

**INDIAN BUREAU OF MINES  
MINERALS DEVELOPEMMENT 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 : **PR09** ) **M.Pratap.Reddy**  
Officer and ID No.
- (ii) Designation : Assistant Mining Geologis
- (iii) Accompanying mine : RAMANJANEYA REDDY GM(MINES)  
Official with  
Designation
- (iv) Date of Inspection : 15/11/2016
- (v) Prev.inspection date : 03/02/2016

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **RACHERLA**
- (b) **Registration NO.** :
- (c) **Category** : A Mechanised
- (d) **Type of Working** : Opencast
- (e) **Postal address**
- 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. **Address for correspondance** : 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. **Mineral 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 SRINAGAR COLONY HYDERABAD  
 HYDERABAD TELANGANA  
 Phone: 3740737, 3740747  
 FAX : 3740770

Agent : D.S.N.V.PRASAD  
 BOINCHERUVUPALLI VILLAGE  
 KURNOOL DISTRICT KURNOOL  
 ANDHRA PRADESH  
 Phone: 08522-249952  
 FAX : 08522-249920

## Mining Engineer

Name : K.NAGA THULASI REDDY, Full Time  
 Qualification : B.E. MINING  
 Appointment/ : 20/04/2000  
 Termination date

## Geologist

Name : Dr.Y.Prabhakara Reddy, Full Time  
 Qualification : MSc. Geo  
 Appointment/ : 24/12/2012  
 Termination date

## Manager

Name : S.G.KULKARNI  
 Qualification : B.SC WITH FCC  
 Appointment/ : 24/10/2007  
 Termination date

6. Date of approval of Mining	:	Mining Scheme rule 12 MCDR1988	22/04/2003
Plan/Scheme of Mining	:	Modif.approved Mining Scheme	02/05/2006
	:	Modif.approved Mining Scheme	19/12/2006
	:	Mining Scheme rule 12 MCDR1988	16/04/2008
	:	Mining Scheme rule 12 MCDR1988	12/09/2013

## PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	23 Boreholes have proposed in the year 2015-16	The Lessee has carried out the Exploration by means of Core drilling. So far the lessee has completed about 63 Corebore holes.	
1b	Exploration over lease area for geological axis 1 or 2	G1 scale of exploration	An extent of 471 ha mineralised area has been covered under G1 scale of Exploration.	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No agency name is proposed.	The exploration has been carried out by J.P. Kore Drilling, 301, Mythri Residency, Street No. 7, Hyderabad - 500 007. The expenditure incurred is Rs Rs. 46,83,320/ for drilling of 63 corebore holes.	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	The entire mineralised area(471 ha) has been covered under G1 scale of exploration.	
1e	Balance reserve as on 01/04/20	The balance reserve after depletion of proposed production the reserve stands at 148.59 million tonnes.	After depletion of actual production the reseve as on 1.4.2016 stands at 152.54 million tonnes	The balance reserve is on higher side as the proposed rate production has not been achieved due less in take of Limestone by the plant.
1f	General remarks of inspecting officers on geology, exploration etc	The deposit is simple bedded deposit. 104 core boreholes have been proposed.	It is simple bedded deposit.No major structural features have been observed.The lessee has carried out drilling of 163 core boreholes. The entire mineralised area has been covered under G1 scale of exploration.	The total proposed exploration of the five years period has been completed by the third year itself and thus total area mineralised area has been covered under G1 scale of exploration.

## Development :

Sl.No.	Item	Propasals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	Between grid lines S1200-S200 and W1300-W150	The development cum production is achieved in the proposed location itself.	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	No benches in top soil,OB were proposed. The production is envisaged from seven benches.	The benches in mineral as proposed were formed.	
2c	Stripping ratio or ore to OB ratio	1:0.087	1:0.362	The OB ratio was more on account of intercalated waste material that has been encountered in thr form of cavity fillings.
2d	Quantity of topsoil generation in m3	Nil	Nil	
2e	Quantity of overburden generation in m3	91425m <sup>3</sup>	101794 m <sup>3</sup>	The OB generated is on higher side on account of the incidence of more cavity fillings.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	The development cum production cum is proposed in the seven benches.	The development cum production cum is achieved in the proposed seven benches only.	

### Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One pit	One pit.	
3b	Quantity of ROM mineral production proposed	27,56,718 T	11,61,756 T	Less production achieved on account of less intake from the Plant.
3c	Recovery of sailable/usable mineral from ROM production	27,56,718 T	11,61,756 T	There is no recovery loss.
3d	Quantity of mineral reject generation	No mineral reject generation proposals.	There is no generation of mineral rejects.	

