INDIAN BUREAU OF MINES MINERALS DEVELOPMENT AND REGULATION DIVISION

MCDR inspection REPORT

Hyderabad regional office

Mine file No : AP/KNL/LST-123/HYD

Mine code : 38APR11056

(i)	Name of the Inspecting Officer and ID No.	:	M029) MADHU SUDHAN YADAV M
(ii)	Designation	:	Assistant Controller Mine
(iii)	Accompaning mine Official with Designation	:	Sri.C.Sreenivasa Reddy, Manager(Mines), Sri.Shivanaga
(iv)	Date of Inspection	:	23-DEC-21
(v)	Prev.inspection date	:	28-SEP-20
	PAR	т-	I : GENERAL INFORMATION
(a)	Mine Name	:	RACHERLA

1.	(a)	Mine Name	:	RACHERLA	
	(b)	Registration NO.	:	522	
	(c) Category		:	A Mechanised	
	(d) (e)	Type of Working Postal address	:	Opencast	
		State	:	ANDHRA PRADESH	
		District	:	KURNOOL	
		Village	:	RACHERLA	
		Taluka	:		
		Post office	:	PEAPALLY	
		Pin Code	:		
		FAX No.	:	08522- 249920.	
		E-mail	:		
		Phone	:	08522- 249918/19	
	(f)	Police Station	:	RACHERLA	
	(g)	First opening date	:	15-JAN-98	
	(h)	Weekly day of rest	:	SUN	
2.	Address for correspondance		:	M/S RAIN COMMODITIES BOINCHERUVUPALLY (V), KURNOOL-518220	LTD, PEAPULLY(M),
3.	(a)	Lease Number	:	APR1257	
	(b)	Lease area	:	510.25	
	(c)	Period of lease	:	30	
	(d)	Date of Expiry	:	29-JAN-27	
4.	Mine	ral worked	:	LIMESTONE	Main
				SHALE	Associated

5.	Name	and Address of	the		
		Lessee	:	RAIN COMMODITIES LTD	
				34,GREEN TOWERS, SRINAGAR	
				COLONY HYDERABAD HYDERABAD	
				TELANGANA Dhone:08522-249918/19 040-40401234	
				FAX :08522-249920	
				TAA 000522 219920	
		Owner	:	N.SUJITH KUMAR REDDY	
				RAIN INDUSTRIES LTD, PLOT	
				34 SRINAGARCOLONY HYDERABAD	
				Phone: 3740737, 3740747	
				FAX : 3740770	
				1111 0 0,10,70	
		Agent	:	M.Achi Reddy	
				Rain Cements Ltd.	
				Racherla(V) Kurnool dt.	
				Phone:	
				FAX :	
		Mining Enginee	r		
		Name	:	K NAGA THULASI REDDY Full Time	
		Qualification	:	B E MINING	
		Appointment /	:	20-APR-00	
		Termination da	ite		
		Geolesist			
		Geologist		Dr. V. Drobbeltore Doddy Eull Time	
		Name		MSa Coo	
		Qualification		MSC. GEO 24 DEC 12	
		Termination da	ite		
		Managor			
		Mallager		k Domonionous Doddu	
		Qualification		K.Raman Janeya Reddy	
		Qualification	•	01 - TAN - 16	
		Termination da	ite	01-0AN-10	
6.	Date	of approval of	Mini	ng : Mining Scheme rule 12 MCDR1988	22-APR-03
	Plan/	Scheme of Minin	ıg	Modif.approved Mining Scheme	02-MAY-06
				Modif.approved Mining Scheme	19-DEC-06
				Mining Scheme rule 12 MCDR1988 Fresh under rule 22 MCP1960	16-APR-08
				Mining Scheme rule 12 MCDR1988	12-SEP-13
				MP review under 17(1) MCR 2016	21-MAR-18
				MP modif under 17(3) MCR 2016	17-JUL-20

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
la	Backlog of previous year	No proposal	Nil	
1b	Exploration over lease area for geological axis 1 or 2	2020-21 - Nil 2021-22 - 06 Nos.	2021-22 - Nil	Lessee has reported that proposed drilling will be completed before March'21.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No proposal	Nil	
ld	Balance area to be explored to bring Geological axis in 1 or 2	2020-21 - Nil 2021-22 - 39.25 Ha of G3 level to G1 level of exploration	Nil	
le	Balance reserve as on 01/04/20		Proved Mineral Reserves as on 01/04/2021 - 316.5685 million tonnes	
1f	General remarks of inspecting officers on geology, exploration etc			Lessee has reported that 6 Nos. boreholes proposed to bring the G3 level area to G1 level in the Modified Mining Plan will be completed by March'21 after harvesting of crops in the proposed drilling area.

Deve	elopment :			
Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	N1684500 - N1684900 E815800 - E816550	Work done within the proposed co-ordinates.	

