# INDIAN BUREAU OF MINES MINERALS DEVELOPMENT AND REGULATION DIVISION

#### MCDR INSPECTION REPORT

### Bhubaneshwar regional office

Mine file No : ORI/IRON/KJR/MCDR-60/BBS Mine code : 300RI08013

(i) Name of the Inspecting : SRM ) SHRI SUDIP RANJAN MAZUMDAR

Officer and ID No.

(ii) Designation : Senior Mining Geologist

(iii) Accompaning mine : Shri Tarun Kanti Roy, Mines Manager

Official with Designation

(iv) Date of Inspection : 10/01/2018
(v) Prev.inspection date : 17/02/2016

PART-I : GENERAL INFORMATION

1. (a) Mine Name : BOLANI

(b) Registration NO. : IBM/1120/2011

(c) Category : A Mechanised

(d) Type of Working : Opencast

(e) Postal address

State : ORISSA
District : KEONJHAR
Village : BOLANI
Taluka : BARBIL
Post office : BOLANI
Pin Code : 758037

FAX No. : 06767-30246

E-mail : rmdbom2016@gmail.com

Phone : 06767-60207

(f) Police Station : Bolani

(g) First opening date : 12/04/1960

(h) Weekly day of rest : SUN

2. Address for : BOLANI ORES MINES, AT/PO: BOLANI

correspondance KEONJHAR DISTRICT

ORISSA

3. (a) Lease Number : ORIO102 (b) Lease area : 1321.45

(c) Period of lease : 20

(d) Date of Expiry : 09/04/2010

4. Mineral worked : IRON ORE Main

5. Name and Address of the

Lessee : STEEL AUTHORITY OF INDIA LIMITED

PURNAPANI LIMESTONE MINE SUNDERGARH DISTRICT -770 ORISSA SUNDARGARH ORISSA

Phone:0661-728121

FAX :

Owner : Kalyan Maity, (Director cum Nominated Owner)

SAIL, RAW MATERIAL DIVISION Industry House ( 4th to 6th Floor ) 10, Camac Street, Kolkata KOLKATA WEST BENGAL

Phone: 033-22825255

FAX :

Agent : A.K.MISHRA

KEONJHAR ORISSA

Phone: FAX:

Mining Engineer

Name : Ravi Ranjan, Full Time

Qualification : B.Tech in Mining Engineering

Appointment/ : 01/05/2016

Termination date

Geologist

Name : Joydev Chattopadhyay, Full Time Qualification : M.Sc.Tech in Applied Geology

Appointment/ : 01/06/2016

Termination date

Manager

Name : Tarun Kanti Roy
Qualification : B.TECH (MINING)
Appointment/ : 10/07/2014

Termination date

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PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

### Exploration :

| Sl.No. | Item  | Proposals  | Actual work   | Remarks   |
|--------|---|--|---|---|
| 1a     | Backlog of previous year  | 33 boreholes have been proposed to be drilled in the year 2016-17  | 13 boreholes have been drilled in the year 2016-17.   | Short fall due want of forest clearance as the drilling proposal falls over the undiverted forest area.   |
| 1b     | Exploration over lease area for geological axis 1 or 2                  | No Specific proposal   | Lease area explored under G1 is 348.68 ha & G2 is 195.89 ha. The total area explored under G1 & G2 level of exploration is 544.57 Ha.                         | Lease area explored under G1 is 348.68 ha & G2 is 195.89 ha. The total area explored under G1 & G2 level of exploration is 544.57 Ha.                         |
| 1c     | Exploration Agencies and Expenditure in lakh rupees during the year     | ExPloration Agency: M/S MECL (A Central Public Sector Enterprise)  | Exploration agency is M/S MECL and total expenditure incurred is approximately Rs 2.3 Crore.  | Exploration agency is M/S MECL and total expenditure incurred is approximately Rs 2.3 Crore.  |
| 1d     | Balance area to<br>be explored to<br>bring Geological<br>axis in 1 or 2 | No Specific<br>Proposal  | Balance area to explore under G1 and G2 level of UNFC is 776.88 Ha.   | Balance area to<br>explore under G1<br>and G2 level of<br>UNFC is 776.88 Ha.  |
| 1e     | Balance reserve<br>as on 01/04/20                                       | As on<br>01.04.2016<br>Reserves:<br>250.62 MT<br>Resources:<br>57.68 MT<br>Total Reserve<br>and Resource:<br>308.30 MT | ROM Production during the year 2016-17 was 5.68 MT. Reserve as on 01.04.2017 Reserves: 244.94 MT Resources: 57.68 MT Total Reserve and Resource is: 302.62 MT | ROM Production during the year 2016-17 was 5.68 MT. Reserve as on 01.04.2017 Reserves: 244.94 MT Resources: 57.68 MT Total Reserve and Resource is: 302.62 MT |

