

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

MCDR INSPECTION REPORT

Ranchi regional office

Mine file No : JHK/GML/BX/249/RRO

Mine code : 07JHK12010

- (i) Name of the Inspecting : **B001**) **SAGAR BODRA**
Officer and ID No.
- (ii) Designation : Assistant Mining Geologis
- (iii) Accompanying mine : S/SHRI VICTOR BASU, GM (GEOLOGY) & AKHILESH KUMAR SIN
Official with
Designation
- (iv) Date of Inspection : 16/08/2018
- (v) Prev.inspection date : 05/10/2016

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **SERANDAG (140.66 HCT.)**
- (b) **Registration NO.** : **IBM/935/2011**
- (c) Category : A Other than Fully Mech.
- (d) Type of Working : Opencast
- (e) Postal address :
State : JHARKHAND
District : LOHARDAGA
Village : SERANDAG
Taluka : LOHARDAGA
Post office : GHAGHRA
Pin Code :
FAX No. : 06526-224112/224015/223113
E-mail : bijesh.jha@adityabirla.com
Phone : 06526-224118
- (f) Police Station : GHAGHRA
- (g) First opening date : 25/04/1996
- (h) Weekly day of rest : SUN
2. Address for : MINES DIVISION, HINDALCO INDUSTRIES LTD.,
correspondance : HINDALCO COMPLEX, COURT ROAD,
AT/P.O- LOHARDAGA-835302, JHARKHAND
3. (a) Lease Number : BHR0250
- (b) Lease area : 140.07
- (c) Period of lease : 30
- (d) Date of Expiry : 03/10/2008
4. Mineral worked : BAUXITE Main

5. Name and Address of the

Lessee : M/S HINDALCO INDUSRIES LTD.
 COURT ROAD, LOHARDAGA,
 LOHARDAGA JHARKHAND
 Phone:06526 - 224012 & 224118
 FAX :06526-224112, 224016 & 0651- 2330782

Owner : A.K. AGARWALA
 HINDALCO INDUSTRIES LIMITED
 AT-RENUKOOT, P.O.-RENUKOOT
 DIST. SNOEBHADRA, U.P
 SONBHADRA UTTAR PRADESH
 Phone: 05446-252084, 2
 FAX : 05446-252107

Agent : B.K.JHA
 M/s HINDALCO INDUSTRIES
 Ltd. COURT ROAD PO& DIST -
 LOHARDAGA (JHK) LOHARDAGA
 JHARKHAND
 Phone: Mob- 941708929, 06526-224112/224015
 FAX : 06526-224118

Mining Engineer

Name : SRI AMAR BHARTI,Full Time
 Qualification : B.E(MIN)
 Appointment/ : 04/05/2016
 Termination date

Geologist

Name : SRI RAMESH KUMAR,Full Time
 Qualification : M.SC(GEOLOGY)
 Appointment/ : 03/01/2014
 Termination date

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| 6. Date of approval of Mining | : | Existing rule 11 MCDR1988 | 18/01/1994 |
| Plan/Scheme of Mining | | Mining Scheme rule 12 MCDR1988 | 31/01/2001 |
| | | Mining Scheme rule 12 MCDR1988 | 24/10/2005 |
| | | Renewal under rule 24 MCR1960 | 07/06/2012 |
| | | MP modif under MCR 1960 | 31/05/2016 |

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

| Sl.No. | Item | Proposals | Actual work | Remarks |
|--------|---|---|---|---------|
| 1a | Backlog of previous year | No exploration was proposed in modification of approved mining plan for the period from 2015-16 to 2019-20. | There is no backlog of previous year as the lease area has already been explored at a grid interval of 50m x 50m and 25m x 25m. | Nil |
| 1b | Exploration over lease area for geological axis 1 or 2 | No such proposal in modification of approved mining plan for the period from 2015-16 to 2019-20. | The entire leasehold area has already been explored by core drilling at a grid interval of 50m x 50m and 25m x 25m. | Nil |
| 1c | Exploration Agencies and Expenditure in lakh rupees during the year | No such proposal was there in modification of approved mining plan for the period from 2015-16 to 2019-20. | Not applicable. | Nil |
| 1d | Balance area to be explored to bring Geological axis in 1 or 2 | No such proposal was there in modification of approved mining plan for the period from 2015-16 to 2019-20. | No balance area to be explored. The entire leasehold area has already been explored by core drilling at a grid interval of 50m x 50m and 25m x 25m. | Nil |

