

**INDIAN BUREAU OF MINES
MINERALS DEVELOPEMMENT AND REGULATION DIVISION**

Review and updation of Mining Plan REPORT

Kolkata regional office

Mine file No : KOL/JHK/SB(W)/Fe(j-1)

Mine code : 40JHK18002

- (i) Name of the Inspecting : **K03**) **G. S. KANNAN**
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Ms.Aindrila Chanda, Manager Geo & Shri.Tanveer, Manag
Official with
Designation
- (iv) Date of Inspection : 12/11/2019
- (v) Prev.inspection date :

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **JHILLINGBURU(GUA)210.44HE**
- (b) **Registration NO.** :
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
State : JHARKHAND
District : SINGHBHUM (WEST)
Village : GUA
Taluka :
Post office : GUA
Pin Code : 833213
FAX No. : 06596-263714
E-mail :
Phone : 06596-263714
- (f) Police Station :
- (g) First opening date :
- (h) Weekly day of rest :
2. Address for :
correspondance
3. (a) Lease Number : JHK0006
(b) Lease area : 210.44
(c) Period of lease : 50
(d) Date of Expiry : 11/05/2020
4. Mineral worked : MANGANESE ORE Main

5. Name and Address of the

Lessee : STEEL AUTHORITY OF INDIA LTD.
INDUSTRY HOUSE 5TH & 6TH
FLOOR 10, CAMAC STREET
KOLKATA WEST BENGAL
Phone:033-22822316/0462/3385
FAX :033-22822316/0462

Owner : Vivek Gupta ,Director (Raw Material & Logistics)
Steel Authority Of India
Limited Isoat Bhawan,Lodi
Road New Delhi-110003
SINGHBHUM (WEST) JHARKHAND
Phone:
FAX :

6. Date of approval of Mining : Renewal under rule 24 MCR1960 10/02/2011
Plan/Scheme of Mining

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

| Sl.No. | Item | Proposals | Actual work | Remarks |
|--------|---|--|--|---|
| 1a | Backlog of previous year | 34 Core Boreholes Proposed in plan period | No Boreholes has drilled | Mine is not Working, for want of Statuary Clearances from 2011. |
| 1b | Exploration over lease area for geological axis 1 or 2 | 34 - Additional exploration was proposed in mining plan over the lease area for Geological axis - 1 | Additional exploration was not carried out in the lease area for Geological axis - 1 | No Exploration has been carry out in the lease area so far. |
| 1c | Exploration Agencies and Expenditure in lakh rupees during the year | Own drilling and/ or Contract drilling machines were proposed for Exploration. | No Boreholes has drilled | Mine is not Working, for want of Statuary Clearances from 2011. |
| 1d | Balance area to be explored to bring Geological axis in 1 or 2 | Exploration was proposed out at 200m X 100m grid interval. Additional exploration was proposed in Plan period. | Exploration was not carried out at 200m X 100m grid interval. Entire lease area of 210.526 hect area has to be explored for availability of ore from G-2/3 to G-1. | |

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| 1e | Balance reserve as on 01/04/20 | Manganese Ore as on 01.04.2015 Probable Mineral Reserves (122) = 510000 Tons Pre-Feasibility Mineral Resources (222) = 680000 Tons Iron Ore as on 01.04.2015 Probable Mineral Reserves (122) = 440000 Tons Pre-Feasibility Mineral Resources (222) = 110000 Tons | Manganese Ore as on 01.04.2019 Probable Mineral Reserves (122) = 510000 Tons Pre-Feasibility Mineral Resources (222) = 680000 Tons Iron Ore as on 01.04.2019 Probable Mineral Reserves (122) = 440000 Tons Pre-Feasibility Mineral Resources (222) = 110000 Tons | Hence there is no mining activity; R & R has not been changed from 01.04.2015 and carry forward from previous approved mining plan. |
| 1f | General remarks of inspecting officers on geology, exploration etc | It is part of Singhbhum, Bonai and Keonjhar group of Iron Ore deposit. | The terrain forms a part of the oldest metasedimentary formational of chottanagapur plateau. | Entire Lease is having Same Geology and Mineralogy is changes from place to place. Hence borehole has to be drilled at closer interval to get quantity and quality |