1f General remarks
 of inspecting
 officers on
 geology,
 exploration etc

No Comments

The total area explored under G1 & G2 level of exploration is 544.57 Ha. The proposals for exploration as per the exploration plan for 2016-17 could not be completed due want of forest clearance as the drilling proposal falls over the un-diverted forest area.

The total area explored under G1 & G2 level of exploration is 544.57 Ha. The proposals for exploration as per the exploration plan for 2016-17 could not be completed due want of forest clearance as the drilling proposal falls over the undiverted forest area.

### Development :

| Sl.No. | Item   | Propasals   | Actual work  | Remarks  |
|--------|--|---|--|--|
| 2a     | Location of development w.r.t.lease area                                   | S2320/ W2617-<br>W2646<br>G-area: S846-<br>S932/W2165-<br>W2261 | G-area: S846-S932/W2165-<br>W2261<br>D-area: N1071-<br>N1148/E860-E901<br>Panposh: N124-N157/E260- | F-area: S2181-<br>S2320/ W2617-W2646<br>G-area: S846-<br>S932/W2165-W2261<br>D-area: N1071-<br>N1148/E860-E901<br>Panposh: N124-<br>N157/E260-E341 |
| 2b     | Separate benches<br>in topsoil,<br>overburden and<br>minerals (Rule<br>15) | benches   | Separate benches overburden and mineral not maintained.  | Separate benches overburden and mineral not maintained.  |
| 2c     | Stripping ratio<br>or ore to OB<br>ratio                                   | 1 : 0.81  | 1 : 0.44   |  |
| 2d     | Quantity of topsoil generation in m3                                       | Nil   | No top soil is being generated during the year.  | No top soil is being generated during the year.  |

| 2e | Quantity of overburden generation in m3   | Quantity of<br>overburden<br>generation<br>proposed for<br>generation is<br>3540000 m3 | Quantity of overburden<br>generated during the<br>year 1125852 m3 or<br>(2476875T) | Quantity of<br>overburden<br>generated during<br>the year 1125852<br>m3 or (2476875T) |
|----|---|--|--|---|
| 2f | General remarks of inspecting officers on development of pit w.r.t. type of deposit etc | No Comments  | The location of developement is as per the proposal for the year 2016-17.          | The location of developement is as per the proposal for the year 2016-17.             |

# Exploitation:

| Sl.No. | Item   | Propasals  | Actual work  | Remarks   |
|--------|--|--|--|---|
| 3a     | Number of pit proposed for production                            | proposed for production.   | Four (04) number of pits put for production. F-area: S2181-S2320/ W2617-W2646 G-area: S846-S932/W2165- W2261 D-area: N1071- N1148/E860-E901 Panposh: N124-N157/E260-E341 | Four (04) number of pits put for production. F-area: S2181- S2320/ W2617-W2646 G-area: S846- S932/W2165-W2261 D-area: N1071- N1148/E860-E901 Panposh: N124- N157/E260-E341                              |
| 3b     | Quantity of ROM mineral production proposed                      | Proposal for<br>ROM production<br>fo rthe year<br>2016-17 was<br>9.62 million<br>tones | Actual ROM Production fo<br>rthe year 2016-17 was<br>5.68 million tones  | Actual ROM Production fo rthe year 2016-17 was 5.68 million tones   |
| 3с     | Recovery of<br>sailable/usable<br>mineral from ROM<br>production |  | Recovery of saleable/usuable mineral from ROM is 98.3%.  | Subgrade material generated during mining was not be fully blended with high grade ore as per proposal and has been stacked separately. Hence, the recovery of saleable material is more than proposal. |

3d Quantity of mineral reject generation

The proposal Actual mineral reject for MR generation was 94374 generation was tones. 1.67 million tones

that subgrade generated will be blended with high grade ore. But all the subgrade generated could not be blended with high grade ore and stacked separately. There is no designated area marked for stacking subgrade ore in the approved scheme of mining. Hence, it has been intimated to lessee through violation letter.