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| 1e | Balance reserve as on 01/04/20 | As per modification in approved mining plan for the plan period from 2015-16 to 2019-20, the reserve as on 01/04/2015 is : Proved (111) - 797305 MT and remaining resources (211) - 1610856 MT. Average grade of bauxite is Al ₂ O ₃ -41.6%, SiO ₂ - 3.9%. | The production as reported during the period from 2015-16 to 2017-18 was 81010 MT. The balance reserve available as on 01/04/2018 is: (797305 MT- 81010 MT) = 716295 MT and remaining resources (211) - 1610856 MT. | Nil |
| 1f | General remarks of inspecting officers on geology, exploration etc | Not applicable. | The plateau surface is covered by lateritic profile of variable thickness. The bauxite of this plateau are largely ferruginous variety. The mineral occurs as local lenses close to the scarp faces. The entire leasehold area has already been explored by core drilling at a grid interval of 50m x 50m and 25m x 25m and reserves has been established accordingly. | Nil |

Development :

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|--|---|--|---------|
| 2a | Location of development w.r.t.lease area | BLOCK: II- Quarry no. II- 1 & 2 was proposed to be developed in eastern part of the lease area during the year 2017-18. | Both quarries were developed as proposed un the approved document. | Nil |

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| 2b | Separate benches in topsoil, overburden and minerals (Rule 15) | Proposal for formation of three benches in soil & morrum, laterite and bauxite have been made in the approved document. | Separate benches in soil & morrum, laterite and bauxite have been made. | Nil |
| 2c | Stripping ratio or ore to OB ratio | Ore to OB ratio during the year 2017-18 was 1:1.25. | During the year 2017-18, the reported production and OB removal was 43825 MT & 106618 MT. On calculation, Ore to OB ratio comes around 1:1.41 | Nil |
| 2d | Quantity of topsoil generation in m3 | It was a proposed to generate 36115 cum. of topsoil & murrum during the year 2017-18. | The mine was reopened in the month of October, 2017. However, no generation of topsoil was reported during the plan period 2017-18. | Nil |
| 2e | Quantity of overburden generation in m3 | It was a proposed to generate 117211 cum. of waste during the year 2017-18. | About 106618 MT OB was removed during the plan period 2017-18. | Nil |
| 2f | General remarks of inspecting officers on development of pit w.r.t. type of deposit etc | Not applicable. | Quarry no. 1 & 2 of Block II were proposed to be developed in eastern part of the lease area during the year 2017-18. The development work was being carried out as proposal. | Nil |

Exploitation:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---------------------------------------|--|--|---------|
| 3a | Number of pit proposed for production | Quarry no. 1 & 2 of Block II were proposed for production during the year 2017-18. | Both quarries were developed and reported production about 43825 MT. | Nil |

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| 3b | Quantity of ROM mineral production proposed | 71191 MT of ROM was proposed to be produced during the year 2017-18. | Reported ROM production was 43825 Mt during the year 2017-18. | Nil |
| 3c | Recovery of sailable/usable mineral from ROM production | 60% recovery of ore was proposed in the approved document. | Reported recovery was about 60%. | Nil |
| 3d | Quantity of mineral reject generation | There is no proposal of mineral reject generation in the approved document. | No mineral reject generation has been reported from the mine during the year 2017-18. | Nil |
| 3e | Grade of mineral rejects generation and threshold value declared. | None | Not applicable as there is no mineral reject generation from the mine. The threshold value of bauxite is Al ₂ O ₃ - 30% with SiO ₂ - <5%. | Nil |
| 3f | Quantity of sub grade mineral generation. | There is no proposal of sub grade mineral generation in the approved document. | No subgrade mineral generation has been reported from the mine during the year 2017-18. | Nil |
| 3g | Grade of sub grade mineral generation | None | Not applicable as there is no generation of subgrade mineral from the mine. | Nil |
| 3h | Manual / Mechanised method adopted for segregating from ROM | Manual method of sorting and sizing of bauxite from the blasted material (ROM) has been proposed in the approved document. | The bauxite after blasting is sorted and sized manually from ROM. | Nil |
| 3i | Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects. | NA | Not applicab.e. | Nil |

