

MCDR INSPECTION REPORT

Mine file No.-MP/BGT/Mn-66/NGP
40MPR01064

Mine code-

i) Name of inspecting officer-P.Nahar,

ii) Designation- Asstt. Mining Geologist

iii) Accompanying mine Official with /designation- Shri Deven P. Trivedi, Partner, Shri J.P. Yadav, Rep., Shri Himanshu Churhe, Geologist and Shri Rajesh Nihe, Surveyor.

iv) Dt. Of Inspection-19/06/2018

A) GENERAL

| S.No | Particulars | Details |
|------|--|---|
| 1 | Name of the Mine | Katang Jhari Manganese Ore |
| 2 | Total Lease area (Ha) with break up of Non -forest and Forest Land | 5.26 -Ha.(Revenue) |
| 3 | Mine code | 40MPR01064 |
| 4 | IBM Registration Number under rule 45 of MCDR-1988 | IBM/4371/2011 |
| 5 | Name of lessee, address, phone, email and Fax. No. | M/s J.K. Minerals Ward No.-15, Main Road Balaghat(M.P.)PIN-481 001 |
| 6 | Village | Katnag Jhari |
| 7 | Taluka/Mandal | Waraseoni |
| 8 | District | Balaghat(M.P.) |
| 9 | Pin Code | 481 332 |
| 10 | State | M.P. |
| 11 | Post office | Waraseoni |
| 12 | Nearest Police Station | Waraseoni |
| 13 | Nearest Railway Station | Saongi -8km |
| 14 | Date of Grant of Mining Lease | 15/02/2007 |
| 15 | Date of Execution | 15/02/2007 |
| 16 | Date of opening of Mine | 01/03/2010 |
| 17 | Date of first Renewal, if applicable and its period & expiry | None |
| 18 | Date of second Renewal, if applicable and its period & expiry | Expiry-14/02/2027 |
| 19 | Date of submission of renewal application if Mining Operations are continuing under deemed extension | NA |
| 20 | Name of the Nominated Owner with Address, phone, email, fax number and date of appointment | Shri P.K.J. Trivedi, Partner and Nominated Owner M/s J.K. Minerals Ward No.-15, Main Road Balaghat(M.P.)PIN-481 001 Phone-07632-240533 |
| 21 | Name of the Mine Agent with Address, phone, email, fax number and date of appointment | None |
| 22 | Name of the Mines Manager with Address, phone, email, fax | Shri D.K.Turkar, Diploma in Mining and Mine Surveying |

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| | number and date of appointment in mines | Since 16/11/2006 |
| 23 | Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine | Shri D.K.Turkar , Diploma in Mining and Mine Surveying Since 16/11/2006 |
| 24 | Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44. | Shri Himanshu Churhe, M.Sc. (Geology) Since 17/12/2015. |
| 25 | Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any. | 05/11/2015 Proposal Period-2013-14 to 2017-18 |
| 26 | Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any. | NA |
| 27 | Minerals(s) granted in lease and proved for mining | Manganese Ore |
| 28 | Method of Mining(open Cast, Underground) | Open Cast . |
| 29 | Category(Fully Mechanized, Others or Manual. | B Category. Manual. |
| 30 | Captive/Non captive | Non captive. |

B)Scientific Mining: Compliance of proposals of approved mining plan/scheme of mining.

| S.No | Item | Proposals | Actual Work | Remarks |
|------|---|---------------|--------------------|---|
| 1a | Backlog of previous year | Not proposed. | Not done. | Inspection has been carried out in connection with submission of draft Review of Mining Plan for the proposal period from 2018-19 to 2022-23. |
| 1b | Exploration over lease area for Geological axis 1 or 2. | Not proposed. | G2 | ---- |
| 1c | Exploration Agency & Expenditure in lakh Rupees during the year | NA | NA | ---- |
| 1d | Balance area to be explored to bring Geological axis in 1 or 2 | Approx. 1.0Ha | NA | |
| 1e | Balance reserves as | ---- | 122-10055T 222- | |

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|--|--|---|-------------|--|
| | on 01.04.17 | | 64705Tonnes | |
| | General remarks of inspecting officer on geology, exploration etc. | Litho units of the area belonging to Mansar Formation of Sauser Group having Precambrian age are exposed in the area showing N40°W-S40°E strike dipping with 40° to 80° towards NE. | | |