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	No topsoil benches proposed. Proposed to maintain seperate bench for flaggy limestone	Flaggy limestone occuring above the payzone of limestone is being worked separetely.	
2c	Stripping ratio or ore to OB ratio	No proposal	Nil	
2d	Quantity of topsoil generation in m3	2020-21 - 4250 cu.m	2020-21 - 5512 cu.m	Thin layer of topsoil around 0.5 thickness is being scrapped and utilised for plantation purpose
2e	Quantity of overburden generation in m3	No proposal	Nil	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			The flaggy limetsone being generated as mineral reject is occuring above the payzone of limestone.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One	One	
3b	Quantity of ROM mineral production proposed	2020-21 - 2397389 Tonnes	2020-21 - 1581580 Tonnes	
3с	Recovery of sailable/usable mineral from ROM production	2019-20 - 85 %	1581580 Tonnes of limestone from payzone and 251475 Tonnes of mineral reject generated from mineralised zone in 2020-21. Thus a recovery of 85% is achieved.	
3d	Quantity of mineral reject generation	2020-21 - 405937 Tonnes (Flaggy limestone is generated as mineral reject).	2020-21 - 251475 Tonnes of flaggy limestone generated as mineral reject.	

3e Grade of mineral Cao - 36.48% Cao - 36.48% SiO2 - 25.79% SiO2 - 25.79% rejects generation and threshold value declared. 3f Quantity of sub No proposal Nil grade mineral generation. 3q Grade of sub Not applicable Nil grade mineral generation Manual / No proposal 3h Nil Mechanised method adopted for segregating from ROM 3i Any analysis or No proposal Nil beneficiation study proposed and carried out for sub grade mineral and rejects. Зj Provision of Drilling and Duirng inspection it was drilling and blasting observed that Wagon blasting in proposed in drill being used for the mineral drilling with a blast mineral benches benches. hole dia of 150 mm & depth of 9 m, spacing of 5 meters and burden of 3 meters. Blasting with ANFO & slurry explosives with NONELS as initiating system. Provision of 3k It was During inspection, mining proposed to it was observed that machineries in use wagon wagon drills, dumpers & mineral benches excavators are being drills, exvators & used for drilling, dumpers for loading & transportation drilling, of ore to crushing loading & plant. transporting of ore to crushing plant. 31 Whether height During inspection it It was of benches in was noticed that the proposed to overburden and maintain the bench height is being mineral suitable bench height maintained 8 m for method of of 8 meters and digging height of the excavators are mining proposed in MP/SOM compatible with bench height.

3m	Total area covered under excavation/pits	58.95 ha till 2022-23	53.19 ha till 2020-21	
3n	Ore to OB ratio for the pit/mine during the year.	No poposal	No OB produced	
30	Total area put in use under different heads at the end of year	Total area put to use as per plan is 88.69 ha till 2022- 23.	Total area put to use till 2020-21 is 80.185 Ha.	
3p	Production of ROM mineral during the last five year period as applicable	2016-17- 2724004 Te 2017-18- 2719625 Te 2018-19 - 1981121 Te 2019-20 - 2221680 Te 2020-21 - 2397389 Te	2016-17- 1282230 Te 2017-18- 1332767 Te 2018-19 -1496000 Te 2019-20 - 1211500 Te 2020-21 - 1581580 Te	Lessee has reported that ROM production is less due to less market demand.
3q	General remarks of inspecting officers on method of mining etc.			Mining is carried out in common lease boundary with Racherla Limestone Mine-2 by obtaining permission from DGMS.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Flaggy limestone generated was proposed to dump separately.	Being dumped separately as proposed.	
4b	Location of topsoil, OB and mineral reject dumps	In the year 2020-21, mineral reject dumping was proposed at N1685865- 168570 & E817613-817505	Mineral reject dumping was done at the proposed dump location in 2020- 21.	
4c	Number of dumps within lease area and outside of lease area	Two dumps within the lease area.	Two dumps are within the lease area. Dumping is being carried out only at one dump.	Two old dumps, Mineral reject-1 & Yellow ochre-1 is noticed outside the lease area.

4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	UPL marked on the conceptual plan	Mineral reject is being dumped at proposed site proved for the presence of mineral.	
4e	Number of active and alive dumps.	One dump proposed	Active -1 dump	
4f	Number of dead dumps.		One dead dump has been noticed within the mining lease.	
4g	Number of dumps established.	2020-21 - Nil	2020-21 - Nil	
4h	Whether Retaining wall or garland drain all along dumps are there.	265m of Garland drain proposed along the grade dumps Retaining Wall - No proposal	Garland drain made around the mineral reject dump	
4i	Length of Retaining wall or garland drain all along dumps	Retaining wall - No proposal Garland drain - 1348m	Garland drain - 1350m	
4j	Number of settling ponds	No proposal	Nil	
4k	Specific comments of inspecting officer on waste dump management			The mineral reject dumps are of flaggy limestone which is having a Cao-36.48% and Si02-25.79%.