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| 3j | Provision of drilling and blasting in mineral benches | There is provision of drilling by DTH drills and blasting by using special gelatine explosives, detonators & safety fuse in the approved document. | Usually 88-100 mm diameter holes are drilled by wagon drill to a depth of 5.5 mt. keeping spacing and burden 2.5m x 3m respectively. The holes are charged with slurry explosives. Short firing is done by using ordinary detonator & safety fuse. | Nil |
| 3k | Provision of mining machineries in mineral benches | The method of mining proposed to be carry out by OTFM method by deep hole drilling, blasting and shovel-dumper combination and manually loading of ore. Mining machineries like excavators, dumpers, dozers, compressors and wagon drills are proposed to be deployed in the mine. | The mining machineries are deployed as proposed made in the approved document as and when required. | Nil |
| 3l | Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM | Proposal is there to maintain height of OB benches 6m and bauxite benches 3m in the approved document. | The height of overburden and in ore zone benches are maintained as proposed and suitable for the method of mining proposed in the modification of approved mining plan. | Nil |
| 3m | Total area covered under excavation/pits | An extent of 7.86 ha was proposed to be covered under excavation / pits during the year 2017-18. | As reported an extent of 5.47 ha area has been degraded by the quarry / pits during 2017-18. | Nil |

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| 3n | Ore to OB ratio for the pit/mine during the year. | Proposed Ore to OB ratio during the year 2017-18 was 1:1.25. | During the year 2017-18, the reported production and OB removal was 43825 MT & 106618 MT. On calculation, Ore to OB ratio comes around 1:1.41 | Nil |
| 3o | Total area put in use under different heads at the end of year | As per modification in approved mining plan for the period from 2015-16 to 2019-20, land use pattern after 2017-18 is as under: Quarries-18.44 ha, Road-2.25 ha, Soil dump-0.14 ha, O.B dump-00 ha and green belt-1.20 ha. Total area in use 22.03 ha | As per annual return submitted for the year 2017-18, area put in use under different heads are as follows: area already exploited & abandoned by opencast workings: 12.52 ha, current opencast workings: 5.47 ha, reclaimed/rehabilitated: 7.05 ha, Waste disposal: 0.140 ha and occupied by plant, buildings, road etc.,: 2.25 ha. Work done under progressive mine closure plan during the year-0.70 ha. | Nil |
| 3p | Production of ROM mineral during the last five year period as applicable | As per modification in approved mining plan for the plan period 2015-16 to 2019-20, production proposed during the last five years are ; 2015-16: 72225 tonnes, 2016-17: 100126 tonnes, 2017-18: 103939 tonnes, 2018-19: 101027 tonnes and 2019-20- 99671 tonnes. | Production achieved during the last five years are: 2011-12: 89090 tonnes, 2012-13: 99772 tonnes, 2013-14: 99795 tonnes, 2014-15: 31650 tonnes and 2015-16- Nil. | Nil |

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| 3q | General remarks of inspecting officers on method of mining etc. | Not applicable. | The mine was reopened in the month October, 2017. This is a captive (O.T.F.M A category) mine. The mining operation is being done as per proposal made in the approved document. | Nil |
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Solid Waste Management - Dumping:

| Sl.No. | Item | Proposals | Actual work | Remarks |
|--------|--|---|--|---------|
| 4a | Separate dumping of topsoil, OB and mineral rejects (Rule 32,33) | There is no proposal for separate dumping of top soil, OB and mineral rejects in the document approved for year 2015-16 to 2019-20. The entire waste material to be generated during the course of mining operation will be utilised for backfilling in the worked out areas. The topsoil so generated will be spread over the backfilled area. | The mine was reopened in the month of October, 2017. Whatever OB and waste material generated from the mine is utilised for concurrent backfilling in the mined out areas and top soil is spread over backfilled areas for reclamation. | Nil |
| 4b | Location of topsoil, OB and mineral reject dumps | There is no proposal for separate dumping of top soil, OB and mineral rejects in the approved document. | The mine was reopened in the month of October, 2017. No separate dumping of topsoil, OB & mineral reject are done at the mine site. Whatever OB and waste material generated from the mine is utilised for concurrent backfilling in the mined out areas and top soil is spread over backfilled areas for reclamation. | Nil |

