

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

**MCDR INSPECTION REPORT**

**Bhubaneshwar regional office**

**Mine file No :** ORI/LST/SNG/MCDR-11A/BBS

**Mine code :** 38ORI13018

- (i) Name of the Inspecting : **S010** ) **SHRI G.C. SETHI**  
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : Shri S.C.Nayak, Qualified person  
Official with  
Designation
- (iv) Date of Inspection : 09/06/2017
- (v) Prev.inspection date : 19/05/2016

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **TANMURA (64.308 HA)**
- (b) **Registration NO.** : **IBM / 5513 / 2011**
- (c) Category : A Other than Fully Mech.
- (d) Type of Working : Opencast
- (e) Postal address
- State : ORISSA
- District : SUNDARGARH
- Village : TUNMURA
- Taluka : RAJGANGPUR
- Post office : TUNMURA
- Pin Code : 770070
- FAX No. : 06612401032
- E-mail : info@vklmining.com/vivekla
- Phone : 0661 2401032
- (f) Police Station :
- (g) First opening date : 27/03/1992
- (h) Weekly day of rest : SUN
2. Address for : TANMURA LST & DOLOMITE MINE, M/S V.K.LALL  
correspondance P.O.GOMARDIH, VIARAJGANGPUR  
ORISSA-770070
3. (a) Lease Number : ORI0032
- (b) Lease area : 64.3
- (c) Period of lease : 10
- (d) Date of Expiry : 25/05/2002
4. Mineral worked : DOLOMITE Associated  
LIMESTONE Main

## 5. Name and Address of the

Lessee : SRI V.K. LAL  
 V.K LAL CONTRACTORS COLONY  
 SECTOR-6 SUNDARGARH ORISSA  
 Phone:06624-29040  
 FAX :

Owner : SRI V.K. LAL  
 CONTRACTORS COLONY SECTOR-  
 6 SUNDARGARH ORISSA  
 Phone: 06624-29040  
 FAX :

## Geologist

Name : PREM PRAKASH,Part Time  
 Qualification : M.Sc (GEOLOGY)  
 Appointment/ :  
 Termination date

## Manager

Name : K.C KHUNTIA  
 Qualification : DIPLOMA IN MINING &Foremans Competancy c  
 Appointment/ : 28/10/2000  
 Termination date

6. Date of approval of Mining	:	Renewal under rule 22 MCR1960	20/11/2004
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	16/01/2009
		Renewal under rule 24 MCR1960	23/03/2012
		Modif.of approved Mining Plan	16/11/2016

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

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Not mentioned in the mining plan approved on 23.03.2012.	Nil	Nil
1b	Exploration over lease area for geological axis 1 or 2	An extent of 13.790ha of area has been explored upto G1 level as envisaged in the modification & review of mining plan approved on 16.11.2016.	An extent of 13.790ha of area has been explored upto G1 level.	Nil
1c	Exploration Agencies and Expenditure in lakh rupees during the year	The mining lessee was the exploration agency for this mine and Rs. 1,53,708.00 has been spend on account of exploration	Rs. 1,53,708.00 has been spend on account of exploration as per the modification & review of mining plan approved on 16.11.2016.	Nil
1d	Balance area to be explored to bring Geological axis in 1 or 2	An extent of 58.518ha has not been explored.	An extent of 50.518ha to be explored for G1/G2 scale.	Nil

