) - 26 Ha. Total Area - 184.839 Ha.	mined out Area for water reservoir is considred under R & R but the area is considered fpr computation of FA submitted to IBM	
9d	Scrutiny of Annual return on afforestation	a) Within ML : 1230 (Survival Rate : 85%) b) Outside ML : 3771 (Survival Rate : 89%)		
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	Nil	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Closing Stock of subgrade 2682300 MT balanced in separate stack	As reported	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Production Cost: Rs.202.13/- per MT.		Previous Violation u/r 45 of MCDR-2017 is still pending and also show cause issued.

9k Scrutiny of BACK HOE 2.000 As reported.
Annual return on CUM 8
mining TIPPER
machineries

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

2

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

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

Date :

(SHRI IBRAHIM SARIF)

Indian Bureau of Mines