

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

**MCDR inspection REPORT**

**Goa regional office**

**Mine file No :** KAR/BGK/Fe-10

**Mine code :** 30KAR26001

- (i) Name of the Inspecting : **K02** ) **KALMATA M.K.**  
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Shri Gangadhar, Lessee's representative  
Official with  
Designation
- (iv) Date of Inspection : 07-MAR-19
- (v) Prev.inspection date : 18-DEC-17

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **AMINAGAD ARIHANT MINERALS**
- (b) **Registration NO.** : **IBM/5563/2011**
- (c) Category : A Other than Fully Mech.
- (d) Type of Working : Opencast
- (e) Postal address
- State : KARNATAKA
- District : BAGALKOT
- Village :
- Taluka :
- Post office :
- Pin Code :
- FAX No. : 08351-270207
- E-mail : arihantminerals79@yahoo.coi
- Phone : 08351-270207
- (f) Police Station : AMINGAD
- (g) First opening date : 28-JUN-10
- (h) Weekly day of rest : SUN
2. Address for : Behind Ayurvedic Hospital, ILKAL  
correspondance Taluka-Hunagundi, Dist- Bagalkot  
Karnataka-587125
3. (a) Lease Number : KAR1658
- (b) Lease area : 4.85
- (c) Period of lease : 20
- (d) Date of Expiry : 27-JUN-30
4. Mineral worked : IRON ORE Main

5. Name and Address of the

Lessee : RAVI SANGAPPA SARDESAI  
EXTENSION AREA BAGALKOT  
BAGALKOT KARNATAKA  
Phone:9448090383  
FAX :

Owner : RAVI SANGAPPA SARDESAI  
BAGALKOT KARNATAKA  
Phone:  
FAX :

Geologist

Name : Mr.Manjunath Paltekar, Full Time  
Qualification : M.sc (Applied Geology)  
Appointment/ : 01-SEP-18  
Termination date

6. Date of approval of Mining : Fresh under rule 22 MCR1960 05-JAN-07  
Plan/Scheme of Mining Mining Scheme rule 12 MCDR1988 18-MAY-15

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

## Exploration :

| Sl.No. | Item  | Proposals  | Actual work  | Remarks  |
|--------|---|--|--|--|
| 1a     | Backlog of previous year  | No exploration proposal is given in the present plan period which is valid up to 31.03.2020. | No exploration has been carried out by the lessee in the present plan period up to date of inspection. | However earlier lessee has made 11 trial pits in the lease area in the grid pattern 100m x 100m in the western part of the lease area and remaining part of the area is explored in irregular grid pattern.  |
| 1b     | Exploration over lease area for geological axis 1 or 2              | No exploration is proposed in the present plan period.                                       | No exploration is carried out in the present plan period up to date of inspection.                     | Entire lease area is explored under G-1 and G-2 level of exploration. Western part is explored under G-1 level and remaining part under G-2 level.   |
| 1c     | Exploration Agencies and Expenditure in lakh rupees during the year | Nil  | Nil  | No exploration is proposed in the present plan period. However earlier exploration was carried out by lessee himself.  |
| 1d     | Balance area to be explored to bring Geological axis in 1 or 2      | No exploration was proposed in the present plan period.                                      | No exploration was carried out in the present plan period up to the date of inspection.                | In the central and eastern part of the lease area the exploration is not carried out in the regular grid pattern. so lessee has advised to make few trial pits in the regular grid pattern to know the presence of ore, quality of ore and recovery. |

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| 1e | Balance reserve<br>as on 01/04/20 | Reserves as on<br>01.04.2018   |
|    |                                   | Proved Mineral Reserves<br>(111)<br>2,49,460 tonnes<br>Pre-feasibility<br>Resources (221/222)<br>6440 tonnes<br>Indicated M Resources<br>(331) 268240<br>tonnes<br>Total |
|    |                                   | 524140 tonnes  |

