INDIAN BUREAU OF MINES MINERALS DEVELOPMENT AND REGULATION DIVISION

MCDR INSPECTION REPORT

Hyderabad regional office

	Mine f	Eile No : AP/KNL/LST-1	23,	Mine code : 38APR11056
	(i)	Name of the Inspecting Officer and ID No.	:	MQ17) MANISH K MAINDIRATTA
	(ii)	Designation	:	Regional Controller Mines
	(iii)	Accompaning mine Official with Designation	:	Shri NagaThulasi Reddy Mining Engineer, Shri Prabhaka
	(iv)	Date of Inspection	:	28/11/2019
	(v)	Prev.inspection date	:	17/07/2018
		PAR	т-	I : GENERAL INFORMATION
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	: 15/01/1998	
	(h)	Weekly day of rest	: SUN	
2.	Addro	ess for espondance	: M/S RAIN COMMODITIES LTD, BOINCHERUVUPALLY (V), PEAPULLY(M) KURNOOL-518220	,

3.	(a)	Lease Number	: APR1257	
	(b)	Lease area	: 510.25	
	(C)	Period of lease	: 30	
	(d)	Date of Expiry	: 29/01/2027	
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 Phone:08522-249918/19, 040-40401234 FAX :08522-249920	
	Owner	:	N.SUJITH KUMAR REDDY RAIN INDUSTRIES LTD, PLOT 34 SRINAGARCOLONY HYDERABAD HYDERABAD TELANGANA Phone: 3740737,3740747 FAX : 3740770	
	Agent	:	M.Achi Reddy Rain Cements Ltd. Racherla(V) Kurnool dt. KURNOOL ANDHRA PRADESH Phone: FAX :	
	Mining Enginee	er		
	Name	:	K.NAGA THULASI REDDY,Full Time	
	Qualification	:	B.E.MINING	
	Appointment/ Termination da	: ite	20/04/2000	
	Geologist			
	Name	:	Dr.Y.Prabhakara Reddy,Full Time	
	Qualification	:	MSc. Geo	
	Appointment/ Termination da	: ite	24/12/2012	
	Manager			
	Name	:	k.Ramanjaneya Reddy	
	Qualification	:		
	Appointment/ Termination da	: ite	01/01/2016	
6.	Date of approval of Plan/Scheme of Minin	Mini Ng	.ng : Mining Scheme rule 12 MCDR1988 Modif.approved Mining Scheme Modif.approved Mining Scheme Mining Scheme rule 12 MCDR1988 Fresh under rule 22 MCR1960 Mining Scheme rule 12 MCDR1988 MP review under 17(1) MCR 2016	22/04/2003 02/05/2006 19/12/2006 16/04/2008 30/07/2009 12/09/2013 21/03/2018

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
la	Backlog of previous year	2018-19-3 bore holes proposed	No bore hole undertaken	Violation being issued.
1b	Exploration over lease area for geological axis 1 or 2	2018-19-3 bore holes proposed	No bore hole undertaken Area under G1 = 461.12 ha G2 = 9.88 ha G3 = 39.25 ha	
lc	Exploration Agencies and Expenditure in lakh rupees during the year	No proposal	Nil	
1d	Balance area to be explored to bring Geological axis in 1 or 2	9.88 ha of area under G2 exploration was proposed for exploration in 2018-19.	The exploration has not been done. However 39.25 ha of non mineralised land is also having limestone at a depth of 23 to 37 m approximately as per the bore hole.	t D e
le	Balance reserve as on 01/04/20	As on 31.12.2017 111/122 = 327.99 mT 211/222 = 101.80 mT 331/332 = 49.4 mT	Depletion from 1.1.18 to 31.3.19 = 1.917 mT Balance 111/122 = 326.73 mT 211/222 = 101.80 mT 331/322 = 49.4 mT Total reserves = 326.73 mT Remaining resource 151.3	2

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	N168499- N1684200 E816500- E815600 depth upto 470mRL	The work has been done within same grid upto a depth of 448mRL	violation being issued.

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	proposed	The flaggy limestone occuring above the pay zone of limestone is being worked separtely.	
2c	Stripping ratio or ore to OB ratio		Ore to waste ratio= 1496000: 392650T i.e,1:0.262	Flaggy limestone occuring above the pay zone of limestone is booked as mineral reject. Total of 392650 T of flaggy limestone is generated as mineral reject.
2d	Quantity of topsoil generation in m3	3463 cu m	6194 cu m	
2e	Quantity of overburden generation in m3	No Overburden generation was anticipated.	No overburden generation reported. However the flaggy lime stone occuring above the limestone is booked as mineral reject.	178477 cu m of flaggy limestone generated as OB and No Ochre has been produced.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc		The flaggy limestone being generated as mineral reject is occuring above the payzone of limestone and in all the records it is being shown accordingly.	

