

INDIAN BUREAU OF MINES
MINERALS DEVELOPMENT AND REGULATION DIVISION

MCDR inspection REPORT

Hyderabad regional office

Mine file No : AP/CDP/Fe-2/HYD

Mine code : 30APR04002

- (i) Name of the Inspecting : K007) SHAIVAL KARTIKEYA
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Shri A. Ramakrishnaiah, Resp. of Lessee
Official with
Designation
- (iv) Date of Inspection : 15-JUN-22
- (v) Prev.inspection date : 22-FEB-20

PART-I : GENERAL INFORMATION

1. (a) Mine Name : CHABALI (88.395H)
- (b) Registration NO. :
- (c) Category : A Other Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
State : ANDHRA PRADESH
District : CUDDAPAH
Village : CHABALI
Taluka : PENDLI MARRI
Post office : CHOUTA PALLI
Pin Code : 516218
FAX No. : 08562-244161
E-mail :
Phone : 9440164225
- (f) Police Station : PENDLIMARRI
- (g) First opening date : 15-OCT-03
- (h) Weekly day of rest : SUN
2. Address for : K.RAJA MOHAN REDDY
correspondance : 1/397-1, COURT ROAD, CUDDAPAH.
3. (a) Lease Number : APR2476
- (b) Lease area : 88.39
- (c) Period of lease : 20
- (d) Date of Expiry : 06-DEC-21 **51**
4. Mineral worked : IRON ORE Main

5. Name and Address of the

Lessee : K.RAJAMOHAN REDDY
1/397-1 COURT ROAD
CUDDAPAH ANDHRA PRADESH
Phone:
FAX :

6. Date of approval of Mining Plan/Scheme of Mining	:	Modif.of approved Mining Plan	23-JAN-08
		Mining Scheme rule 12 MCDR1988	09-MAR-11
		Mining Scheme rule 12 MCDR1988	28-MAR-11
		Mining Scheme rule 12 MCDR1988	11-NOV-16
		MP review under 17(1) MCR 2016	17-MAY-21

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	F.Y. 2021-22: 10 nos. of core boreholes and 18 nos. of DTH boreholes up to the contact zone has been proposed.	F.Y. 2021-22: 18 nos. of DTH boreholes with cumulative depth of 550.0 meters has been drilled so far.	Violation has been pointed out.
1b	Exploration over lease area for geological axis 1 or 2	3.50 Ha. G2 Level area will be converted into G1 level.	Not achieved, as the Mining Operations are Temporarily Discontinued w.e.f. 01/10/2021	-do-
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not mentioned in the approved document.	Sri K. Raja Mohan Reddy, Y.S.R. Kadapa (Andhra Pradesh)	-
1d	Balance area to be explored to bring Geological axis in 1 or 2	3.50 Ha. G2 Level area will be converted into G1 level.	Not achieved, as the Mining Operations are Temporarily Discontinued w.e.f. 01/10/2021	-
1e	Balance reserve as on 01/04/20	Balance reserves as on 01.04.2022 Under (111): 5.1942 Million Tonnes Under (121): 0.9674 Million Tonnes	Balance reserves as on 01.04.2022 Under (111): 5.6745 Million Tonnes Under (121): 0.9674 Million Tonnes	Average Grade 45.50% Fe

1f	General remarks of inspecting officers on geology, exploration etc	The lease area belongs to the Vempalli stage of Papaghni series of Lower Cuddapah. The iron ore occurs in this area with Ferruginous Shale and Ferruginous Quartzite. The ferruginous shale formation in this area is bedded type which is dark brownish to brownish in colour. The formation is overlying the quartzite.	The thickness of the formation is about 20 m to 30 m. Iron Ore is recovered from this formation. The grade of iron ore varies from 41.58% Fe to 49.50% Fe in ferruginous shale horizon, based on the exploration data. This recovery of iron is about 64% as per the study conducted by the Department of Geology, Vemana University, Kadapa.	The ferruginous quartzite's are observed from the exploration data to a thickness of 30m to 35m. Iron ore is recovered from this formation. The grade of iron ore varies from 41.20% Fe to 49.50% Fe in ferruginous quartzites with ore horizon based on the chemical analysis reports.
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Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	F.Y. 2021-22: In main pit in NE-SW side in between UTM co-ordinates N1601760 to N1602580 and E240600 to E241300	F.Y. 2021-22: In main pit in NE-SW side in between UTM co-ordinates N1601760 to N1602580 and E240600 to E241300	No major deviation has been found.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	OB/Waste: 02 no. Mineral/Ore: 02 nos.	OB/Waste: 02 no. Mineral/Ore: 02 nos.	-