Development :

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|--|--|--|---|
| 2a | Location of development w.r.t.lease area | Location in between Quarry-1 and Quarry-4 | Working has been not carried out as per the proposal | Mine is not Working from 2011, for want of Statuary Clearances. |
| 2b | Separate benches in topsoil, overburden and minerals (Rule 15) | There is no proposals for separate Bench's | There is no proposals for separate Bench's | Mine is not Working from 2011, for want of Statuary Clearances |

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| 2c | Stripping ratio or ore to OB ratio | 1 :1.02 | Nil reported, since no production during that period. | Mine is not Working from 2011, for want of Statuary Clearances |
| 2d | Quantity of topsoil generation in m3 | No proposal | Nil | Mine is not Working from 2011, for want of Statuary Clearances |
| 2e | Quantity of overburden generation in m3 | During 2018-2019 it is proposed OB as 38772 cu.m and Intercalated waste as 105733 cu.m. Total waste as 144505 cu.m | Nil | Mine is not Working from 2011, for want of Statuary Clearances |
| 2f | General remarks of inspecting officers on development of pit w.r.t. type of deposit etc | Proposed 144505 cu.m of waste. | Nil | Mine is not Working from 2011, for want of Statuary Clearances. |

Exploitation:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|---|---|---|
| 3a | Number of pit proposed for production | Development and production was proposed in Quarry-1. | Development and production are not carried out. | Mine is not Working from 2011, for want of Statuary Clearances. |
| 3b | Quantity of ROM mineral production proposed | The total target of ROM Production was 61000 tons during 2018-2019. | Nil | Mine is not Working from 2011, for want of Statuary Clearances. |
| 3c | Recovery of sailable/usable mineral from ROM production | 15% (+10-40mm) 20% (-10mm) | Nil | Mine is not Working from 2011, for want of Statuary Clearances. |
| 3d | Quantity of mineral reject generation | No Proposal | Nil | Mine is not Working from 2011, for want of Statuary Clearances. |

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| 3e | Grade of mineral rejects generation and threshold value declared. | Mineral reject- No Proposal. Threshold Value for Mineral rejects is not Declared | Mineral reject- No Proposal. Threshold Value for Mineral rejects is not Declared | Mine is not Working from 2011, for want of Statuary Clearances. |
| 3f | Quantity of sub grade mineral generation. | 32533 cu.m of Sub Grade Generation has been proposed | No Sub Grade Generation | Mine is not Working from 2011, for want of Statuary Clearances. |
| 3g | Grade of sub grade mineral generation | +15-20% Mn, %7-60% Fe | There is No Generation of Subgrade Mineral | Mine is not Working from 2011, for want of Statuary Clearances. |
| 3h | Manual / Mechanised method adopted for segregating from ROM | Mechanised | Nil | Mine is not Working from 2011, for want of Statuary Clearances. |
| 3i | Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects. | No Beneficiation Study is Proposed | Only Manual Picking of Ore from Intercalated Waste | Mine is not Working from 2011, for want of Statuary Clearances. |
| 3j | Provision of drilling and blasting in mineral benches | Spacing - 3m Burded - 2.5m It is Proposed to drill by 110mm dia, crawler mounted down hole drill. Blasting is done by using slurry explosives and nonnel fuses. | Drilling & Blasting are not done | Mine is not Working from 2011, for want of Statuary Clearances. |
| 3k | Provision of mining machineries in mineral benches | Electric Shovels Hydraulic Excavators Tippers | Nil | Mine is not Working from 2011, for want of Statuary Clearances |
| 3l | Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM | Bench height of 6m was proposed in Mineral. | Nil | Mine is not Working from 2011, for want of Statuary Clearances |