It was proposed

3e Grade of mineral Grade of rejects generation and threshold value declared.

Fe, Threshold value for Iron is +45% fe

Grade of mineral reject mineral reject generation is +45% Fe to generation is 55% Fe, Threshold value +45% Fe to 55% for Iron is +45% fe

3f Quantity of sub grade mineral generation.

The proposal for MR generation was tones. 1.67 million tones

Actual mineral reject generation was 94374

Grade of mineral reject generation is +45% Fe to 55% Fe, Threshold value for Iron is +45% fe

It was proposed that subgrade generated will be blended with high grade ore. But all the subgrade generated could not be blended with high grade ore and stacked separately. There is no designated area marked for stacking subgrade ore in the approved scheme of mining. Hence, it has been intimated to lessee through violation letter.

| 3g | Grade of sub<br>grade mineral<br>generation  | Grade of mineral reject generation is +45% Fe to 55% Fe.                                      | Grade of mineral reject generation is +45% Fe to 55% Fe.   | Grade of mineral reject generation is +45% Fe to 55% Fe.  |
|----|--|---|--|---|
| 3h | Manual / Mechanised method adopted for segregating from ROM  | Mechanized<br>method  | Mechanized method  | Mechanized method   |
| 3i | Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.                        | Not Proposed  | Not Applicable   | Not Applicable  |
| 3j | Provision of drilling and blasting in mineral benches  | Yes   | Yes  |   |
| 3k | Provision of mining machineries in mineral benches   | 9.5 m3<br>capacity<br>hydraulic<br>shovel, 100<br>tons dumpers,<br>drill master,<br>dozer etc | 9.5 m3 capacity<br>hydraulic shovel, 100<br>tons dumpers , drill<br>master, dozer etc                | 9.5 m3 capacity<br>hydraulic shovel,<br>100 tons dumpers,<br>drill master,<br>dozer etc                             |
| 31 | Whether height<br>of benches in<br>overburden and<br>mineral suitable<br>for method of<br>mining proposed<br>in MP/SOM | Yes   | Yes the height of the benches is suitable for the method of mining proposed in the scheme of mining. | Yes the height of<br>the benches is<br>suitable for the<br>method of mining<br>proposed in the<br>scheme of mining. |
| 3m | Total area<br>covered under<br>excavation/pits   | 277.36 На.  | 277.36 на.   |   |
| 3n | Ore to OB ratio for the pit/mine during the year.  | 1 : 0.81  | 1 : 0.44   |   |
| 30 | Total area put in use under different heads at the end of year   | Total area at<br>the end of<br>plan period is<br>559.9789 Ha                                  | the end of year is   | Total area put in use at the end of year is 456.71 Ha   |

| 3p | Production of<br>ROM mineral<br>during the last<br>five year period<br>as applicable | Proposal (in million tones) 2011-12: 12 MT 2012-13: 12 MT 2013-14: 12 MT | Actual ROM Production in tonnes<br>2011-12: 3745275 T<br>2012-13: 3075927 T<br>2013-14: 3785357 T<br>2014-15: 4342889 T<br>2015-16: 5354705 T  | Actual ROM Production in tonnes 2011-12: 3745275 T 2012-13: 3075927 T 2013-14: 3785357 T 2014-15: 4342889 T 2015-16: 5354705 T   |
|----|--|--|--|--|
| 3q | General remarks of inspecting officers on method of mining etc.                      | No Comments  | Exploitation of mineral has been done from four nos. of pits. The production was less than proposed. The subgrade ore was proposed to be blended with high grade ROM. Instead certain quantity of subgrade mineral has not been blended with ROM and stacked separately. | Exploitation of mineral has been done from four nos. of pits. The production was less than proposed. The subgrade ore was proposed to be blended with high grade ROM. Instead certain quantity of subgrade mineral has not been blended with ROM and stacked separately. |

