

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

MCDR INSPECTION REPORT

Bangalore regional office

Mine file No : KNT/RCH/G-4/BNG

Mine code : 27KAR16004

- (i) Name of the Inspecting : **P005**) **C.PARAMESHWARAN**
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine :
Official with
Designation
- (iv) Date of Inspection : 27/07/2015
- (v) Prev.inspection date : 03/09/2014

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **HIRABUDDINI**
- (b) **Registration NO.** :
- (c) **Category** : A Fully Mechanised
- (d) **Type of Working** : Underground
- (e) **Postal address**
- State : KARNATAKA
- District : RAICHUR
- Village : HIRA
- Taluka : MANVI
- Post office : HIRA
- Pin Code :
- FAX No. : 08537-275054
- E-mail : hygomin@bsnl.in & hgmlsrmh
- Phone : 08537-275034
- (f) **Police Station** : Sirivara
- (g) **First opening date** : 01/01/1997
- (h) **Weekly day of rest** : SUN
2. **Address for correspondance** : HUTTI GOLD MINES COMPANY LTD
Village-Hira Buddinni; Post-Heera, Tq-Manvi
Dist-RAICHUR, Karnataka -584 129
3. (a) **Lease Number** : KAR1493
- (b) **Lease area** : 21.58
- (c) **Period of lease** : 20
- (d) **Date of Expiry** : 28/03/2028
4. **Mineral worked** : GOLD Main

5. Name and Address of the

Lessee : HUTTI GOLD MINES COMPANY LTD
 At & Po- Hutti Tq-Lingsugur
 584 115 RAICHUR KARNATAKA
 Phone:08537-275025
 FAX :08537-275054

Owner : HUTTI GOLD MINES COMPANY LTD
 Shri A.K.Monnappa, IAS, MD
 3rd Floor, KHB Shopping
 Complex, National Games
 Village, Koramangala
 BANGALORE KARNATAKA
 Phone: 080-25710501, 2
 FAX :

Agent : PRAKASH
 At & Po- HUTTI Tq-Lingsugur
 RAICHUR KARNATAKA
 Phone: 08537-275034
 FAX : 08537-275054

Geologist

Name : PRABHU M, Full Time
 Qualification : M.Sc. Applied Geology
 Appointment/ : 05/05/2010
 Termination date

Manager

Name : APSAR MIYA
 Qualification : Dipl. in Mining and first class
 Appointment/ : 01/05/2012
 Termination date

6. Date of approval of Mining : Mining Scheme rule 12 MCDR1988 22/02/2013
 Plan/Scheme of Mining

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	DURING THE YEAR 2014-15, 200M DD holes from U/G & 500m from surface , the location is 120m towards north of BH No. HG-18 along section line, angle 55 degree and in 2015-16 500m in surface DD holes , location 120m towards north of BH No. HG-19 along section line, angle 52 degree. (In u/g, for 2014-15, location=Ms/I IIL/DE/X-cut towards north. PBH-4 & 5 , 100m each.	The proposed work is not undertaken in the proposed years as it was reported on the day of inspection and also observed through annual returns.(However, as per the MCDR inspection data, during the year 13-14, 2323.8m drilling has been undertaken on the surface. But nothing in the year 2014-15.	Not followed as per the proposals.

1b	Exploration over lease area for geological axis 1 or 2	DURING THE YEAR 2014-15, 200M DD holes from U/G & 500m from surface , the location is 120m towards north of BH No. HG-18 along section line, angle 55 degree and in 2015-16 500m in surface DD holes , location 120m towards north of BH No. HG-19 along section line, angle 52 degree. (In u/g, for 2014-15, location=Ms/I IIL/DE/X-cut towards north. PBH-4 & 5 , 100m each.	It is reported in the data sheet submitted for the inspection of the mines, that 2323.8m drilling undertaken and not in underground.	As per the proposals to drill both in underground & surface were not carried out.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	M/s Hutti Gold Mines Ltd.	M/s DBM, Hutti	
1d	Balance area to be explored to bring Geological axis in 1 or 2	with the existing main shaft & west shaft, it is planned to develop the exploratory mine up to 8th level in another 5 years.	Ore reserve Estimation as on 01-04-2015 - 5,02,191 T @ 4.12 g/t.	With the existing development & also based on the future developments, balance area may be bring to axis 1 & 2.

1e	Balance reserve as on 01/04/20	In the approved document as on 1/4/2011. 8,06,202 tonnes at 4.21g/t. under 111 category.	Ore reserve Estimation as on 01-04-2015 - 5,02,191 T @ 4.12 g/t	As per the approved document & after carrying out exploration in surface during 13-14 , reserves were updated as on 1/4/2015.
1f	General remarks of inspecting officers on geology, exploration etc	The on lode exploratory mine development, raise and winze carried out.	This exploratory mine development gave sufficient technical information on geometry of the ore body to plan for the stoping works. Based, on the mining feasibility information, stope preparation were carried out as per the approval of IBM, DGMS & NIRM.	Based, on the mine development information ore reserves estimation were carried out.

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	The waste rock development from 6th level to 10th level from 2011-12 to 2015-16. The drives and cross cuts from same level(2014-15 Development 135 Mtrs. Sub-level Development 150 Mtrs. Ore from development - 7125T Stope production - 57999 T Total = 64724 T .	The mine is in operation in the 5th year of the 5 years proposals. It is reported that the mine has produced 24434 Tons of gold ore from the mine.	The mine has not achived the desired and targetted productions.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	NA, since this u/g mine.	NA, since this u/g mine.	NA, since this u/g mine.