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| 3m | Total area covered under excavation/pits | 6.690 hect area is under Pit and additional 2.00 hect is required | 6.690 hect areas are under Pit only. | Due to Non-working of Mines, additional area is not in use. |
| 3n | Ore to OB ratio for the pit/mine during the year. | 1 : 1.02 | Nil reported, since no production during that period. | Mine is not Working from 2011, for want of Statuary Clearances |
| 3o | Total area put in use under different heads at the end of year | Land use Pattern as on 01.04.2015. Mines = 6.69 hect Infra = 25.42 hect Green Belt = 0.65 hect | Land use Pattern as on 01.04.2019. Mines = 6.69 hect Infra = 25.42 hect Green Belt = 0.65 hect | There are no Changes in land use Pattern from 2011 because of Non-Working. |
| 3p | Production of ROM mineral during the last five year period as applicable | 2018-2019 = 61000 tons 2017-2018 = 61000 tons 2016-2017 = 61000 tons 2015-2016 = 61000 tons 2014-2015 = 61000 tons | 2018-2019 = Nil 2017-2018 = Nil 2016-2017 = Nil 2015-2016 = Nil 2014-2015 = Nil | From 2011 to till date, the Mine was not working due to want of statutory order |
| 3q | General remarks of inspecting officers on method of mining etc. | Mechanised Method is Proposed | Nil | Mine is not Working from 2011, for want of Statuary Clearances |

Solid Waste Management - Dumping:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|--|--|---|--|
| 4a | Separate dumping of topsoil, OB and mineral rejects (Rule 32,33) | Generated Intercalated waste will be dumping nearer to NW of Quarry-1. | There is no generation of OB because of Non-working | Mine is not Working from 2011, for want of Statuary Clearances |
| 4b | Location of topsoil, OB and mineral reject dumps | NW of Quarry-1. | Nil | Mine is not Working from 2011, for want of Statuary Clearances |

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| 4c | Number of dumps within lease area and outside of lease area | Lease area = 1 Non Lease area = Nil | Lease area = 1 Non Lease area = Nil | Mine is not Working from 2011, for want of Statuary Clearances |
| 4d | Location of dumps w.r.t. ultimate pit limit (Rule 16) | Outside the UPL and NW of Quarry-1. | Nil | Mine is not Working from 2011, for want of Statuary Clearances |
| 4e | Number of active and alive dumps. | Active Dump = 1 Alive Dump = Nil | There is no active dump within lease area for waste dumping. | Mine is not Working from 2011, for want of Statuary Clearances |
| 4f | Number of dead dumps. | No Proposal | Nil | Mine is not Working from 2011, for want of Statuary Clearances |
| 4g | Number of dumps established. | No proposal | Nil | Mine is not Working from 2011, for want of Statuary Clearances |
| 4h | Whether Retaining wall or garland drain all along dumps are there. | Yes, Proposed around the dumps | Nil | Mine is not Working from 2011, for want of Statuary Clearances |
| 4i | Length of Retaining wall or garland drain all along dumps | 75m/ year around the dump | Nil | Mine is not Working from 2011, for want of Statuary Clearances |
| 4j | Number of settling ponds | One Settling tank has proposed | Nil | Mine is not Working from 2011, for want of Statuary Clearances |
| 4k | Specific comments of inspecting officer on waste dump management | Generated Intercalated waste will be dumping nearer to NW of Quarry-1. | Nil | Mine is not Working from 2011, for want of Statuary Clearances |

Solid Waste Management - Backfilling:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|------|-----------|-------------|---------|
|--------|------|-----------|-------------|---------|