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| 4c | Number of dumps within lease area and outside of lease area | There is no proposal for separate dumping of top soil, OB and mineral rejects in the approved document. | The OB and waste material generated from the mine is utilised for concurrent backfilling in the mined out areas and top soil is spread over backfilled areas for reclamation. | Nil |
| 4d | Location of dumps w.r.t. ultimate pit limit (Rule 16) | As per approved document, there is no proposal for dumping waste materials during the plan period 2017-18. | The OB and waste material generated from the mine is utilised for concurrent backfilling in the mined out areas. | Nil |
| 4e | Number of active and alive dumps. | As per approved document, there is no proposal for waste materials during the plan period 2017-18. | No active & alive dump. | Nil |
| 4f | Number of dead dumps. | As per approved document, there is no proposal for waste materials during the plan period 2017-18. | None. | Nil |
| 4g | Number of dumps established. | Not applicable. | None. | Nil |
| 4h | Whether Retaining wall or garland drain all along dumps are there. | As per approved document, no proposal for making retaining wall or garland drain during the plan period 2017-18. | Not applicable. | Nil |
| 4i | Length of Retaining wall or garland drain all along dumps | Not applicable. | Not applicable. | Nil |

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| 4j | Number of settling ponds | Not applicable. | None. | Nil |
| 4k | Specific comments of inspecting officer on waste dump management | Not applicable. | The mine was reopened in the month of october, 2017. Whatever, OB and waste material generated from the mine is utilised for concurrent backfilling in the mined out areas and top soil is spread over it for reclamation of the backfilled quarries.. | Nil |

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 such proposal for the year 2017-18 in the approved document. | The mine was re-opened in the month of october, 2017. The entire OB and waste material generated from the mine is utilised for concurrent backfilling of the mined out areas and top soil is spread over it for reclamation of the backfilled quarriies. | Nil |
| 5b | Area under backfilling of mined out area | There was a proposal of 2.09 ha area to be backfilled during the plan period 2017-18 as per approved document. | An extent of 5.47 ha area has already been backfilled as indicated in the annual return submitted for the year 2017-18. | Nil |
| 5c | Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32) | AS per approved document, there is proposal for concurrent use of topsoil for rehabilitation of mined out areas. | The mine was re-opened in the month of october, 2017. The entire OB and waste material generated from the mine is utilised for concurrent backfilling of the mined out areas and top soil is spread over it for reclamation / rehabilitation of the backfilled areas. | Nil |

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| 5d | Total area fully reclaimed and rehabilitated | As per approved document, there is proposal of 2.09 ha area to be backfilled during the year 2017-18 by the waste materials generated from the mine. | An extent of 5.47 ha area has been backfilled /reclaimed as indicated in the annual return submitted for the year 2017-18, | Nil |
| 5e | General remarks of inspecting officers on backfilling and reclamation etc. | Concurrent backfilling was proposed in the approved document. | The entire OB and waste material generated from the mine is utilised for concurrent backfilling of the mined out areas and top soil is spread over it for reclamation / rehabilitation of the backfilled quarry. An extent of 5.47 ha area has already been backfilled as per annual return submitted for the year 2017-18. | Nil |

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). | No such proposal was there in the approved document, dated 31.05.2016, valid for the plan period 2015-16 to 2019-20 | The Annual Report on PMCP is being submitted on stipulated time. | Nil |
| 6b | Area available for rehabilitation (ha) . | Proposal was there to rehabilite 1.61 ha by planation and backfilling proposal was available for 2.09 Ha area during the plan period 2017-18. | Upto 2017-18, about 5.47 Ha area was backfilled as indicated in the submitted annual return. As per proposal no area was rehabilitatted. | Nil |

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| 6c | afforestation done (ha). | As per proposal, 5000 nos. of plants were proposed to be planted within 7.5m barrier covering an area of about 2.00 Ha and 17400 nos. of plants were proposed to be planted over backfilled covering 6.96 ha during the plan period 2015-16 to 2019-20. | 1000 nos. of plants have been planted during the plan period 2017-18 with a survival rate about 70%. The plantation area covered within 7.5m barrier and backfilled area has not been given in the submitted annual return. | Nil |
| 6d | No. of saplings planted during the year | As per proposal, 5000 nos. of plants were proposed to be planted within 7.5m barrier covering an area of about 2.00 Ha and 17400 nos. of plants were proposed to be planted over backfilled covering 6.96 ha during the plan period 2015-16 to 2019-20. | 1000 nos. of plants have been planted during the plan period 2017-18 with a survival rate about 70%. The plantation area covered within 7.5m barrier and backfilled area has not been given in the submitted annual return. | Nil |