1e	Balance reserve as on 01/04/20	As per the approved mining plan,dated 23.03.2013, the available reserves/reso urces for limestone & dolomite is as given below:- Limestone: Proved reserves (111): 0.648 million tonnes, Probable Reserves (121 & 122): 0.585 million tonnes & remaining resources: 0.67 million tonnes and the same for dolomite- Proved (111): 1.419 million tonnes, Probable(121 & 122): 0.975 million tonnes & remaining resources: 2.727 million tonnes.	The available limestone & dolomite reserves/resources as per the annual return 2016-17 is as given below: Limestone: Proved reserves (111): 0.644 million tonnes, Probable Reserves (122): 0.585 million tonnes & remaining resources: 0.67 million tonnes and the same for dolomite- Proved (111): 1.419 million tonnes, Probable(122): 0.975 million tonnes & remaining resources: 2.27 million tonnes.	The updated reserves/resources have been furnished after depletion of production reported for the year 2016-17.
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1f	General remarks of inspecting officers on geology, exploration etc	In the approved mining plan, 8 nos. of bore holes were proposed to be drilled during the year 2016-17.	In Sundargarh district, the limestone & dolomite forms an important horizon in Gangpur area and have been classified as Birmitrapur Stage of the archean complex belonging to the Gangpur group of Dharwar age. The Gangpur series of rocks occupy Panposh Sub-division and a part of Sundargarh sub-division of Sundargarh district. The proposed bore holes could not drilled as the mining operations were suspended by the State Govt.	Nil
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Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t. lease area	Quarry-1 (eastern side) and Quarry-2 (western side) of the leaae area.	Quarry-1 (eastern side) and Quarry-2 (western side) of the leaae area.	Nil
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches for overburden and limestone & dolomite are proposed in the approved mining plan.	Separate benches are made in ,overburden as well as in limestone & dolomite.	Nil
2c	Stripping ratio or ore to OB ratio	Quarry-1(1:0.10t/cum) & Quarry-291:0.13t/cum)	Not evaluated as there is no dolomite production & waste handling during teh year 2016-17.	Nil

2d	Quantity of topsoil generation in m3	In the year 2016-17, it was proposed to generate 45840 cum of topsoil as envisaged in the approved mining plan.	No top soil was generated during the year as the development of the mine is lagging behind the proposal.	Nil
2e	Quantity of overburden generation in m3	In the year 2016-17, it was proposed to generate 59490cum of overburden material as envisaged in the approved mining plan.	No verburden material was generated during the year 2016-17 as the mine was operated in an intermitent manner with total limestone production of 1060 tonnes .	Nil
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	No comment is offered.	The production is lagging behind against the proposal envisaged in the approved mining plan due to lack of market demand for limestone & dolomite	Nil

#### Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Two nos. of quarries viz. Quarry-1 & Quarry-2 were proposed for production during the year 2016-17.	Both the quarries were under operation during the year 2016-17.	Nil
3b	Quantity of ROM mineral production proposed	During the year 2016-17, 114454 tonnes of limestone & 339226 tonnes of dolomite was proposed for production as envisaged in the approved mining plan.	During the year 2016-17, 1060 tonnes of limestone production was reported, whereas, no dolomite was produced from the mine as indicated in the annual return submitted by the party for the year 2016-17.	The low production of limestone & nil production of dolomite is due to lack of market demand for limestone & dolomite.

3c	Recovery of sailable/usable mineral from ROM production	The recovery of limestone was proposed for 70% of the ore zone and the same for dolomite was also 70% as envisaged in the approved mining plan.	The limestone production is much in lower side of the proposed quantities and no dolomite production was reported during the year 2016-17.	Nil
3d	Quantity of mineral reject generation	No proposal for mineral reject generation in the approved mining plan.	Nil	Nil
3e	Grade of mineral rejects generation and threshold value declared.	Not applicable.	The limestone with +18% silica and the dolomite with +7% silica is considered as the mineral rejects.	Nil
3f	Quantity of sub grade mineral generation.	Nil	Nil	Nil
3g	Grade of sub grade mineral generation	No such proposal.	Not applicable.	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised method such as crushing & screening has been proposed to be adopted for segregation of ROM limestone & dolomite.	The same practice is being followed as per the proposal.	Nil
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No such proposal.	Not applicable.	Nil