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|----|---|--|-----|--|
| 5a | Status of part or full extraction of mineral from mined out area before starting backfilling. | Back filling has proposed in mineral exhausted quarry-2 | Nil | Mine is not Working from 2011, for want of Statuary Clearances |
| 5b | Area under backfilling of mined out area | Area of 1.5 hecets in quarry no-2 has been proposed for backfilling. | Nil | Mine is not Working from 2011, for want of Statuary Clearances |
| 5c | Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32) | No Proposal | Nil | Mine is not Working from 2011, for want of Statuary Clearances |
| 5d | Total area fully reclaimed and rehabilitated | No Proposal | Nil | Mine is not Working from 2011, for want of Statuary Clearances |
| 5e | General remarks of inspecting officers on backfilling and reclamation etc. | Back filling has proposed | Nil | Mine is not Working from 2011, for want of Statuary Clearances |

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). | It should be on or before 1st July every year. | Not Submitted | Mine is not Working from 2011, for want of Statuary Clearances |
| 6b | Area available for rehabilitation (ha) . | No Proposal | Nil | Mine is not Working from 2011, for want of Statuary Clearances |
| 6c | afforestation done (ha). | No Proposal | Nil | Mine is not Working from 2011, for want of Statuary Clearances |
| 6d | No. of saplings planted during the year | No Proposal | Nil | Mine is not Working from 2011, for want of Statuary Clearances |

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| 6e | Cumulative no .of plants | No Proposal | Nil | Mine is not Working from 2011, for want of Statuary Clearances |
| 6f | Any other method of rehabilitation | No Proposal | Nil | Mine is not Working from 2011, for want of Statuary Clearances |
| 6g | Cost incurred on watch and care during the year | No Proposal | Nil | Mine is not Working from 2011, for want of Statuary Clearances |
| 6h | Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D | No Proposal | Nil | Mine is not Working from 2011, for want of Statuary Clearances |
| 6i | Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings | No Proposal | Nil | Mine is not Working from 2011, for want of Statuary Clearances |
| 6j | Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area | No Proposal | Nil | Mine is not Working from 2011, for want of Statuary Clearances |
| 6k | Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir | No Proposal | Nil | Mine is not Working from 2011, for want of Statuary Clearances |
| 6l | Compliance on reclamation and rehabilitation by backfilling (v)any other specific means. | No Proposal | Nil | Mine is not Working from 2011, for want of Statuary Clearances |
| 6m | Compliance of rehabilitation of waste land within lease (i)afforestation | 1500 saplings proposed during 2018-2019 | 200 Saplings has planted inside the lease area and 350 has planted outside the lease area | Mine is not Working from 2011, for want of Statuary Clearances |

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| 6n | Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha) | 1.50 hect proposed. | 0.50 planted | Mine is not Working from 2011, for want of Statuary Clearances |
| 6o | Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation | Nil | Nil | Mine is not Working from 2011, for want of Statuary Clearances |
| 6p | Compliance of environmental monitoring (core zone and buffer zone) | Bi-Annually Survey | Environment monitoring is carried out through own as well as private agency. | Mine is not Working from 2011, for want of Statuary Clearances |
| 6q | General remarks of inspecting officers on PMCP compliance and progressive closure operations etc. | Environment monitoring is carried out through own as well as private agency. | Nil | Mine is not Working from 2011, for want of Statuary Clearances |

Mineral Conservation:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|--|-------------|--|
| 7a | ROM Mineral dispatch or grade-wise sorting within lease area | 610000 tons | Nil | Mine is not Working from 2011, for want of Statuary Clearances |
| 7b | Method of grade-wise mineral sorting i.e. manual or mechanical. | Mechanical Process and Manual Picking of Ore from Intercalated Waste | Nil | Mine is not Working from 2011, for want of Statuary Clearances |
| 7c | Different grade of mineral sorted out at mines. | No Proposal | Nil | Mine is not Working from 2011, for want of Statuary Clearances |
| 7d | Any beneficiation process at mines . | No Proposal | Nil | Mine is not Working from 2011, for want of Statuary Clearances |