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| 1f | General remarks<br>of inspecting<br>officers on<br>geology,<br>exploration etc | The lease area is<br>located at the bottom of<br>the hill range on which<br>Iron ore lease of M/s.<br>Doddannavar is exist.<br>Only low grade float ore<br>is available in the<br>lease area. Earlier 11<br>trial pits were made in<br>the entire lease area to<br>a depth of 4m. The<br>western part of the<br>lease is explored in the<br>regular grid pattern and<br>remaing part of the<br>lease area is explored<br>in irregular pattern. So<br>lessee was advised to<br>explore entire lease<br>under G-1 level. |
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Development :

| Sl.No. | Item   | Propasals   | Actual work   | Remarks                                      |
|--------|--|---|---|--|
| 2a     | Location of<br>development<br>w.r.t.lease area | There was a<br>proposal to<br>work between<br>the co-<br>ordinates, N-<br>580 to N-940<br>and E-950 to<br>E-1030 in the<br>year 2017-18<br>and 2018-19. | During inspection it was<br>observed that working<br>has been not carried out<br>as per the proposal and<br>extended upto 7.5mtr<br>safety zone in the<br>western part of the<br>lease area b/w B.P-A and<br>B.P-H and in the south-<br>western part B/w B.P-H<br>and B.P-G it appears<br>that working has been<br>carried out outside the<br>lease also. | Violation is<br>pointed out for<br>the same. |

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| 2b | Separate benches in topsoil, overburden and minerals (Rule 15) | No separate benches were proposed in topsoil and OB. | The deposit is the float ore only, so no separate benches were formed in ore and OB. benches of 3.00 to 4.00 mtrs were formed and float ore is recoverd by screening. | The deposit is float ore only, so entire material removed during the mining has been fed to screening plant for recovery of float ore.   |
| 2c | Stripping ratio or ore to OB ratio                             | 1:0.57   | 1:0.5   | As per the observation during field visit approximately 10 to 11 thousand tons of OB was generated in the year 2017-18 and record of the same has been not maintained by the lessee and same was not shown in the annual returns submitted for the year 2017-18 and violation is pointed out for the same. |
| 2d | Quantity of topsoil generation in m3                           | Nil  | Nil   | No topsoil is handled in the present plan period. The topsoil removed earlier was utilized for plantation in the safety zone.  |
| 2e | Quantity of overburden generation in m3                        | 4898   | 4400  | As per the observation during field visit approximately 10 to 11 thousand tons of OB was generated in the year 2017-18 and record of the same has been not maintained by the lessee and same was not shown in the annual returns submitted for the year 2017-18 and violation is pointed out for the same. |

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| 2f | General remarks of inspecting officers on development of pit w.r.t. type of deposit etc | The deposit is float ore only, so entire material removed during the mining has been fed to screening plant for recovery of float ore. Total two benches were developed and total depth was 5 to 6 mtrs. The mining has been not carried out as per the proposal and violation is pointed out for the same. |
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### Exploitation:

| Sl.No. | Item  | Propasals                       | Actual work  | Remarks   |
|--------|---|---------------------------------|--|---|
| 3a     | Number of pit proposed for production                             | One                             | Only single pit was developed, but working has been carried out in irregular manner and not as per the proposal. | Violation is pointed out for the same.  |
| 3b     | Quantity of ROM mineral production proposed                       | 29999 tonnes                    | 20000 tonnes   |   |
| 3c     | Recovery of sailable/usable mineral from ROM production           | 80%                             | 65%  | The deposit is float ore only, so entire material removed during the mining has been fed to screening plant for recovery of float ore. So total material handled during the year 2017-18 was around 31000 tonnes in that 20000 is shown as ore and no record was kept for OB. Based on field observation the OB generated during 2017-18 was around 11000 tonnes. |
| 3d     | Quantity of mineral reject generation                             | No mineral reject was proposed. | Nil  |   |
| 3e     | Grade of mineral rejects generation and threshold value declared. | Not applicable                  | Not applicable   |   |

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| 3f | Quantity of sub grade mineral generation.  | No sub grade was proposed.        | Nil  |   |
| 3g | Grade of sub grade mineral generation  | Not applicable                    | Not applicable                               |   |
| 3h | Manual / Mechanised method adopted for segregating from ROM  | Mechanized                        | Mechanized                                   | Lessee is using dry screening plant for ROM segregation.  |
| 3i | Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.      | Not proposed                      | Nil  |   |
| 3j | Provision of drilling and blasting in mineral benches  | No drilling blasting is proposed. | Nil  | Since the seposit is float ore only and formation is soft lessee is doing mining manually.  |
| 3k | Provision of mining machineries in mineral benches   | Not proposed.                     | Lessee is doing manual mining.               |   |
| 3l | Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM | 2mtr bench height was proposed.   | Proposed bench height was almost maintained. |   |
| 3m | Total area covered under excavation/pits   | 1.2ha up to 2018-19               | 1.5 to 2.00ha up to 2018-19                  | The working has been not carried out as per the proposal. In the western side and south western side working has been carried out beyond the proposed area and violation is pointed out for the same. |