# Solid Waste Management - Dumping:

| Sl.No. | Item   | Propasals  | Actual work  | Remarks   |
|--------|--|--|--|---|
| 4a     | Separate dumping of topsoil, OB and mineral rejects (Rule 32,33) | dumping is<br>planned for OB<br>while the<br>Mineral<br>Reject/ Sub- | OB & IB waste is dumped in the earmarked areas where as the sub-grade ore produced concurrent to mining could not be blended with high grade ore and stacked separately. There is no top soil generation | The subgrade ore was proposed to be blended with high grade ROM. Instead certain quantity of subgrade mineral has not been blended with ROM and stacked separately. |

Fines dump:

Outside UPL

4b Location of Location of Location of waste There is no topsoil, OB and Waste dumps: dumping: proposal for mineral reject F-Area: S1720- F-area: S2217subgrade stacking dumps S2240/W2610-S2494/W2822-W3000 and top soil W3250 G-area: S980generation will be G-Area: S980-S1225/W1737-W2158 nil. S1220/W2070-D-area: N717-N1107/E518-E700 D-Area: N820-Panposh: N67-S160/E170-N960/E1070-E320; N25-N390/E103-W173 E1150 Panposh Area: S70-S260/E290-E440; N50-N320/ E80-W290 Number of dumps 4c Within Lease Within Lease area Within Lease area within lease Fines dump: 03 nos. Fines dump: 03 area area and outside Fines dump: 03 F-area: 2 nos. of waste nos. of lease area nos. dumps F-area: 2 nos. of F-area: 2 nos. G-area: 02 nos. waste waste dumps of waste dumps dumps & 01 no. of G-area: 02 nos. subgrade dump. waste dumps & 01 G-area: 02 nos. waste D-area: 02 nos. of waste no. of subgrade dumps & 01 no. dumps. dump. of subgrade Panposh: 05 nos. waste D-area: 02 nos. of dump. dumps waste dumps. D-area: 02 Panposh: 05 nos. waste dumps nos. of waste dumps. Panposh: 05 nos. waste dumps 4d Location of Location of Location of dumps in Location of dumps dumps w.r.t. dumps in following areas: in following ultimate pit following F-area: Within UPL areas: limit (Rule 16) areas: G-area: Within UPL F-area: Within UPL F-area: Within D-Area: Outside UPL G-area: Within UPL Panposh: Outside UPL D-Area: Outside G-area: Within Fines dump: Outside UPL UPL Panposh: Outside D-Area: UPL

Outside UPL

Outside UPL Fines dump: Outside UPL

Panposh:

| 4e         | Number of active and alive dumps.                                  |   | F-area: 01 active<br>G-area: 02 active<br>D-Area: 01 active<br>Panposh: 01 active<br>Fines dump: inactive                   | F-area: 01 active<br>G-area: 02 active<br>D-Area: 01 active<br>Panposh: 01 active<br>Fines dump:<br>inactive                       |
|------------|--|---|---|--|
| 4f         | Number of dead dumps.  | Number of dead dumps: F-area: 01 inactive G-area: 01 inactive D-Area: 01 inactive Panposh: 04 inactive Fines dump: inactive | Number of dead dumps: F-area: 01 inactive G-area: 01 inactive D-Area: 01 inactive Panposh: 04 inactive Fines dump: inactive | Number of dead dumps: F-area: 01 inactive G-area: 01 inactive D-Area: 01 inactive Panposh: 04 inactive Fines dump: inactive        |
| <b>4</b> g | Number of dumps established.                                       | Numner of dumps stabilized: F-area: 01 stabilized G-area: Nil D-Area: 01 stabilized Panposh: 02 stabilized                  | Number of dumps<br>stabilized:<br>F-area: 01 stabilized<br>G-area: Nil<br>D-Area: 01 stabilized<br>Panposh: 02 stabilized   | Number of dumps<br>stabilized:<br>F-area: 01<br>stabilized<br>G-area: Nil<br>D-Area: 01<br>stabilized<br>Panposh: 02<br>stabilized |
| 4h         | Whether Retaining wall or garland drain all along dumps are there. | Yes   | Yes   |  |
| 4i         | Length of Retaining wall or garland drain all along dumps          | Proposal for construction of retaining wall: G-area: RW-718x1.5x1.2 D-area: RW-569x1.5x1.2                                  | Retaining wall constructed RW-1162 x 1 x 2  | Retaining wall<br>constructed RW-<br>1162 x 1 x 2  |