Exploitation:

	Sl.No. Item	Propasals	Actual work	Remarks
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3a	Number of pit proposed for production	One	One	The pit is extended within two leases wqith NW-SE orientation. there are two complete benches of mineral reject in SE direction of the pit and 8 benched in NW. The pit has extended upto a depth of 450mRL
3b	Quantity of ROM mineral production proposed	1981121 T of limestone from payzone and 467847 T of mineral reject generation was anticipated from the mineralised zone.	1496000 T ROM of limestone from payzone and 392650Tof mineral reject generated. However the ROM production has been reported as 1496000 T only.	
3c	Recovery of sailable/usable mineral from ROM production	2018-19= 80.8%	1496000 T ROM of limestone from payzone and 392650Tof mineral reject generated from mineralised zone in 2018-19 . Thus a recovery of 79% is achieved.	
3d	Quantity of mineral reject generation	Flaggy Limestone is generated as mineral reject = 467848 T	Flaggy limestonegenerated as mineral reject 392650 T	
3e	Grade of mineral rejects generation and threshold value declared.	No proposal	CaO-35% as reported.	The resource need to be assessed as per the new threshold value published by IBM.
3f	Quantity of sub grade mineral generation.		NIL	
3g	Grade of sub grade mineral generation			

3h	Manual / Mechanised method adopted for segregating from ROM	No segregation proposed	The mineral in the contact zone is recovered by visual segraegation.	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal	Not undertaken	
3j	Provision of drilling and blasting in mineral benches	drilling and blasting proposed with nonel initiating device.	ANFO as column charge and Slurry explosive as base charge is used with Nonel initiation system	
3k	Provision of mining machineries in mineral benches	mechanised mining by Excavator- Dumper proposed	2 shovels of 2.3 cu m capacity, 1 back hoe of 2.6 cu m capacity and 5 dumpers are being used.	
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	No proposal	boom height of excavtor is suitable for proposed bench hegith 8m	
3m	Total area covered under excavation/pits	58.95 hectare till 2022-23	51.095 hectare till 2018-19	
3n	Ore to OB ratio for the pit/mine during the year.	No proposal	No Overburden produced.	1496000 T ROM of limestone from payzone and 392650Tof mineral reject generated.
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 hectare till 2022-23	within ML Under pit- 51.095 ha. dump- 8.828 ha.	The old dumps of ochre and mineral reject (flaggy limestone is there outside the lease area)

3p	Production of	 cement grade limestone
	ROM mineral	production:
	during the last	2014-15- 1545010 T
	five year period	2015-16 -1161756 т
	as applicable	2016-17- 1282230 T
		2017-18- 1332767 т
		2018-19 -1496000 T
3q	General remarks of inspecting officers on method of mining etc.	

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 be dumped separately.	Being dumped separately as proposed.	
4b	Location of topsoil, OB and mineral reject dumps	In the year 2018-19, mineral reject dumping was proposed at N1685800- 16585500 E817500-817300	mineral reject dumping was done at the same place in 2018-19.	
4c	Number of dumps within lease area and outside of lease area	two dumps within ML	Two dumps are ther within Mining Lease. Dumping is being done only at one dump.	However two dumps each for mineral reject and yelow ocre each, outside the lease have also been noticed.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	UPL marked on the conceptual plan.	dumping is done at the proposed site proved for the presence ofmineral.	
4e	Number of active and alive dumps.	dumping at one dump was approved	dumping done at the proposed site.	
4f	Number of dead dumps.		Only one dead dump has been noticed within mining lease.	

4g	Number of dumps established.	two dumps are there in the lease	two within mining lease
4h	Whether Retaining wall or garland drain all along dumps are there.		
4i	Length of Retaining wall or garland drain all along dumps	retaining wall and garland drain proposed around dump	provided as per proposal.
4j	Number of settling ponds	No proposal	NIL
4k	Specific comments of inspecting officer on waste dump management		The dumps are of flaggy limestone which may fall within the threshold value published by IBM now. The reassessment of resource in the dumps need to be done.

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	The pit is not mature for the prupose.	
5b	Area under backfilling of mined out area	No proposal	NIL, as the area is not mature for the purpose.	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Porposed	The top soil generated is used for plantation.	
5d	Total area fully reclaimed and rehabilitated	No proposal	Area under excavation is not mature for the purpose.	

5e	General remarks	Are is not mature for
	of inspecting	the purpose of
	officers on	reclamation and
	backfilling and	rehabilitation.
	reclamation etc.	