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| 3n | Ore to OB ratio for the pit/mine during the year.                        | 1:0.57  | 1:0.5  | As per the observation during field visit approximately 10 to 11 thousand tons of OB was generated in the year 2017-18 and record of the same has been not maintained by the lessee and same was not shown in the annual returns submitted for the year 2017-18 and violation is pointed out for the same.                                   |
| 3o | Total area put in use under different heads at the end of year           |   | Area under mining- 2.00 ha, Mineral stock- 0.4ha, backfilled area- 0.2ha.  |  |
| 3p | Production of ROM mineral during the last five year period as applicable | 2014-15<br>30000 tonnes<br>2015-16<br>29999 tonnes<br>2016-17<br>29999 tonnes<br>2017-18<br>29999 tonnes<br>2018-19<br>29999 tonnes | 2014-15<br>30000 tonnes as per manual return<br>2015-16<br>Nil<br>2016-17<br>19500 tonnes<br>2017-18<br>20000 tonnes<br>2018-19<br>24000 tonnes (up to Feb 2019) |  |
| 3q | General remarks of inspecting officers on method of mining etc.          |   |  | The deposit is float ore only, The mine is working manually and benches are maintained at 2.00 to 3.00 mtr height. The entire material removed during the mining has been fed to screening plant for recovery of float ore. The mining operation is not carried out as per the proposed locations and violation is pointed out for the same. |



| Sl.No. | Item   | Propasals   | Actual work   | Remarks  |
|--------|--|---|---|--|
| 4a     | Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)   | Only OB dump was proposed.  | OB dumping was not made as per the proposal   | Violation is pointed out for the same.   |
| 4b     | Location of topsoil, OB and mineral reject dumps                   | Proposed OB dump is b/e the co-ordinates N-500 to N-550 and E-975 to E-1015 | The dumping of OB was not made as per the proposal and waste generated was utilized for backfilling the worked out area where there is no such proposal for backfilling in the approved scheme of mining. | Violation is pointed out for the same.   |
| 4c     | Number of dumps within lease area and outside of lease area        | One   | Nil   | OB generated was utilized for backfilling the worked out area and violation is pointed out for the same.   |
| 4d     | Location of dumps w.r.t. ultimate pit limit (Rule 16)              | Out side the UPL  | No dump was made  | OB generated was utilized for backfilling worked out area.   |
| 4e     | Number of active and alive dumps.                                  | One   | Nil   |  |
| 4f     | Number of dead dumps.  | Nil   | Nil   |  |
| 4g     | Number of dumps established.                                       | One   | Nil   |  |
| 4h     | Whether Retaining wall or garland drain all along dumps are there. | Retaining wall was proposed   | Retaining wall was not constructed as per the proposal.   | Dump was not formed as per the proposal and entire OB was utilized for backfilling the worked out area, so no retaining wall was constructed in the year 2017-18. However violation is pointed out for the same. |
| 4i     | Length of Retaining wall or garland drain all along dumps          | 50 mtrs   | No retaing wall was constructed in the year 2017-18.  | Violation is poined out for the same.  |
| 4j     | Number of settling ponds   | Nil   | Nil   |  |

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| 4k | Specific comments of inspecting officer on waste dump management | In the approved document there was a proposal to dump 80% of the waste generated b/w co-ordinates N-500 to N-550 and E-975 to E-1015 and 20% was shown for road work, However waste dump is not made as per the proposal and waste generated is using for backfilling the worked out pits where there is no such proposal in the approved document. Violation is pointed out for the same. |
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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 back filling was proposed. | The nature of the deposit is float ore only and depth of the mineralization was proved up to 4.00 mtrs by trial pits. Lessee has backfilled the mined out area in the Southern side and south-western part of the lease area where there is no such proposal of backfilling in the approved document. | Violation is pointed out for the same.  |
| 5b     | Area under backfilling of mined out area  | Nil                           | 0.2ha   | About 0.2 ha in the southern and south-western part of the lease area was backfillied without proposal and violation is pointed out for the same. |
| 5c     | Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)     | Nil                           | Nil   | The OB generated was utilized for backfilling the mined out area.   |

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| 5d | Total area fully reclaimed and rehabilitated                               | Nil | About 0.2ha is backfillied   |
| 5e | General remarks of inspecting officers on backfilling and reclamation etc. |     | In the approved scheme of mining there was no proposal for backfilling in the present plan period. However lessee has backfilled about 0.2ha in the southern and south-western part of the lease area and violation is pointed out for the same. |