2c	Stripping ratio or ore to OB ratio	1 : 1.86	1 : 0.844	Less production and development during F.Y. 2021-22.
2d	Quantity of topsoil generation in m3	No proposal.	NIL	-
2e	Quantity of overburden generation in m3	F.Y. 2021-22: 421718 CuM	F.Y. 2021-22: 16255.45 CuM	-
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Mining Operations are Temporarily Discontinued w.e.f. 01/10/2021. The development and production was done through fully mechanized means.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	01 no.	01 no.	-
3b	Quantity of ROM mineral production proposed	F.Y. 2021-22: 499610.00 Metric Tonnes	F.Y. 2021-22: 19258.00.00 Metric Tonnes	Less production during F.Y. 2021-22
3c	Recovery of sailable/usable mineral from ROM production	64%	Approx 60%	-
3d	Quantity of mineral reject generation	No proposal	149450.00 Metric Tonnes	-
3e	Grade of mineral rejects generation and threshold value declared.	No proposal	25% Fe	-
3f	Quantity of sub grade mineral generation.	No proposal	NIL	-

3g	Grade of sub grade mineral generation	No proposal	NIL	-
3h	Manual / Mechanised method adopted for segregating from ROM	Proposal has been given in the approved document for installation of Double Deck 125 TPH capacity Mobile Dry Screening Plant for segregation of +40 mm, -40 mm to +10 mm and -10 mm ore from the ROM.	Mobile Crusher with 300 TPH capacity has been installed.	-
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	-do-	-do-	-
3j	Provision of drilling and blasting in mineral benches	Drilling Bit Dia.: 100 mm Spacing: 3.0 m Burden: 3.0 m Depth: 6.0 m to 6.30 m	Drilling Bit Dia.: 100 mm Spacing: 3.0 m Burden: 3.0 m Depth: 6.0 m to 6.30 m	-

3k	Provision of mining machineries in mineral benches	1. Excavator 05 nos. with 1.0 CuM to 1.5 CuM bucket capacity 2. Wheel Loader 01 no. with 1.70 CuM bucket capacity 3. Jack Hammer 06 nos. with 32 mm dia 4. Tractor mounted compressor 04 nos. with 400 CFM capacity 5. Tippers 22 nos. with 16.0 Tonnes capacity 6. Generator 01 no. with 63 KVA capacity 7. DTH drill 02 no. with 100 mm dia. 8. Water Tanker 01 no. with 5000 Liters capacity	1. Back Hoe 01 no. with 1.0 CuM bucket capacity 2. Dumpers 03 nos. with 30 Tonnes capacity 3. Crusher 01 no. with 300 TPH capacity 4. Front End Loader 01 no. with 01 no. with 2.2 CuM bucket capacity 5. Water Tanker 01 no. with 5000 Liters capacity	-
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	OB/Waste: 3.0 m Mineral/Ore: 6.0 m	OB/Waste: 3.0 m Mineral/Ore: 6.0 m	-
3m	Total area covered under excavation/pits	21.250 Ha. up to end of review period i.e. F.Y. 2025-26	16.894 Ha. up to end of F.Y. 2021-22	-
3n	Ore to OB ratio for the pit/mine during the year.	1 : 1.86	1 : 0.844	Less production and development during F.Y. 2021-22.