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 Proposal	Nil	
5b	Area under backfilling of mined out area	No proposal	Nil	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Proposed	The top soil generated is used for plantation.	

5d	Total area fully reclaimed and rehabilitated	No	proposal	Nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.			

The pit is not mined out upto its ultimate pit limit to start backfilling.

Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
ба	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	To be submitted as per rule	Submitted	
6b	Area available for rehabilitation (ha) .	No proposal	Nil	
бс	afforestation done (ha).	2020-21 - 0.56 Ha	2020-21 - 1.08 Ha	
6d	No. of saplings planted during the year	2020-21 - 1000 Nos.	2020-21- 2410 Nos.	
бе	Cumulative no .of plants	No proposal	16362 Nos. as per the PMCP data submitted.	
6f	Any other method of rehabilitation	No proposal	Nil	
бg	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	No proposal	Nil	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No proposal	Nil	

1	6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on on backfilled area	No proposal	Nil	
	6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal	Nil	
	61	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No proposal	Nil	
	бm	Compliance of rehabilitation of waste land within lease (i)afforestation	No proposal	Nil	
	бп	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No proposal	Nil	
	60	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No proposal	Nil	
	бр	Compliance of environmental monitoring (core zone and buffer zone)	Quarterly environmental monitoring of core and buffer zone.	Quarterly environmental monitoring carried out during 2020-21 and all the parameters are within the permissible limit.	
	δq	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			No area of pit has reached its ultimate pit limit to start Reclamation and Rehabilitation and backfilling activities.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	2397389 Tonnes of limestone from payzone and 405937 Tonnes of mineral reject generation was anticipated from the mineralised zone.	1581580 Tonnes of limestone from payzone and 251475 Tonnes of mineral reject generated.	
7b	Method of grade- wise mineral sorting i.e. manual or mechanical.	No proposal	Nil	
7c	Different grade of mineral sorted out at mines.	No proposal	Nil	
7d	Any beneficiation process at mines	No proposal	Nil	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			Flaggy limestone is considered as mineral reject. However it is used for blending whenever required.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Proposed to scrap and use for plantation	Thin layer of around 0. meters of topsoil scrapped and utlised for plantation.	5 r
8b	Concurrent use or storage of topsoil	Proposed	Top soil is used for plantation	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Seperated dump for flaggy limestone is proposed	Seperated dump for flaggy limestone is maintained	

8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	Nil	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal	Nil	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	No proposal	Nil	
8g	Survival rate	80%	75%	
8h	Water sprinkling on roads to control airborne dust	Water Tankers and sprinklers to be provided for dust supression.	Water tanker & sprinklers provided for dust supression.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Plantation is done on the old dead dumps and in the buffere zone.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	To be Submitted.	Monthly and Annual Returns are being submitted regularly.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer - K. Naga Thulasi reddy Geologist- Dr. Y Prabhakar Reddy	Mining Engineer - Sri. K. Naga Thulasi reddy Geologist- Sri. Shivanagaraju	Sri. Shivanagaraju, Geologist appointed on 14/10/2021.

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Opencast pit- 51.095 ha Dump- 11.09 ha Infrastructure - 8.605 ha	Same as submitted.	
9d	Scrutiny of Annual return on afforestation	2410 outside lease area	Broadly as submission and same quantity is verified in afforestation register maintained.	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	251475 Tonnes of mineral reject is reported	251475 Tonnes of mineral reject reported is verified in the register maintained.	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	1581580 Tonnes is reported as ROM production	1581580 Tonnes	
93	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Cost of production is reported as Rs.149.46/-	Total overhead cost is not matching with the cost per tonne calculation. Advised to correct the annual returns since it has been referred back by the MMS division	Lessee has reported that cost of production decreased due to change in tippers. New tippers fuel consumption is 8-9 lt/hr compare to old dumpers of fuel consumption 19-20 lts/hr.
9h	Scrutiny of Annual return on fixed assets	The value of fixed assets reported by the lessee in annual returns is Rs.180999950/-	Fixed assest couldn't be verified.	
9k	Scrutiny of Annual return on mining machineries	Tippers - 06 Nos. Backhoe - 02 Nos. Dozer - 01 No. Blast hole drill machine - 1 No. Water tanker - 1 No.	Machineries found in the mining area.	

Details of violations observed during current inspection and compliance position of violation pointed out							
Vi			Show c	ouse position			
Rule NO.	Issued on	Compliance of	n Rule	NO.	Issued on Compliance on		

Date :

(MADHU SUDHAN YADAV M)

Indian Bureau of Mines