3e	Grade of mineral rejects generation and threshold value declared.	Nil	The grade of Limestone occurring the subject ML is much above the Threshold limits.	
3f	Quantity of sub grade mineral generation.	91425 M <sup>3</sup>	47822 M <sup>3</sup>	
3g	Grade of sub grade mineral generation	Cao - 35.60% Sio2 - 22.80%	Cao - 40.11% Sio2 - 23.25 %	
3h	Manual / Mechanised method adopted for segregating from ROM	No segregation proposals envisaged.	The entire ROM is handled by mechanical method (machinary)	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No beneficiation is proposed.	No beneficiation is done except physical sizing.	
3j	Provision of drilling and blasting in mineral benches	Wet drilling & Controlled blasting with NONELS is proposed	Drilling and blasting is done as proposed.	
3k	Provision of mining machineries in mineral benches	Excavators & Dumpers	Done as proposed.	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Height of Limestone bench is proposed at 8m	The bench heights are maintained as proposed in the AMP.	
3m	Total area covered under excavation/pits	10.02 ha	6.0 ha	Excavation is less due to less demand from the plant.
3n	Ore to OB ratio for the pit/mine during the year.	1:0.087	1:0.367	

3o	Total area put in use under different heads at the end of year	Under mining =54.81 Ha, Green belt= 10.70 ha, Sub Grade dump = 2.28 Ha, Magazine-0.25 Ha, Roads = 0.50 Ha, Total = 68.54 Ha	Under Mining= 49.63 Ha, Green belt = 10.89 Ha, Sub Grade Dump = 7.43 Ha, Roads = 3.67 Ha, Magazine-0.25 Ha Total = 71.87 Ha	The extent of subgrade dump and Roads is more as the sub grade dump was earlier proposed in existing dump out side ML area and now the subgrade materis is dumped with in the ML area.A new road has been laid for this subgrade dump.
3p	Production of ROM mineral during the last five year period as applicable	2011-12= 32,99,625 T, 2012-13 = 32,99,850 T, 2013-14 - 27,40,608 T, 2014-15= 26,93,375 T, 2015-16 =27,56,718 T,	2011-12 = 18,75,000 T, 2012-13=15,75,000 T, 2013-14=15,43,000 T, 2014-15=15,45,010 T, 2015-16=11,61,756 T	The production achived is less than the targetted as there was less demand from the plant.
3q	General remarks of inspecting officers on method of mining etc.	Opencast mechanised method of mining	The mining method adopted is Opencast mechanised method. The benches have been formed systematically by maintaining proper height and width.The OB benches have been sufficiently advanced.	

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Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Provision for seperate dumping of Top soil, OB and sub grade material has been proposed.	As proposed, the respective material has been dumped at the earmaked places.	
4b	Location of topsoil, OB and mineral reject dumps	As per the approval letter dated 12.9.2013, the proposals of dumping of top soil and OB was Outside ML area.	In view of the latest guide lines, the top soil and subgrade material have to be dumped with in the ML area and accordingly the material is dumped.	

4c	Number of dumps within lease area and outside of lease area	Within ML - NIL Outside ML= 2 and Outside = 2	Within ML = 2 and outside ML=2	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	The dumps have been proposed beyond UPL	All the dumping materials are beyond UPL.	
4e	Number of active and alive dumps.	One	One	
4f	Number of dead dumps.	Nil	Three, these are outside ML area.	
4g	Number of dumps established.	Nil	Nil	The old dumps that are outside ML area have been stabilised.
4h	Whether Retaining wall or garland drain all along dumps are there.	No such proposals have been made.	-	
4i	Length of Retaining wall or garland drain all along dumps	-	-	
4j	Number of settling ponds	None	-	
4k	Specific comments of inspecting officer on waste dump management	The Waste dumping proposals have been made outside ML area vide approval letter dated 12.9.2013.	In view of change in the guidelines waste dumping has been done within the ML area.	

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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.	No such proposals have been made	The mineral is continuing at depth and no such proposals arise at this stage.	
5b	Area under backfilling of mined out area	No such proposals are given	-	

5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	It is proposed to concurrently use the top soil of 7500 cum for afforestation and development of green belt.	As proposed the top soil is concurrently used for development of green belt.
5d	Total area fully reclaimed and rehabilitated	Nil	-
5e	General remarks of inspecting officers on backfilling and reclamation etc.	No proposals exists on backfilling and reclamation.	The mineral is continuing at depth and at this stage the backfilling and reclamation does not arise.