| 4j | Number of settling ponds   | 2 Nos.<br>Dimension 15m<br>(L) x 10m (W) | Nil  |  |
|----|--|--|--|--|
| 4k | Specific comments of inspecting officer on waste dump management | No Comments                              | OB dumping has been done as per proposal. The subgrade material could not be fully blended with high grade ROM and is stacked separately. The dumps are located outside the UPL. | OB dumping has been done as per proposal. The subgrade material could not be fully blended with high grade ROM and is stacked separately. The dumps are located outside the UPL. |
|    |  |  |  |  |

# 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. | There is no proposal for backfilling.         | None of the working pits completely demineralized except South-western part of F-area.                             | None of the working pits completely demineralized except Southwestern part of Farea.                               |
| 5b     | Area under<br>backfilling of<br>mined out area  | Not Proposed                                  | 0.1 Ha. In F area  |  |
| 5c     | Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)     | There is no proposal for top soil generation. | Topsoil generated incidental to development is being utilized only for plantation at different areas within lease. | Topsoil generated incidental to development is being utilized only for plantation at different areas within lease. |
| 5d     | Total area fully reclaimed and rehabilitated  | Not Proposed                                  | Not Applicable   | Not Applicable   |
| 5e     | General remarks of inspecting officers on backfilling and reclamation etc.                    | No Comments                                   | Solid waste management done as per the proposal  | Solid waste management done as per the proposal  |

# 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).                               | Annual report<br>on Protective<br>&<br>Rehabilitative<br>work carried<br>out to be<br>given by 30th<br>June. | Annual Report on PMCP for the year 2016-17 has been submitted. | Annual Report on PMCP for the year 2016-17 has been submitted. |
| 6b     | Area available for rehabilitation (ha) .   | Not Proposed   | Not Applicable   | Not Applicable   |
| 6c     | afforestation done (ha).   | 3.51 Ha.   | 6.00 на.   | 6.00 на.   |
| 6d     | No. of saplings planted during the year  | Number of samplings proposed for planation in 2016-17 was 8775 Nos.  | No. of saplings planted during the year was 25000 Nos.         | No. of saplings planted during the year was 25000 Nos.         |
| бе     | Cumulative no .of plants   | Cumulative no. of plants to be planted proposed was 20300 Nos.   | Cumulative no. of plants planted was 220000 Nos.               | Cumulative no. of plants planted was 220000 Nos.               |
| 6f     | Any other method of rehabilitation   | Not Proposed   | Not Applicable   | Not Applicable   |
| 6g     | Cost incurred on watch and care during the year  | Rs 4.12 Lakhs  | Rs 20.12 Lakhs   |  |
| 6h     | Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D | Not Proposed   | Not Applicable   | Not Applicable   |
| 6i     | Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings          | Not Proposed   | Not Applicable   | Not Applicable   |

| 6j | Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on on backfilled area        | Not Proposed   | Not Applicable  | Not Applicable   |
|----|---|--|---|--|
| 6k | Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir | Not Proposed   | Not Applicable  | Not Applicable   |
| 61 | Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.                  | Not Proposed   | Not Applicable  | Not Applicable   |
| 6m | Compliance of rehabilitation of waste land within lease (i)afforestation                                  |  | Not Applicable  | Not Applicable   |
| 6n | Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)                      | Not Proposed   | Not Applicable  | Not Applicable   |
| 60 | Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation                     | Not Proposed   | Not Applicable  | Not Applicable   |
| 6p | Compliance of environmental monitoring (core zone and buffer zone)  | 04 CAAQMS stations to monitor AAQ Quarterly Water pollution monitoring | 04 CAAQMS stations installed and up-linked to SPCB sever Quarterly water Monitoring outsourced to NABL Accredited laboratory. | 04 CAAQMS stations installed and uplinked to SPCB sever Quarterly water Monitoring outsourced to NABL Accredited laboratory. |

6q General remarks No Comments of inspecting officers on PMCP compliance and progressive closure operations etc.