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| 7e | General remarks of inspecting officer on Mineral conservation and beneficiation issues | Proposed 610000 tons of ROM | Nil | Mine is not Working from 2011, for want of Statuary Clearances |
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Environment:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|--|---|---|
| 8a | Separate removal and utilization of topsoil (Rule 32) | No Proposal | Nil | Mine is not Working from 2011, for want of Statuary Clearances |
| 8b | Concurrent use or storage of topsoil | No Proposal | Nil | Mine is not Working from 2011, for want of Statuary Clearances |
| 8c | Separate dumps for overburden, waste rock, rejects and fines (Rule 33) | Separate dump has been proposed for waste dump | Nil | Mine is not Working from 2011, for want of Statuary Clearances |
| 8d | Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use | No Proposal | Nil | Mine is not Working from 2011, for want of Statuary Clearances |
| 8e | Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc) | No Proposal | Nil | Mine is not Working from 2011, for want of Statuary Clearances |
| 8f | Baseline information on existence of plantation and additional plantation done (Rule 41) | 1500 saplings/ year has proposed. | 200 Saplings has planted inside the lease area and 350 has planted outside the lease area | Cumulatively 2500 saplings have been planted during previous plan period. |
| 8g | Survival rate | 50% | 50% | |

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| 8h | Water sprinkling on roads to control airborne dust | Yes, it is proposed for water sprinkling on haul roads. | Water sprinkling on road is observed during the inspection. | |
| 8i | General remarks of inspecting officer on aesthetic beauty in and around mines area | Scanty vegetation, bushes are observed in lease area | Surrounding area beyond lease area is greenery. The area is hilly terrain. | Area is in forest and there is no agricultural land within the lease. |

Compliance of Rule 45:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|---|--|--|
| 9a | Status of submission of Monthly and Annual returns | MR Submitted up to = September 2019 AR Submitted up to = 2018-2019 | Both Annual & Monthly returns are submitting in online system. Submitted within the time limits | |
| 9b | Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager | Appointment of Mining Engineer, Geologist is shown as full time. | Mining Engineer & Geologist are appointed as part time for all the non working mines. | It is advised to show only as part time. |
| 9c | Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc. | Land use Pattern as on 01.04.2015. Mines = 6.69 hect Infra = 25.42 hect | Landuse Pattern is filled as per approved Mining Plan | |
| 9d | Scrutiny of Annual return on afforestation | 200 Saplings has planted inside the lease area and 350 has planted outside the lease area | Cumulatively 2500 saplings have been planted during previous plan period. | Mine is not Working from 2011, for want of Statuary Clearances |
| 9e | Scrutiny of Annual return on mineral reject generation (Grade and quantity) | There is no Mineral Rejects Generation | There is no Mineral Rejects Generation | Mine is not Working from 2011, for want of Statuary Clearances |

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| 9f | Scrutiny of Annual return on ROM stock and/or graded ore | Nil | Due to Non-Working from 2011, there is no ROM stock and all are nil only. | Mine is not Working from 2011, for want of Statuary Clearances |
| 9g | Scrutiny of Annual return on sale value, Ex. Mine price and production cost | Ex.Mine Price & Production cost is Zero | Due to Non-Working, there is no ROM, hence Ex.Mine Price & Production cost is Zero. | Mine is not Working from 2011, for want of Statuary Clearances |
| 9h | Scrutiny of Annual return on fixed assets | Fixed Assets is given | Fixed Assets is filled | Mine is not Working from 2011, for want of Statuary Clearances |
| 9k | Scrutiny of Annual return on mining machineries | Machineries detail not given | Due to Non-Working, there is no availability of machineries in field. | Mine is not Working from 2011, for want of Statuary Clearances |

Details of violations observed during current inspection and compliance position of violation pointed out

| Violation observed | | Show couse position | |
|--------------------|-------------------------|---------------------|-------------------------|
| Rule NO. | Issued on Compliance on | Rule NO. | Issued on Compliance on |

Date :

(G. S. KANNAN)

Indian Bureau of Mines