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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). | Before 1st july of every year. | Lessee has submitted annual report on PMCP for the year 2017-18 and details of plantation given in the report was found correct. |  |
| 6b     | Area available for rehabilitation (ha) .                                     | Nil                            | Nil  | About 0.2 ha is backfilled.  |
| 6c     | afforestation done (ha).   | 0.08                           | 0.1  |  |
| 6d     | No. of saplings planted during the year                                      | 100                            | 150 within the lease and 125 outside the lease   | The mine office is located outside the lease area and plantation is made around the mine office. |
| 6e     | Cumulative no .of plants   |                                | Total 2100 saplings wre planted b/w 2012-13 to 2018-19.  |  |
| 6f     | Any other method of rehabilitation   | Nil                            | Nil  |  |
| 6g     | Cost incurred on watch and care during the year                              | Nil                            | Rs-20000   |  |

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|----|--|-----|--|--|
| 6h | Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D | Nil | About 0.2 ha was backfilled  | Backfilling was made without any proposal and violation is pointed out for the same. |
| 6i | Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings          | Nil | Waste generated was utilized for backfilling of worked out pit.                    |  |
| 6j | Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area         | Nil | Plantation was made on some part of the backfilled area in the 7.5mtr safety zone. |  |
| 6k | Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir  | Nil | Nil  |  |
| 6l | Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.                  | Nil | Nil  |  |
| 6m | Compliance of rehabilitation of waste land within lease (i) afforestation                                  | Nil | Nil  |  |
| 6n | Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)                      | Nil | Nil  |  |
| 6o | Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation                     | Nil | Nil  |  |

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| 6p | Compliance of environmental monitoring (core zone and buffer zone)                                | The monitoring is carried out as per the schedule through approved third party and reports are maintained.  |
| 6q | General remarks of inspecting officers on PMCP compliance and progressive closure operations etc. | There was no proposal for backfilling in the approved scheme of mining, however lessee has backfilled about 0.2ha, The plantation was made as per the proposal given in the PMCP. Since no dump was formed the retaining wall was not constructed as per the proposal. Violation is pointed out for backfilling the mined out area with out any proposal and not constructing retaining wall as per the proposal. |

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Mineral Conservation:

| Sl.No. | Item  | Propasals  | Actual work  | Remarks  |
|--------|---|------------|--|--|
| 7a     | ROM Mineral dispatch or grade-wise sorting within lease area    |            | The deposit is float ore only and lessee is recovering only lumps by dry screening and grade of the lumps is 55 to 58% Fe. |  |
| 7b     | Method of grade-wise mineral sorting i.e. manual or mechanical. | Mechanical | Mechanical   | Lessee is using mobile screening plant for recovering lumps. |
| 7c     | Different grade of mineral sorted out at mines.                 |            | Lessee has stocked different size lumpy ore having 55 to 58% Fe.   |  |
| 7d     | Any beneficiation process at mines .                            | Nil        | Nil  |  |

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| 7e | General remarks of inspecting officer on Mineral conservation and beneficiation issues | It was observed that fines generated after screening is using for backfilling the mined out area with out doing any chemical analysis. The quantity of fines generated during screening is not maintained in records also. So lessee has advised to do chemical analysis of the fines in the NABL laboratory, If Fe% is more than the threshold value, then the same should be stocked separately as ore/mineral reject etc, for future use. |
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## Environment:

| Sl.No. | Item  | Propasals                           | Actual work  | Remarks  |
|--------|---|-------------------------------------|--|--|
| 8a     | Separate removal and utilization of topsoil (Rule 32)   | No topsoil generation was proposed. | No topsoil was removed in the year 2017-18.  | The topsoil removed earlier was utilized for plantation in the 7.5 mtr safetyzone and plantation around office premises. |
| 8b     | Concurrent use or storage of topsoil  | Nil                                 | Nil  |  |
| 8c     | Separate dumps for overburden, waste rock, rejects and fines (Rule 33)                            | Separate waste dump was proposed.   | Waste dump was not made as per the proposal and waste generated during mining activity is utilized for backfilling the worked out pit with out having any such proposals in the approved document. | Violation is pointed out for the same.   |
| 8d     | Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use | Nil                                 | Waste generated is utilized for backfilling the worked out pit with out having any proposal in the approved document.  | Violation is pointed out for the same.   |