Compliance on PMCP is as per proposal.

Compliance on PMCP is as per proposal.

### Mineral Conservation:

| Sl.No. | Item   | Propasals     | Actual work   | Remarks   |
|--------|--|---------------|---|---|
| 7a     | ROM Mineral<br>dispatch or<br>grade-wise<br>sorting within<br>lease area     | Not Specified | Grade wise lump and fines dispatch: Lump: 62% to below 65% and Fines: 62% to below 65%  | Grade wise lump and fines dispatch: Lump: 62% to below 65% and Fines: 62% to below 65%  |
| 7b     | Method of grade-<br>wise mineral<br>sorting i.e.<br>manual or<br>mechanical. | Mechanical    | Mechanical  | Mechanical  |
| 7c     | Different grade of mineral sorted out at mines.                              | Not Specified | Grade wise lump and fines dispatch: Lump: 62% to below 65%; Fines: 62% to below 65%   | Grade wise lump and fines dispatch: Lump: 62% to below 65%; Fines: 62% to below 65%   |
| 7d     | Any beneficiation process at mines .   | facilities at | Beneficiation carried out as per proposal in which wet beneficiation continued till approximately mid of february 2017 after which it is stopped. Crushhing and screening progressed. | Beneficiation carried out as per proposal in which wet beneficiation continued till approximately mid of february 2017 after which it is stopped. Crushhing and screening progressed. |

7e General remarks No Comments Beneficiation carried Beneficiation out as per proposal in of inspecting carried out as per officer on which wet beneficiation proposal in which continued till Mineral wet beneficiation conservation and approximately mid of continued till beneficiation february 2017 after approximately mid which it is stopped. of february 2017 issues Crushhing and screening after which it is stopped. Crushhing progressed. and screening progressed.

#### Environment:

| Sl.No. | Item  | Propasals  | Actual work  | Remarks  |
|--------|---|--|--|--|
| 8a     | Separate removal and utilization of topsoil (Rule 32)   | proposal for<br>top soil<br>generation<br>during current | Topsoil generated incidental to development is being utilized only for plantation at different areas within lease. | Topsoil generated incidental to development is being utilized only for plantation at different areas within lease. |
| 8b     | Concurrent use or storage of topsoil  | Not Proposed   | Not Applicable   | Not Applicable   |
| 8c     | Separate dumps<br>for overburden,<br>waste rock,<br>rejects and<br>fines (Rule 33)                | Yes  | Yes  | Yes  |
| 8d     | Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use | Not Proposed   | Not Applicable   | Not Applicable   |

| 8e                     | Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc) | Not Proposed                                       | Not Applicable  | Not Applicable  |  |
|------------------------|---|--|---|---|--|
| 8f                     | Baseline information on existence of plantation and additional plantation done (Rule 41)                    | Not Specified                                      | Number of trees planted during the year : 25000 Nos.  | Number of trees planted during the year : 25000 Nos.  |  |
| 8g                     | Survival rate   | Not Specified                                      | As reported survival rate within the lease area is 60%.   | As reported survival rate within the lease area is 60%.   |  |
| 8h                     | Water sprinkling<br>on roads to<br>control airborne<br>dust   | to be controlled by water sprinkling system on the | Water sprinkling is done to suppress the airborne dust by using water tankers. Permanent sprinklers installed along Panposh road & 600tph plant road. | Water sprinkling is done to suppress the airborne dust by using water tankers. Permanent sprinklers installed along Panposh road & 600tph plant road. |  |
| 8i                     | General remarks<br>of inspecting<br>officer on<br>aesthetic beauty<br>in and around<br>mines area           | No Comments  | Aesthetic beauty in and around mines is maintained.   | Aesthetic beauty in and around mines is maintained.   |  |
| Compliance of Rule 45: |   |  |   |   |  |
| Sl.No.                 | Item  | Propasals  | Actual work   | Remarks   |  |