C)Development-

| S.No | Item | Proposals | Actual Work | Remarks |
|------|--|---|---|---|
| 2a | Location of development w.r.t. lease are | Not proposed. | Open Cast-Working-Within main pit. | ---- |
| 2b | Separate benches in topsoil, overburden and mineral (Rule 15) Length x Width x Height | Not proposed. | Soil-H-1.5mxw-1.5mxL-220m OB-H-5 to 9mW-3to 5m L-200m (including ore bench) | ---- |
| 2c | Stripping ratio or ore to OB ratio | Not proposed. | 1:23 (approx.) | It is a B Category Manual Mines. Proper record of Ore and waste generation has not been maintained. |
| 2d | Quantity of topsoil generation in m3 | Not proposed. | Any record of top soil generation has not been maintained. | It is a B- Category Manual mine and proper record of was generation has not been maintained. |
| 2e | Quantity of overburden generation in m3 | Not proposed. | NA | It is a B- Category Manual mine and proper record of waste generation has not been maintained. |
| 2f | General remarks of inspecting officer on development of pit w.r.t. type of deposit etc. | Mining proposals has been made in existing Open Cast Pit. Development has been done at proposed location. | | |

D)Exploitation-

| S.No | Item | Proposals | Actual Work | Remarks |
|------|---|--|---|---|
| 3a | Number of pits proposed for production | Not proposed. | One | Development was done at location where previous year proposals were made. |
| 3b | Quantity of ROM mineral production proposed | 14-15-3055T 15-16-3472T 16-17-3472T 17-18-3472T | 14-15-1001T 15-16-999T 16-17-995T 17-18-994.5T | ---- |

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|----|--|--|--|--|
| | | 18-19- Not proposed. | 18-19- Nil (Till date of inspection) | |
| 3c | Recovery of saleable/usable mineral from ROM production | Not proposed. | 80% (approx.) | ---- |
| 3d | Quantity of mineral reject generation | 14-15-44T 15-16-49.6T 16-17-49.6T 17-18-49.6T 18-19- Not proposed. | Nil | Entire mineral reject has been a utilized after blending hence there is no mineral reject. |
| 3e | Grade of mineral reject generation and threshold value declared | Not proposed. | NA | ---- |
| 3f | Quantity of sub-grade mineral generation | Not proposed. | Nil | Entire Sub-grade mineral has been a utilized after blending hence no Sub-grade mineral. |
| 3g | Grade of sub-grade mineral generation | NA | Nil | ---- |
| 3h | Manual /Mechanised method adopted for segregating from ROM | Not proposed. | Manual. Open cast. | ---- |
| 3i | Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject | NP | NA | ---- |
| 3j | Provision of drilling & blasting in mineral benches | Not proposed. | Not noticed during the inspection | ---- |
| 3k | Provision of mining machineries in mineral benches | Not proposed | None | ---- |
| 3l | Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM | Not proposed. | At places 3 to 7m | Fresh proposals for reduction of bench height are already submitted. |
| 3m | Total area covered Under excavation/pits | 2.1370Ha | 2.49Ha (approx .Till date of inspection. | Including old excavation . |
| 3n | Ore to OB ratio for the pit/mine during the year | Not proposed. | 1:23 (approx.) | ---- |

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| 3o | Total area put in use under different heads at the end of year | Not proposed. | 4.6666 Ha(approx.) | ---- |
| 3p | Production of ROM mineral during last five-year period, as applicable | 14-15-30555T 15-16-3472T 16-17-3472T 17-18-3472T 18-19- Not proposed. | 14-15-1001T 15-16-999T 16-17-995T 17-18-994.5T 18-19- Nil (Till date of inspection) | Draft Review of Mining was submitted. Same was under process. |
| 3q | General remarks of inspecting officer on method of mining etc. | Mining is done manually by open cast method. | | |