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|----|---|-----|---|--|
| 8e | Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc) | Nil | About 0.2ha was backfilled with out any proposal.   | Violation is pointed out for the same. |
| 8f | Baseline information on existence of plantation and additional plantation done (Rule 41)                    |     | About 2100 plantation was made in and around the lease area.  |  |
| 8g | Survival rate   |     | 60 to 65%   |  |
| 8h | Water sprinkling on roads to control airborne dust  |     | Water tanker mounted tractor is being used for dust suppression. The mine is working manually and generation of airborne dust is negligible.  |  |
| 8i | General remarks of inspecting officer on aesthetic beauty in and around mines area                          |     | About 1.5 to 2.00 ha was degraded by mining, Stocking of finished product and ROM was not made properly and lessee was advised to make proper stocking. Plantation was made in the 7.5 mtr safety zone and outside the lease area around office premises. |  |

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Compliance of Rule 45:

| Sl.No. | Item   | Propasals  | Actual work   | Remarks |
|--------|--|--|---|---------|
| 9a     | Status of submission of Monthly and Annual returns | Monthly returns before the tenth day of every month in respect of the preceding month and Annual return before the 1st day of July each year for the preceding financial year. | Lessee has submitted monthly returns up to feb-2019 and Annual return for the year 2017-18. |         |

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| 9b | Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager           | Manager was shown as Mr.Nagappa S Tilagul and Mining engineer and Geologist were shown as Nil.   | Lessee has appointed Mr.Manjunath Paltelkar as the Geologist and No mining engineer is appointed so far.   | Violation is pointed out for not appointing Mining Engineer.  |
| 9c | Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc. | In the annual returns submitted for the year 2017-18 Area covered under current working was shown as zero, Infrastructure was given as - 0.18Ha and Other (Plantation)-3.86ha. | As per the observation land use details are, Area under mining- 2.00 ha, Mineral stock- 0.4ha, backfilled area- 0.2ha.   | Violation is pointed out for not giving land use details properly and lessee has advised to submit revised returns. |
| 9d | Scrutiny of Annual return on afforestation  | 275  | Plantation register was checked and details of the plantation was found correct.   |   |
| 9e | Scrutiny of Annual return on mineral reject generation (Grade and quantity)                   | Nil  | Nil  |   |
| 9f | Scrutiny of Annual return on ROM stock and/or graded ore                                      | In the annual returns submitted for the year 2017-18, about 26220 tonnes of lumps having Fe% 55 to 58 was shown as closing stock.  | During field visit it was observed that ROM was stocked near screening plant. However upto Jan-2019 monthly returns ROM opening and closing stock was shown as nil. Further in the monthly returns submitted for the month of Feb -2019 opening stock of ROM is shown as 21355 tons and closing stock as 26355 tons. | Violation is pointed out for the same.  |



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| 9g | Scrutiny of Annual return on sale value, Ex. Mine price and production cost | Sale value for 55 to 58% Fe lumpy ore given for Splendid Metal Products Ltd was shown as Rs, 136.7/tonne, for other sale value shown b/w 1200 to 1470/tonne., Exmine price was shown as Rs- 1390/tonne and cost of production was shown as zero. | About 9371 tonnes of 55 to below 58% Lumps was sold to Splendid Metal Products Ltd. And sale value is shown as Rs. 1281546 which will come as Rs 136.7/tonne. As per the record the sale value is more than 1300/tonne. In the monthly returns submitted for June-2018, maximum sale value is shown as Rs. 1700/tonne. However exmine price is shown as Rs.2452/tonne. | Violation is pointed out for not showing sale value and cost of production properly and lessee has advised to submit revised returns. |
| 9h | Scrutiny of Annual return on fixed assets                                   | Value of fixed asset is shown as zero. Whereas net closing balance is shown as Rs- 1351286, Land value is shown only Rs. 88,000. Value of screening plant is shown as Rs-120475.   | Land value for 4.86 has been shown as 88,000 only, it appears the rate is less than the Government rate and cost of Screening plant also given as Rs-120475 only. So lessee as advised to submit revised returns with actual rates.  | Violation is pointed out for the same.  |
| 9k | Scrutiny of Annual return on mining machineries                             | Only tipper was shown.   | The capacity of the tipper was shown as 10000 cum, and lessee has advised to correct the same.   |   |

**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 |
| MCDR17             | Rule 11(1)    | 14-MAR-19     |                     |           |               |
| MCDR17             | Rule 31(4)    | 14-MAR-19     |                     |           |               |
| MCDR17             | Rule 33       | 14-MAR-19     |                     |           |               |
| MCDR17             | Rule 45(7)(a) | 14-MAR-19     |                     |           |               |
| MCDR17             | Rule 55(1)(3) | 14-MAR-19     |                     |           |               |

**Date :**

**(KALMATA M.K.)**

Indian Bureau of Mines