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| 6e | Cumulative no .of plants | As per proposal,5000 nos. of plants were proposed to be planted within 7.5m barrier covering an area of about 2.00 Ha and 17400 nos. of plants were proposed to be planted over backfilled area covering 6.96 ha during the plan period 2015-16 to 2019-20. | No cumulative data on plantation is available. However, 1000 nos. of plants have been planted duringthe plan period 2017-18 with a survival rate about 70%. | Nil |
| 6f | Any other method of rehabilitation | No further proposal available in approved document. | Not applicable. | Nil |
| 6g | Cost incurred on watch and care during the year | No proposal available in the modification in approved M.P. | No information available. | Nil |
| 6h | Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D | About2.09 Ha area was proposed to be backfilled and voids area to be backfilled are 130m x 90m x 8m (Quarry -II-1 and 150m x 52mx 7m in quarry -2. | Backfilling figure is available in terms of area only and not in dimension. About 7.05 Ha area was backfilled during the year 2017-18. | Nil |

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| 6i | Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings | There is proposal for 14.74 Ha of backfilling in the modification in approved Mining Plan valid for the plan period 2015-16 to 2019-20 by using about 1063748 MT of OB/Waste material. During the year 2017-18, 2.09 ha area was proposed to be backfilled. | About 7.05 ha area has been backfilled during the plan period 2017-18. | Nil |
| 6j | Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area | There was proposal of 1.61 ha area to be afforested over backfilled area during the plan period 2017-18.. | 10000 nos. of trees were planted with a survival rate of 70% during the year 2017-18. No information about plantation over backfilled area is available.. | Nil |
| 6k | Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir | There was no such proposal in the modification in approved Mining Plan valid for the plan period 2015-16 to 2019-20.. | No water reservoir was constructed. | Nil |
| 6l | Compliance on reclamation and rehabilitation by backfilling (v) any other specific means. | There was no proposal in the approved Mining Plan. | Not applicable. | Nil |
| 6m | Compliance of rehabilitation of waste land within lease (i) afforestation | N.A | There is no waste land within lease area. | Nil |

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| 6n | Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha) | There was no such proposal as no waste land exists in the lease area. | Not applicable. | Nil |
| 6o | Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation | No proposal available.. | Not applicable. | Nil |
| 6p | Compliance of environmental monitoring (core zone and buffer zone) | No specific proposal was available. | No information available. | Nil |
| 6q | General remarks of inspecting officers on PMCP compliance and progressive closure operations etc. | Proposal for plantation over the reclaimed area has been envisaged in the PMCP chapter. | More plantation has been done over the backfilled area against the proposal given in the PMCP chapters. | Nil |

Mineral Conservation:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|---|---|---------|
| 7a | ROM Mineral dispatch or grade-wise sorting within lease area | No specific proposal in the approved mining plan. | The ROM is sorted and sized manually followed by mechanical screening before despatch, which is a regular practice in the mine. | Nil |
| 7b | Method of grade-wise mineral sorting i.e. manual or mechanical. | Manual sorting and sizing is done with mechanical screening of the over sized materials as envisaged in the modification in approved mining plan valid for the plan period 2017-18. | The same practice is done as per the proposal given in the modification in mining plan. | Nil |

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| 7c | Different grade of mineral sorted out at mines. | Manual method of sorting and sizing has been proposed in the approved document. | The entire sorted and sized materials are supplied to Alumina Plant of M/s HINDALCO Industries Ltd., without specifying the different grades of the materials. | Nil |
| 7d | Any beneficiation process at mines . | Manual sorting and sizing with mechanical screening proposed in the approved document. | The same practice is done as envisaged in the approved document | Nil |
| 7e | General remarks of inspecting officer on Mineral conservation and beneficiation issues | Manual sorting & sizing followed by mechanical screening has been proposed in the approved document. | The same practice is done as envisaged in the approved document. | Nil |