E)Solid Waste Management-Dumping

| <u>S.No</u> | <u>Item</u> | <u>Proposals</u> | <u>Actual Work</u> | <u>Remarks</u> |
|-------------|---|---|--|----------------|
| 4a | Separate dumping of topsoil, OB & mineral reject (Rule 32, 33) | Not proposed. | Entire top Soil has been utilized for afforestation. Separate dumping for Waste and has been done on near eastern boundary of the pit. | ---- |
| 4b | Location of topsoil, OB & mineral reject dumps | Not proposed. | Soil- Nil OB- Near eastern boundary MR dump- Nil | ---- |
| 4c | Number of dumps within lease area and outside lease area | Not proposed. | 05. within the lease area. | ---- |
| 4d | Location of dumps w.r.t. ultimate pit limit (Rule 16) | Not proposed. | All dumps are within UPL | ---- |
| 4e | Number of active & alive dumps | Not proposed. | 2Nos. Active Dumps. | |
| 4f | Number of dead dumps | Not proposed. | 3Nos. | |
| 4g | Number of dumps stabilised | Not proposed | 2Nos. | |
| 4h | Whether Retaining wall or garland drain all along dumps are there | Not Proposed | Garland made near western boundary. | ---- |
| 4i | Length of Retaining wall or garland drain all along dump | Not mentioned | Garland drain -50m (approx.) | ---- |
| 4j | Number of settling ponds | Not proposed | Not made | |
| 4k | Specific comments of inspecting officer on waste dump | In the draft Review of Mining Plan it was proposed that waste generated during mining will be partially used for reclamation and rehabilitation of mined out barrier zone and remaining Qty. for separate | | |

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| | management | dumping. |
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F)Solid Waste Management-Backfilling-

| S.No | Item | Proposals | Actual Work | Remarks |
|------|--|---|---|---------|
| 5a | Status on part or full extraction of mineral from mined out area before starting backfilling | Not proposed. | Mining is on progress. Full extraction is yet to be done. | ---- |
| 5b | Area under backfilling of mined out area | Not proposed. | None | ---- |
| 5c | Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32) | Not proposed. | Storage and utilization | ---- |
| 5d | Total area fully reclaimed & rehabilitated | Not proposed. | Not done | ---- |
| 5e | General remarks of inspecting officer on backfilling, reclamation etc. | Fresh review of approved mining plan for the period 2018-19 to 2022-23 is under process in which proposals of reclamation and rehabilitation of mined out barrier zone have been made.. | | |

G)Progressive Mine Closure Plan-

| S.No | Item | Proposals | Actual Work | Remarks |
|------|---|---|---|--|
| 6a | Whether Annual report on PMCP submitted on time and correctly - Rule 23E(2). Details should be given in the format as given in Annexure-20. | ---- | Not submitted | ---- |
| 6b | Management of worked/mined out benches i) Area available for rehabilitation (ha) ii) Afforestation done (ha) iii) No. of saplings planted during the year iv) Cumulative no. of plants v) Any other specific method of rehabilitation vi) Cost incurred on watch & care during the year | Not proposed. Not proposed. Not proposed. Not proposed Not proposed | Nil 0.25Ha 250 Nos 250Nos. (approx.) (Within ML) None Not available. | ---- |
| 6c | Compliance on reclamation and rehabilitation by backfilling i) Voids available for backfilling (L X B X D) ii) Void filled by waste/tailings | Not proposed. | Nil | There is no matured Pit for Reclamation and Rehabilitation |

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| | iii) Afforestation on the backfilled area iv) Rehabilitation by making water reservoir v) Any other specific means | | | |
| 6d | Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation | Not proposed | Approx. 2.0Ha | ---- |
| 6e | Compliance of Environmental monitoring (core zone & buffer zone) | Not proposed | Not done | ---- |
| 6f | General remarks of inspecting officer on PMCP compliance & progressive closure operations . | Presently ,there is no matured land for reclamation and rehabilitation except reclamation and rehabilitation of mined out barrier zone. | | |