| 9a | Status of<br>submission of<br>Monthly and<br>Annual returns                                   | Monthly returns under Rule 45(5)(b)(i) of MCDR 2017 by 10th day of every month in Form F-1 of the Schedule. Annual Return under Rule 45(5)(c)(i) of MCDR 2017 by 1st July of every year. | submitted. Monthly return till Jan'18 has been submitted.  | Annual return for<br>the year 2016-17<br>has been<br>submitted. Monthly<br>return till Jan'18<br>has been<br>submitted.  |
|----|---|--|--|--|
| 9b | Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager           | Graduate Mining Engineer:15 Diploma Mining Engineer: 17 Geologist: 3   | Graduate Mining Engineer:15 Diploma Mining Engineer: 17 Geologist: 3   | Graduate Mining Engineer:15 Diploma Mining Engineer: 17 Geologist: 3   |
| 9c | Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc. | ,  | Covered under current (O/C) Workings: 360.10 Ha Used for waste disposal: 14 Ha Occupied by plant, buildings, residential, welfare buildings & roads: 70.11 Ha etc. | Covered under current (O/C) Workings: 360.10 Ha Used for waste disposal: 14 Ha Occupied by plant, buildings, residential, welfare buildings & roads: 70.11 Ha etc. |
| 9d | Scrutiny of<br>Annual return on<br>afforestation  |  | Number of saplings planted during the year : 25000 Nos. within the lease area  | Number of saplings<br>planted during the<br>year: 25000 Nos.<br>within the lease<br>area   |

lease area

| 9e | Scrutiny of Annual return on mineral reject generation (Grade and quantity) | Quantity of<br>Mineral<br>rejects<br>generation:<br>94374 tones  | Quantity of Mineral rejects generation: 94374 tones  | Quantity of<br>Mineral rejects<br>generation: 94374<br>tones   |
|----|---|--|--|--|
| 9f | Scrutiny of Annual return on ROM stock and/or graded ore                    | at mine head   | Closing stock at mine head (in tonne) Lump: 62% to below 65%: 102691.310 tonnes Fines: 62% to below 65%: 1737112.350 tonnes                      | Closing stock at mine head (in tonne) Lump: 62% to below 65%: 102691.310 tonnes Fines: 62% to below 65%: 1737112.350 tonnes        |
| 9g | Scrutiny of Annual return on sale value, Ex. Mine price and production cost | _  | Ex-mine price (in Rs Per Tonne) Lump: 62% to below 65%: 387.34 Fines: 62% to below 65%: 387.34   | Closing stock at mine head (in tonne) Lump: 62% to below 65%: 102691.310 tonnes Fines: 62% to below 65%: 1737112.350 tonnes        |
| 9h | Scrutiny of<br>Annual return on<br>fixed assets                             | Assets (in Rs) 7392303 (in respect of the mine,  | Value of Fixed Assets<br>(in Rs) 7392303 (in<br>respect of the mine,<br>beneficiation plant,<br>mine work-shop, power<br>and water installation) | Value of Fixed Assets (in Rs) 7392303 (in respect of the mine, beneficiation plant, mine work- shop, power and water installation) |
| 9k | Scrutiny of Annual return on mining machineries                             | SHOVEL (HYDRAULIC): 6 Nos. BACK HOE: 2 Nos. DUMPER: 12 Nos. ROCK DRILL (NONELEC.): 4 Nos. FRONT END LOADER: 5 Nos. | SHOVEL (HYDRAULIC): 6 Nos. BACK HOE: 2 Nos. DUMPER: 12 Nos. ROCK DRILL (NONELEC.): 4 Nos. FRONT END LOADER: 5 Nos.                               | SHOVEL (HYDRAULIC) : 6 Nos. BACK HOE: 2 Nos. DUMPER: 12 Nos. ROCK DRILL (NONELEC.): 4 Nos. FRONT END LOADER: 5 Nos.                |

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

| Violatio          | S                       | Show couse position |            |                  |  |  |
|-------------------|-------------------------|---------------------|------------|------------------|--|--|
| Rule NO.          | Issued on Compliance of | on Rule 1           | NO. Issued | on Compliance on |  |  |
| MCDR17 Rule 11(1) | 12/01/2018              |                     |            |                  |  |  |

#### Date:

(SHRI SUDIP RANJAN MAZUMDAR)

Indian Bureau of Mines