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).	required to be submitted	the report submitted.	
6b	Area available for rehabilitation (ha) .	No proposal	NIT	The lower benches are found to be submerged in water.
бс	afforestation done (ha).	No proposal for rehabilitation of benches	no work undertaken.	
6d	No. of saplings planted during the year	No proposal of plantation of saplings for rehabilitation of benches	No done accordingly.	
бе	Cumulative no .of plants	No proposal of plantation of saplings for rehabilitation of benches	Not done accordingly.	
6f	Any other method of rehabilitation			
6g	Cost incurred on watch and care during the year			
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No proposal	Not applicable at present as pit is not mature for the purpose.	

бi Compliance on No proposal Not applicable at reclamation and present as pit is not rehabilitation mature for the purpose. by backfilling (ii) Voids filled by waste / tailings бj Compliance on No proposal Not applicable at reclamation and present as pit is not rehabilitation mature for the purpose. by backfilling (iii)Afforestati on on backfilled area 6k Compliance on No proposal Not applicable at Presently the reclamation and present as pit is not bottom benches are rehabilitation mature for the purpose. used for water by backfilling harvesting and (iv) subsequently used Rehabilitation for plant and mine by making water activities. reservoir 61 Compliance on No proposal Not applicable at reclamation and present as pit is not rehabilitation mature for the purpose. by backfilling (v)any other specific means. Compliance of 2000 saplings 766 saplings have been 6m rehabilitation were proposed planted within lease. of waste land for plantation 1493 saplings have within lease over 1 hectare reported to be planted (i)afforestation area outside the lease area. бn Compliance of 2000 saplings 766 saplings have been were proposed planted within lease. rehabilitation of waste land for plantation 1493 saplings have within lease over 1 hectare reported to be planted (ii)Area area outside outside the lease area. rehabilitation the mining (ha) lease. 60 Compliance of no proposal nil rehabilitation of waste land within lease (iii)Method of rehabilitation

Compliance of	proposed	being done	regularly.
environmental			
monitoring (core			
zone and buffer			
zone)			
	Compliance of environmental monitoring (core zone and buffer zone)	Compliance of proposed environmental monitoring (core zone and buffer zone)	Compliance of proposed being done environmental monitoring (core zone and buffer zone)

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	1981121 T of limestone from payzone and 467847 T of mineral reject generation was anticipated from the mineralised zone.	1496000 T ROM of limestone from payzone and 392650Tof mineral reject generated. However the ROM production has been reported as 1496000 T only.	
7b	Method of grade- wise mineral sorting i.e. manual or mechanical.	no proposal	only simultaneous blending is done when required.	
7c	Different grade of mineral sorted out at mines.	cement grade mineral produced.		
7d	Any beneficiation process at mines	No proposal	not done.	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			

Environment:

Sl.No. Item

Propasals

Actual work

Remarks

8a	Separate removal and utilization of topsoil (Rule 32)	proposal was there for separate removal and utilisation was there	Being done accordingly.
8b	Concurrent use or storage of topsoil	concurrent use proposed for top soil	being done accordingly.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	separate dump for flaggy limestone proposed to be generated in 2018-19 was there	Has been done accordingly.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	Not done.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal for phased reclamation and rehabilitation of land affected by mining was there in 2018- 19.	No undertaken accordingly.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	In 2018-19, 2000 saplings proposed for plantation outside mine lease over 1 hectare area	766 saplings planted within mine lease and reported that 1493 saplings planted outside mine lease in 2018-19. Within lease area plantation is done along the 7.5 buffer zone in the southern part of the lease and along the road to magazine and the by the side of mineral reject dump to the west of pit.
8g	Survival rate	80%	80%

8h	Water sprinkling Porposed on roads to
	control airborne dust
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	MR submitted upto October 2019 AR submitted upto 2018-19.		
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 - k Naga Thulasi reddy Geologist- Dr Y Prabhakar Reddy	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	within ML Under pit- 51.095 ha. dump- 8.828 ha.	same as submitted	
9d	Scrutiny of Annual return on afforestation	Plantation reported- 766 saplings in mining lease 1493 saplings OML	broadly as per submission.	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	392650 T ofd mineral reject generation reported	392650T of mineral reject is generated in 2018-19.	Lessee has produced 404006 T, used 11356 T and left with 39265 T of material to be shifted to dump for the prupose.

being done regularly.

9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM generation reported as 1496000 T	ROM generation reported as 1496000 T, whereas the mineral reject generated is not reported as part of ROM from the minerlised zone.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Sale value reported as Rs 182.43 PMT	No specific comment. the COP is in general as per the cost of production in the adjoining areas.
9h	Scrutiny of Annual return on fixed assets		Data submitted
9k	Scrutiny of Annual return on mining machineries	dumper shovel, back hoe excavator, dozer etc being used as submitted	dumper shovel, back hoe excavator, dozer etc being used as 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 or	n Rule NO.	Issued on Compliance on	
MCDR17 Rule 11(1)	10/12/2019				
MCDR17 Rule 45(7)(a)10/12/2019					

Date :

(MANISH K MAINDIRATTA)

Indian Bureau of Mines