3j	Provision of drilling and blasting in mineral benches	Provisions for drilling by wagon drills of 100mm dia and blasting by putting explosives in the drilled holes in overburden as well as in ore zones.	The same practice is being followed in the mine as found during the field visit.	Nil
3k	Provision of mining machineries in mineral benches	The details of mining machineries proposed to be deployed in the mine is as given below:- (i) Wagon drill (ROC-L8) (1 no.), (ii) Jack hammer drills (6 nos.), (iii) Hydraulic excavator L & T-0.9cum (6nos.) (iv) Tractor (1 no.), (v) Water tanker 2000ltr (2 nos.) (vi) 10 tonner Truck/tippers (22 nos.) & (vii) Pump set 10HP (2 nos.) etc.	The details of mining machineries deployed in the mine has not been furnished by the party in the annual return submitted for the year 2016-17.	During the year 2016-17, only 1060 tonnes of limestone was produced from the mine and the party has not deployed any mining machineries except the jack hammer drills for drilling & blasting as reported during the field visit.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	The height of the benches in overburden & in ore zone were proposed for 6m & width of 6m as envisaged in the approved scheme of mining.	The height & width of the benches are 6m & 6m respectively.	Nil



3m	Total area covered under excavation/pits	An extent of 13.05ha. was proposed to be degraded during the mining plan period 2012-13 to 2016-17.	An extent of 7.6ha has been degraded by the current opencast working.	Nil
3n	Ore to OB ratio for the pit/mine during the year.	Quarry- 1(1:0.10 t/cum) & Quarry- 2(1:0.13 t/cum)	During the year 2016-17, only 1060 tonnes of limestone & nil production of dolomite was reported. The waste handling is indicated to be Nil in the annual return 2016-17. Therefore, the Ore: OB ratio could not evaluated.	Nil
3o	Total area put in use under different heads at the end of year	The item wise additional land use under different heads at the end of the mining plan period 2016-17 is as given below:-(i) Mining-13.05ha (ii) Dumping- 1.50ha (iii) Ore stacking- 1.00ha (iv) Top soil stacking- 1.50ha (v) Road-1.65ha (vi) Site services- 1.20ha etc.	The item wise land use under different heads at the end of the year 2016-17 is as given below:-(i) Covered under current opencast working-7.60ha (ii) Waste disposal-0.510ha (iii) Occupied by plant, buildings etc.- 4.402ha.	Nil

3p	Production of ROM mineral during the last five year period as applicable	The proposed production of limestone & dolomite during the period from 2012-13 to 2016-17 is as follows: Limestone:- 2012-13: 114471t ,2013-14:114374t, 2014-15: 114390t, 2015-16:114487t & 2016-17: 114454t. Dolomite:- 2012-13: 339192t 2013-14:339091t , 2014-15:339074t, 2015-16: 339158t & 2016-17:339226t respectively.	The achievements in production of limestone & dolomite during the period from 2012-13 to 2016-17 is as given below: Limestone:- 2012-13: 200t, 2013-14: 1800t, 2014-15: 720t, 2015-16: 400t & 2016-17:1060t. Similarly, the dolomite production during the aforesaid period is as given below: Dolomite:- 2012-13: Nil, 2013-14: 400t, 2014-15: Nil, 2015-16: Nil & 2016-17: Nil respectively.	During all the above five years, the achievements in production are lagging behind the proposals, due to lack of market demand.
3q	General remarks of inspecting officers on method of mining etc.	The method of mining was proposed for other than fully mechanised open cast methods in the approved mining plan.	The mining operations were carried out by other than fully mechanised opencast methods as per the proposal envisaged in the approved mining plan.	Nil

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Solid Waste Management - Dumping:

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Sl.No.	Item	Propasals	Actual work	Remarks
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4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Provisions for separate dumping of topsoil, OB & mineral rejects has been made as envisaged in the approved mining plan.	The waste generated has been dumped in the existing lone dump and the topsoil & Mineral rejects generated also stacked separately.	Nil
4b	Location of topsoil, OB and mineral reject dumps	The OB & waste was proposed to be dumped in the existing lone dump as envisaged in the approved mining plan.	The OB & waste generated was dumped in lone existing dump available in the lease area and separate stacking of topsoil & mineral rejects also found within the lease area.	Nil
4c	Number of dumps within lease area and outside of lease area	Only one existing dump is available in the lease area as envisaged in the approved mining plan.	Only one active dump is found in the mine.	Nil
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Only one dump has been proposed beyond the ultimate pit limits as per the approved mining plan.	The dump was found located beyond the ultimate pit limit.	Nil
4e	Number of active and alive dumps.	There is only one active dump in the mine.	The lone active dump was found during the field visit.	Nil
4f	Number of dead dumps.	No such proposal.	Not seen in the lease area.	Nil
4g	Number of dumps established.	No such proposal.	Nil	Nil
4h	Whether Retaining wall or garland drain all along dumps are there.	Retaining wall for the waste dump has been proposed as envisaged in the approved mining plan.	Boulder retaining wall all along the toes of the dump was found made.	Nil

4i	Length of Retaining wall or garland drain all along dumps	No specific proposal.	Boulder retaining wall & garland drain all around the toe of the dump is made as found during the field visit.	Nil
4j	Number of settling ponds	Series of settling tanks are proposed.	Sereis of settling tanks are made for the garland drain constructed for the dump.	Nil
4k	Specific comments of inspecting officer on waste dump management	Waste dumping was proposed in the existing lone dump as per the proposal.	Dumping is being done in the lone dump as observed during the inspection.	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.	No backfilling was proposed in the year 2016-17.	No backfilling was done during the year 2016-17.	Nil
5b	Area under backfilling of mined out area	Nil	Nil	Nil
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No such proposal. The topsoil so generated was proposed for stacking.	No topsoil was generated during 2016-17.	Nil
5d	Total area fully reclaimed and rehabilitated	No such proposal.	Nil	Nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.	No reclamation/backfilling was proposed during the year 2016-17.	No reclamation has been done during the year 2016-17.	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 in the approved mining.	The annual report on PMCP for the year 2016-17 has been submitted by the party under Rule 26(2) of MCDR,2017.	Nil
6b	Area available for rehabilitation (ha) .	No such rehabilitation proposal for the year 2016-17.	Nil	Nil
6c	afforestation done (ha).	In the year 2016-17, there are 1240 nos. of saplings were proposed to be planted over an extent of 0.20ha.	During the year 2016-17, 410 nos. of saplings were planted within the lease area. but the extent of area was not available.	Nil
6d	No. of saplings planted during the year	Only 1240 nos. of saplings were proposed to be planted in the year 2016-17.	During the year 2016-17, 410 nos. of saplings were planted.	Nil
6e	Cumulative no .of plants	No such proposal.	The commulatrive plantation figures were not avialble. However, during the year 2016-17, 410 salpings were planted.	Nil
6f	Any other method of rehabilitation	No such specific proposal in the modification approved mining plan.	Nil	Nil
6g	Cost incurred on watch and care during the year	No such specific proposal.	Not availble.	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	No comments to offer.	No reclamation & rehabilitation was undertaken during the year 2016-17.	Nil

6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Nil	Nil	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	Nil	Nil	Nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No such proposal for the year 2016-17.	Nil	Nil
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	No such proposal.	Not applicable.	Nil
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	No such proposal.	Nil	Nil
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	No such specific proposal in the approved mining plan.	Not applicable.	Nil
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	No such proposal.	Nil	Nil

6p	Compliance of environmental monitoring (core zone and buffer zone)	No such specific proposal for core zone & buffer zone has been furnished in the approved document.	The ambient air quality, water quality, noise level, vibration level etc. were being monitored in every quarter and found within the permissible limits.	Nil
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	No comments.	No reclamation & rehabilitation was undertaken during the year 2016-17.	Nil

#### Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	The ROM limestone & dolomite produced are processed through screening & crushing as per the buyers specifications	The ROM limestone & dolomite produced are processed through screening & crushing as per the buyers specifications.	Nil
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical screening & crushing for limestone & dolomite.	Mechanical screening & crushing for limestone & dolomite.	Nil
7c	Different grade of mineral sorted out at mines.	By screening & crushing for limestone & dolomite.	By screening & crushing for limestone & dolomite.	Nil
7d	Any beneficiation process at mines	No such proposal.	Nil	Nil

7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	No comments on the proposal given in the approved scheme of mining.	There is no mineral conservation problems in the mine.	Nil
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**Environment:**

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Only 45840 cum of top soil was proposed to be generated in the year 2016-17 as envisaged in the approved mining plan.	No top soil was generated from the mine during the year 2016-17.	Nil
8b	Concurrent use or storage of topsoil	The top soil generated was proposed to be stacked separately.	No top soil gerenerated from the mine during the year 2016-17.	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	The overburden & waste materials generated was proposed for dumping in the existing waste dump.	During the year 2016-17, dumping was done in the existing waste as per the proposal.	Nil
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No such proposal.	Nil	Nil



8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No such proposal.	Nil	Nil
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Status of existing plantation has not been given in the approved document. However, 1240 nos. of saplings was proposed to be planted in the year 2016-17.	During the year 410 nos. of saplings were planted within the lease area	Nil
8g	Survival rate	The plantation of 1240 saplings were proposed to be planted in the year 2016-17 but the survival rate for the same has not been furnished in the approved document.	The survival rate of plantation is about 30% during the year 2016-17.	Nil
8h	Water sprinkling on roads to control airborne dust	Water sprinkling was proposed on the haul road was envisaged in the modification of the approved scheme of mining.	Water sprinkling was a regular practice in the mine as found during the field visit of the area.	Nil

8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	No such specific proposal.	The austhetic beauty of the mine was enhanced by by planation within & out side the lease area.	Nil
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Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	The party has to submit the monthly returns in F-8 & annual returns in H-8.	The party has submitted all the monthly & annual returns in the prescribed forms during the year 2016-17.	Nil
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	The employment status opf mining engineer, geologist & mine manager have been furnished in the annual return submitted for the year 2016-17.	As the mine fall under category -A(FM), full time mining engineer, geologist & mine managers were employed in the mine.	Nil

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	As per the annual return 2016-17, an extent of 7.60ha of area has been covered by current opencast working, an extent of 0.510ha has been utilised for waste disposal & an extent of 4.402ha occupied by plant,buidlings etc.	The land use status furnished in the annual return 2016-17 is found to be in order.	The land use status furnished in the annual return 2016-17 is found to be in order.
9d	Scrutiny of Annual return on afforestation	During the year 2016-17, 410 nos. of saplings with in the lease area.	The status of plantation furnished in the annual return is in order.	Nil
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	During the year 2016-17, no mineral rejects was generated as per the annual return.	Nil	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	During the year 2016-17, 1060 tonnes of limestone was produced & the production of dolomite is reported to be Nil as indicated in the above annual return.	The production figures furnished in the annual returns are verified & found to be correct.	Nil

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	The ex-mine price for limestone is for Rs. 611.93. & the cost of production is indicated to be for Rs. 599.97. The sale value of the entire production of 1060 tonnes is mentioned to be for Rs. 731607.39. No dolomite production was reported during teh year 2016-17.	The ex-mine price & cost of production for limestone furnished in the annual return is found to be in order.	Nil
9h	Scrutiny of Annual return on fixed assets	The total value of the fixed assets has not been indicated in the annual return 2016-17.	The same was not available for verification during the inspection.	Nil
9k	Scrutiny of Annual return on mining machineries	The deployment status of mining machineries has not been furnished in the annual return 2016-17.	No mining machineries are found deployed in the mine during the field visit.	Nil

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**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

**Date :**

**(SHRI G.C. SETHI)**

Indian Bureau of Mines