3o	Total area put in use under different heads at the end of year	Pit- 21.250 Ha. Waste/reject- 19.386 Ha. Others- 8.264 Ha. Up to end of F.Y. 2025-26	Pit- 16.894 Ha. Waste/reject- 9.077 Ha. Others- 4.49 Ha. Up to end of F.Y. 2021-22	-
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3p	Production of ROM mineral during the last five year period as applicable	Yr. 2017-18: 495452.00 Metric Tonnes Yr. 2018-19: 498640.00 Metric Tonnes Yr. 2019-20: 468029.00 Metric Tonnes Yr. 2020-21: 468698.00 Metric Tonnes Yr. 2021-22: 499610.00 Metric Tonnes	Yr. 2017-18: 136731.00 Metric Tonnes Yr. 2018-19: 260689.00 Metric Tonnes Yr. 2019-20: 408602.00 Metric Tonnes Yr. 2020-21: 66251.00 Metric Tonnes Yr. 2021-22: 19258.00 Metric Tonnes	-
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3q General remarks of inspecting officers on method of mining etc.

Mining Operations are Temporarily Discontinued w.e.f. 01/10/2021. Mining has been carried out through the opencast method with fully mechanized means.

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)	Proposal been given in the approved document for separate dumping of OB/Waste/IB in between UTM co-ordinates N1601400 to N1601620 and E240780 to E240890 (2.50 Ha.)	Separate dumping of OB/Waste/IB has been done in between UTM co-ordinates N1601400 to N1601620 and E240780 to E240890 (2.50 Ha.)	-
4b	Location of topsoil, OB and mineral reject dumps	-do-	-do-	-
4c	Number of dumps within lease area and outside of lease area	01 no.	01 no.	-
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Waste dumping has been proposed beyond ultimate pit limit in between UTM co-ordinates N1601400 to N1601620 and E240780 to E240890	Waste dumping has been done beyond ultimate pit limit in between UTM co-ordinates N1601400 to N1601620 and E240780 to E240890	-
4e	Number of active and alive dumps.	01 no.	01 no.	-
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.	Proposal has been given in the approved document for construction of 300 m long Parapet/Retaining Wall at toe of dumps and 300 m long Garland Drain.	Not constructed.	Violation has been pointed out.
4i	Length of Retaining wall or garland drain all along dumps	Parapet/Retaining Wall: 300 m Garland Drain: 300 m	-do-	-do-
4j	Number of settling ponds	No proposal	NIL	-
4k	Specific comments of inspecting officer on waste dump management			Mining Operations are Temporarily Discontinued w.e.f. 01/10/2021

Solid Waste Management - Backfilling:

Sl.No.	Item	Proposals	Actual work	Remarks
5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	No proposal	Nil, as the mineral/ore has not been mined out completely.	-
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)	No proposal	NIL	-
5d	Total area fully reclaimed and rehabilitated	No proposal	NIL	-

5e	General remarks of inspecting officers on backfilling and reclamation etc.	Mining Operations are Temporarily Discontinued w.e.f. 01/10/2021.
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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).	Submitted before due date.	Information has been cross verified during inspection.	-
6b	Area available for rehabilitation (ha) .	No proposal	NIL	-
6c	afforestation done (ha).	No proposal	NIL	-
6d	No. of saplings planted during the year	No proposal	NIL	-
6e	Cumulative no .of plants	No proposal	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	No proposal	NIL	-
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No proposal	NIL	-

6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	No proposal	NIL	-
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal	NIL	-
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	500 nos.	550 nos.	-
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	0.674 Ha.	0.686 Ha.	-
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	By Plantation	By Plantation	-
6p	Compliance of environmental monitoring (core zone and buffer zone)	Proposal has been given in the approved document for regular monitoring of the environmental parameters in the core and buffer zone.	Has been done as per proposal.	All the parameters are within the permissible limits.

6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	Mining Operations are Temporarily Discontinued w.e.f. 01/10/2021.
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Mineral Conservation:

Sl.No.	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Proposal has been given in the approved document for ROM segregation with +40 mm, -40 mm to +10 mm and -10 mm size ore before dispatch.	Being done as per proposal.	-
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanised 125 TPH capacity mobile screening plant.	Mechanised 300 TPH capacity mobile screening plant.	-
7c	Different grade of mineral sorted out at mines.	+40% Fe ore has been proposed for segregation from ROM.	Being done as per proposal.	-
7d	Any beneficiation process at mines	Proposal has been given in the approved document for installation of Double Deck 125 TPH capacity Mobile Dry Screening Plan for segregation of +40 mm, -40 mm to +10 mm and -10 mm ore from the ROM.	Mobile Crusher with 300 TPH capacity has been installed.	-