H)Mineral Conservation-

| <u>S.No</u> | <u>Item</u> | <u>Proposals</u> | <u>Actual Work</u> | <u>Remarks</u> |
|-------------|--|--|--|---|
| 7a | ROM Mineral dispatch or grade-wise sorting within lease area | Not proposed. | Grade wise sorting and sizing within the lease area. Adjacent to lease boundary. | Complied. |
| 7b | Method of grade-wise mineral sorting i.e. manual or mechanical | Not proposed. | Both manual as well as mechanical by jigging within the lease area. | ---- |
| 7c | Different grade of mineral sorted out at mines | Not proposed. | Mostly Ferro -Manganese and Silico Manganese grade | ---- |
| 7d | Any beneficiation process at mines | Not proposed. | Jigging | Manual as well as mechanical jigs have been deployed within the ML. |
| 7e | General remarks of inspecting officer on Mineral conservation & beneficiation issues | Sizing is done manually. Big pieces are also sorted manually. Whereas, for small pieces are separated by manual and mechanical jigs. | | |

I)Environment -

| <u>S.No</u> | <u>Item</u> | <u>Proposals</u> | <u>Actual Work</u> | <u>Remarks</u> |
|-------------|---|------------------|-----------------------------|--|
| 8a | Separate removal and utilization of topsoil (Rule 32) | Not proposed. | Separate removal ,storage . | Top soil is utilized for Afforestation as and when |

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| | | | | required. |
| 8b | Concurrent use or storage of topsoil | Not proposed. | --Do-- | ---- |
| 8c | Separate dumps for overburden, waste rock, rejects and fines (Rule 33) | Not proposed. | Done | ---- |
| 8d | Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use | Not proposed. | Entire Qty. is stored. | ---- |
| 8e | Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc.) | Not proposed. | Not done | Presently, there is no matured land for reclamation and rehabilitation except mined out barrier zone. |
| 8f | Baseline information on existence of plantation & additional plantation | The lease area is Non Forest Land. 15 Nos. of big trees having height of more than 7m are existing in and around lease area. An additional afforestation of around 250Nos .of trees have been made in the lease area. | | |

J)Compliance of rule 45-

| <u>S.No</u> | <u>Item</u> | <u>Comments</u> | | <u>Remarks</u> |
|-------------|---|--|---|----------------|
| 9a | Status of submission of Monthly and Annual returns | M.R. Submitted up to -Up to April 2018(Till date of Inspection) A.R. submitted up to 2017-18 | | Complied. |
| S.N. | Item | Details GIVEN in A.R. | Observation of I/Officer | Remarks |
| 9b | Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager | Manager-Shri D.K. Turkar Mining Engineer- Md.Sartaj Ahmad Geologist-Shri Himanshu Churhe | Manager-Shri D.K. Turkar Mining Engineer- Shri D.K. Turkar Geologist- Shri Himanshu Churhe | ---- |
| 9c | Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc. | Area already exploited-2.650 Ha Covered Under current Mining-0.083Ha Reclaimed and rehabilitated-00 Used for Waste disposal-0.990Ha Occupied by Plant, building etc-0.200Ha Plantation-0.30Ha | Area already exploited-00 Covered Under current Mining-2.5Ha Ha(approx.) Reclaimed and rehabilitated-00 Used for Waste disposal---2.54Ha(approx.) Occupied by Plant, building etc-0.0139Ha Plantation-0.25Ha | ---- |
| 9d | Scrutiny of Annual return on afforestation | 30Nos | 50Nos | |
| 9e | Scrutiny of Annual return on mineral reject generation (Grade & quantity) | Nil | Nil | |

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|----|---|---|---|--|
| 9f | Scrutiny of Annual return on ROM stock and/or graded ore | Closing stock- Nil | 100Tonnes(approx.) As on the date of inspection) | |
| 9g | Scrutiny of Annual return on sale value, Ex. Mine price & production cost | Cost of production- Rs.3949/-per tonne Ex. Mine price-Rs.- 2912/- to 13680/- (for processed ore) Sale value-4,960/- to 10,667/- | Agreed with the information provided in AR | |
| 9i | Scrutiny of Annual return on fixed assets | None | Not correct | |
| 9k | Scrutiny of Annual return on mining machineries | Air Compressor- 1 Nos. Pumps-3Nos. Rock Drill- 2Nos. Tipper-4Nos. | Agreed | |

Details of violation observed during current inspection and compliance position of violation pointed out- Inspection of the mine was carried out in connection with submission of Review of Mining Plan. Any violation has not been noticed during inspection.

(P.Nahar)
Asstt. Mining Geologist
Indian Bureau of Mines, Jabalpur