Environment:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|--|---|--|---------|
| 8a | Separate removal and utilization of topsoil (Rule 32) | The topsoil is proposed to be removed and spread over the backfilled area as envisaged in the modification in approved mining plan. | This same practice is done as envisaged in the modification in approved mining plan. | Nil |
| 8b | Concurrent use or storage of topsoil | Concurrent use of topsoil proposed in the approved document. | The topsoil so generated is spread over the backfilled area to support the plant growth. | Nil |
| 8c | Separate dumps for overburden, waste rock, rejects and fines (Rule 33) | No proposal for dumping OB, waste, rejects and fines in the approved document. | The waste so generated is backfilled concurrently in the mined out area. | Nil |

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| 8d | Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use | Backfilling is proposed by the waste generated due to the mine excavation as per the approved document. | The waste so generated is backfilled in the worked out areas as reclamation measures. | Nil |
| 8e | Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc) | Reclamation & rehabilitation of the worked out area is envisaged in the mining plan but the restoration aspect is not covered in the approved document. | Concurrent reclamation is in practice in the mine followed by plantation over the reclaimed area as reported during the field visit of the area. | Nil |
| 8f | Baseline information on existence of plantation and additional plantation done (Rule 41) | No specific proposal. | There are 1000 saplings are planted during the year 2017-18 against the proposal of 1000 saplings within 7.5m barrier and 4025 saplings over backfilled area for the 2017-18. There is a deviation in planting saplings. No report on existence of plantation. | Nil |
| 8g | Survival rate | No specific proposal. | The reported survival rate is 70%. | Nil |
| 8h | Water sprinkling on roads to control airborne dust | No such proposal. | Water sprinkling on the mine road is done in a periodical interval as reported during the field visit of the area. | Nil |
| 8i | General remarks of inspecting officer on aesthetic beauty in and around mines area | Suitable plantation proposal has been incorporated in the approved document. | The plantation of different species is done over the worked out reclaimed as a regular practice. | Nil |

Compliance of Rule 45:

| Sl.No. | Item | Proposals | Actual work | Remarks |
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| 9a | Status of submission of Monthly and Annual returns | Upto date monthly and annual returns has been submitted by the party to this office. | The returns are by and large satisfactory. | Nil |
| 9b | Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager | The information on employment of mining engineer, geologist and mine manager has been furnished in specified places of the annual return submitted for the year 2017-18. | The mining engineer, geologist and mine manager were present during the field visit of the area. submitted for the year 2017-18. | Nil |
| 9c | Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc. | The land use pattern for different counts has been furnished in the annual return submitted for the year 2017-18. The item wise land degradation status is as follows: Already exploited and abandoned by opencast mining: 12.52 ha, current opencast workings: 5.47 ha, Reclaimed/rehabilitated: 7.05 ha, Use of waste disposal: 0.14 ha and occupied by plant, buildings etc.: 2.25 ha. | The land degraded status furnished in the annual return is by and large satisfactory. | Nil |

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| 9d | Scrutiny of Annual return on afforestation | There are 1000 saplings of different species are planted as indicated in the annual return submitted or the year 2017-18. | The same was verified in the field and found in order. | Nil |
| 9e | Scrutiny of Annual return on mineral reject generation (Grade and quantity) | Status of mineral reject generation has not been furnished in the annual return. | There is no generation of mineral rejects from the mine as reported during the field visit of the area. | Nil |
| 9f | Scrutiny of Annual return on ROM stock and/or graded ore | Only 43825 tonnes of bauxite was produced from the mine during the year 2017-18 as indicated in the annual return. | The production reported in the annual return is found correct. | Nil |
| 9g | Scrutiny of Annual return on sale value, Ex. Mine price and production cost | The reported cost of production is indicated to for Rs.991.00 Since the mine is captive one, the ex-mine price is the same and the cost of production is considered as ex-mine price at the instant. | The cost of production furnished in the annual return is found to be correct. | Nil |
| 9h | Scrutiny of Annual return on fixed assets | The value of fixed asset is indicated to be for Rs. 0 in the annual return submitted for the year 2017-18. | The value of fixed asset as indicated in the annual return appears to be correct. | Nil |

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| 9k | Scrutiny of Annual return on mining machineries | The depliyment status of mining machineries are furnished in specified columns of the annual return. | The same are found during the field visit of the area. | Nil |
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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 :

(SAGAR BODRA)

Indian Bureau of Mines