7e General remarks of inspecting officer on Mineral conservation and beneficiation issues

Mining Operations are Temporarily Discontinued w.e.f. 01/10/2021.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal	NIL	-
8b	Concurrent use or storage of topsoil	No proposal	NIL	-
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Proposal been given in the approved document for separate dumping of OB/Waste/IB in between UTM co-ordinates N1601400 to N1601620 and E240780 to E240890 (2.50 Ha.)	Separate dumping of OB/Waste/IB has been done in between UTM co-ordinates N1601400 to N1601620 and E240780 to E240890 (2.50 Ha.)	-
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)	0.674 Ha. waste land will be rehabilitated by 500 nos. of saplings.	0.686 Ha. waste land has been rehabilitated by 550 nos. of saplings.	-
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	500 nos. of saplings will be planted over 0.674 Ha. waste land.	550 nos. of saplings has been planted over 0.686 Ha. waste land.	-
8g	Survival rate	Not mentioned in the approved document.	Approx 50%	-
8h	Water sprinkling on roads to control airborne dust	Proposal has been given in the approved document for water sprinkling on roads to control airborne dust through the water tanker.	Being done as per proposal.	-
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Mining Operations are Temporarily Discontinued w.e.f. 01/10/2021.

Compliance of Rule 45:

Sl.No.	Item	Proposals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	M.R. Submitted up to May 2022 A.R. Submitted up to F.Y. 2021-22	M.R. Submitted up to May 2022 A.R. Submitted up to F.Y. 2021-22	NIL

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Manager: Shri Y. M. Mahesh Mining Engineer: Shri Y. M. Mahesh Geologist: Shri K. N. Obulesu	Manager: Shri Y. M. Mahesh Mining Engineer: Shri Y. M. Mahesh Geologist: Shri K. N. Obulesu	NIL
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pit- 16.894 Ha. Waste/reject- 9.077 Ha. Others- 4.49 Ha.	Pit- 16.894 Ha. Waste/reject- 9.077 Ha. Others- 4.49 Ha.	NIL
9d	Scrutiny of Annual return on afforestation	Within lease area: 820 nos. of saplings. Survival Rate: 50% Outside lease area: 270 nos. of saplings. Survival Rate: 50%	Within lease area: 550 nos. of saplings. Survival Rate: 50% Outside lease area: 270 nos. of saplings. Survival Rate: 50%	NIL
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	149450.00 Metric Tonnes with 25%Fe.	149450.00 Metric Tonnes with 25%Fe.	NIL
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Closing Stock: Lumps: Below 55% Fe: 169316.650 Fines: Below 55% Fe: 225044.850	Closing Stock: Lumps: Below 55% Fe: 169316.650 Fines: Below 55% Fe: 225044.850	NIL

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex-Mine Price Lumps: Below 55% Fe: Rs. 840.0 Per Metric Tonne Fine: Below 55% Fe: Rs. 590.0 Per Metric Tonne	Ex-Mine Price Lumps: Below 55% Fe: Rs. 840.0 Per Metric Tonne Fine: Below 55% Fe: Rs. 590.0 Per Metric Tonne Sale Value: Zero. (Nil dispatch during F.Y. 2021-22)	NIL
		Sale Value: Zero. (Nil dispatch during F.Y. 2021-22)	Cost of Production: Rs. 210.00 Per Metric Tonne	
		Cost of Production: Rs. 210.00 Per Metric Tonne		
9h	Scrutiny of Annual return on fixed assets	Rs. 450000.00	Rs. 450000.00	NIL
9k	Scrutiny of Annual return on mining machineries	1. Back Hoe 01 no. with 1.0 CuM bucket capacity 2. Dumpers 03 nos. with 30 Tonnes capacity 3. Crusher 01 no. with 300 TPH capacity 4. Front End Loader 01 no. with 01 no. with 2.2 CuM bucket capacity 5. Water Tanker 01 no. with 5000 Liters capacity	Cross verified from the field logbooks.	NIL

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 : 04/07/2022			श्रीवाण कार्तिकेय (SHAIVAL KARTIKEYA) 04/07/2022		

Indian Bureau of Mines