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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 such proposal has been given in the Scheme Minining Plan.	However, the details have been furnished during the Inspection.	
6b	Area available for rehabilitation (ha) .	Nil	-	
6c	afforestation done (ha).	It is proposed to Plant 100 saplings each in within ML and Outside ML area.	As proposed affrestation is done between coordinates S1438-S1509 and W1211-W1281 with in ML area and S20-S65 and W54--W646. in outside ML area.	
6d	No. of saplings planted during the year	2000(1000 with in ML +1000 Outside ML)	Around 2050 saplings have been planted (1050 with in ML area+1000 outside ML area)	
6e	Cumulative no .of plants	11341 saplings with in ML and 103622 saplings out side ML area	11391 saplings with in ML and 103622 saplings out side ML area	
6f	Any other method of rehabilitation	None	-	



6g	Cost incurred on watch and care during the year	No details have been furnished	During the inspection, it is reported that a budgetary provision of Rs 38,75,436/- has been made.
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( L x B x D	No such proposals are given	Not applicable.
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No such proposals have been given	Not applicable.
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on on backfilled area	No such proposals have been given	Not applicable.
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No such proposals have been given	Does not arise.
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	No such proposals have been given	-
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	No waste land exists	However afforestation is done near magazine area as per the approved proposals.
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	No such proposals have been given	-

6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No such proposals have been given	-
6p	Compliance of environmental monitoring (core zone and buffer zone)	Environmental Monitoring in Core and buffer zone has been proposed.	Periodical Enviromental monitoring has been done through a recognised Laboratory.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	No backfilling, reclamation and rehabilitation proposals have been made since the deposit is yet to exhaust.	Complimentary afforestation is done both with in ML and outside ML area. Periodical monitoring of Environmental parameters has been done through recognised laboratory.

#### Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	There is no proposal of grade wise sorting with in ML area	There is no sorting done. The entire ROM is fed to crusher.	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	There is neither manual nor mechanical grade wise sorting proposals.	-	
7c	Different grade of mineral sorted out at mines.	There is no grade wise sorting proposals at mines.	-	
7d	Any beneficiation process at mines .	No beneficiation proposals have been made	Except physical sizing no beneficiation is practiced.	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	No beneficiation proposals have been made.	Entire ROM is consumed. There is no recovery loss.	

## Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	It is proposed to generate 7500 cum top soil and proposed for concurrent use	Around 7000 cum soil was generated and is used for afforestation.	
8b	Concurrent use or storage of topsoil	Concurrent use of top soil is proposed.	As proposed the soil is cocurrently used for afforestation.	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	No waste generation is proposed.	-	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No such proposals have been made.	-	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No such proposals have made	-	The mineral is continuing at depth and the pit is yet to mature for reclamation and rehabilitation.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Base line information along with additional plantation is proposed	As proposed the Plantation is done and so far there exists about 2,357 saplings over an extent of 1.1 ha.	
8g	Survival rate	100%	80%	Survival is less by 20% due water scarcity in the region.
8h	Water sprinkling on roads to control airborne dust	Water sprinkling on roads is proposed	Regular water sprinkling is done on haul roads arrest airborne dust.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Aesthetic beauty by developing green belt is proposed.	As proposed green belt both with in and out side ML is developed which adds aesthetic beauty in and around ML.	

## Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	M/R and A/R need to be submitted in stipualted time	The lessee is submitting the M/R and A/R with in the stipulated time period.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Employment details need to be furnished	The details of Employment like ME, Geologist, Surveyor etc have been furnished vide part-II of the Annual Return.	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	land use details need to be furnished.	land use details have been furnished.	
9d	Scrutiny of Annual return on afforestation	Details on afforestation need to be furnished.	Deatails have been furnished. With in the Lease 1112 saplings and outside ML 94 saplings have been done.	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	generation mineral rejects need to be furnished.	There is no generation of Mineral rejections.	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Yes	There is no ROM stock as on 31.3.2016	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Yes	The cost of production furnished to be Rs 178.88/-	
9k	Scrutiny of Annual return on mining machineries	Yes	The details have been furnished vide part-V, item-5 of Annual Return.	

**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
Rule 42(1)(C)(I)	06/02/2017				

**Date :**

**(M.Pratap.Reddy)**

Indian Bureau of Mines