2c	Stripping ratio or ore to OB ratio	Not applicable in underground mine.	Not applicable in underground mine.	Not applicable in underground mine.
2d	Quantity of topsoil generation in m3	nil	nil	nil
2e	Quantity of overburden generation in m3	Nil	Nil	Nil
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	Systematic underground working.	Systematic underground working.	yes, Systematic underground working.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Not applicable.	The mine is proposed to work through underground levels, cross cuts, sub levels, shafts and winzes and also through stopings.	Yes, the mine is working through shafts, winzes and levels and stoping.
3b	Quantity of ROM mineral production proposed	Development - 7125 T ,Stope - 57599 T , Total = 64724 T	24434 T	Th above production achived from the drives and the stopes.
3c	Recovery of sailable/usable mineral from ROM production	All the ROM will be used for processing to extract the gold ore metal.	Yes, all the ROM will be used for processing to extract the gold ore metal.	Yes , same is followed.
3d	Quantity of mineral reject generation	waste rock developement & generation in the form of rejects for the period 2011-12 to 2015-16 to the tune of 8830 tonnes.	3800 tonnes of waste rock produced, besides, 25513 tonnes & 23961 tonnes of mill tailings were stacked in the surface dumps.	The waste rock excavated from the mine were used for road construction, for other miscellaneous purposes.
3e	Grade of mineral rejects generation and threshold value declared.	Not declared the mineral threshold value.	NA	NA.

3f	Quantity of sub grade mineral generation.	Not proposed in the approved document.	same as above.	No proposals & even of low grade if any will be processed and gold metal will be extracted.
3g	Grade of sub grade mineral generation	NA	NA	NA
3h	Manual / Mechanised method adopted for segregating from ROM	mechanical method.	as above	Mechanical means and at times manual.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Not proposed.	NA	NA
3j	Provision of drilling and blasting in mineral benches	Yes proposal in drilling & blasting in drives, cross cuts, sub level, winze, shafts and in stopes for breaking and extraction mineral and waste and not in benches, since it is a u/g mine.	yes, the above proposal are being followed in the u/g mine activities.	All the drilling & blasting activities are being used in underground activities.
3k	Provision of mining machineries in mineral benches	Not in mineral benches, but in underground workings as described in other paras.	Yes, different underground machineries are put to use in u/g workings, like jack hammers for drives and short heights, simmba drills for stoping purposes. deep holes drilling machines are deployed wherever required.	Depends on the size and place of the locations, machines are deployed accordingly.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	The proposal are drawn for underground mining & other developement activites.	The work is mainly in underground and related activities.	Yes, different activities are in progress as per the u/g related work.

3m	Total area covered under excavation/pits	The total area used for u/g and surface activities. presently it is 14.50 ha area under use.	No activities are on the surface for excavations, except some supporting work and other infrastructures only and some plantations.	Main work is for infrastructures. Some on dumping mill taings, and other plantations.
3n	Ore to OB ratio for the pit/mine during the year.	Not declared for u/g mines	execept cut off grade of 1g/t, no stripping ratio declared.	No Ore to OB ratio for the mine/ given in the approved document.
3o	Total area put in use under different heads at the end of year	22.18 ha	within the proposed area.	yes within the proposed area for the end of the current proposals.
3p	Production of ROM mineral during the last five year period as applicable	2011-12=41757, 2012-13=40676, 2013-14=67456, 2014-15=64724, 2015-16=186387,	2011-12=30529 , 2012-13=22273, 2013-14=25870, 2014-15=24434, 2015-16=,	The targetted production has not achived by the lessee company.
3q	General remarks of inspecting officers on method of mining etc.	Underground mining through open stoping by sub level blast hole.	Same method is followed in the mine.	The method is being followed as per the proposals.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	No proposal for top soil, OB, mineral rejects.	Whatever excavated during the shaft deepening, was used for plantations & no OB, whatever waste comes out of mining operations were strictly used for any road construction, some were stacked in the ear marked for the same. No mineral rejects as such.	Besides, mill tailings generated after the extraction of metal from the ROM, were sent to the mill tailing dump, ear marked for the purposes.
4b	Location of topsoil, OB and mineral reject dumps	Not proposed.	Not proposed.	yes not proposed.

4c	Number of dumps within lease area and outside of lease area	There is no waste dump as such, except mill tailings.	yes, mill tailings are kept in their respective locations of the surface plan.	The existing mill tailings are present within the ML area & none is found outside the lease.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	The u/g workings are related to the ore body and the surface structures are protected and planning will be made accordingly.	Yes, as per the approved document regarding the propuction & development plan and sections will be carried out in the respective blocks.	The u/g workings are related to the ore body and the surface structures are protected and planning will be made accordingly.
4e	Number of active and alive dumps.	No waste dump, only one active mill tailing dump & one inactive mill taings dump is present in the lease.	No waste dump, only one active mill tailing dump & one inactive mill taings dump is present in the lease.	One active mill tailings dump is present in the ML area. One inactive mill tailings.
4f	Number of dead dumps.	One mill tailings dead dump & no waste dumps.	Yes, one mill tailings dump is present and dead.	Yes only one dead mill tailings.
4g	Number of dumps established.	One mill tailings dumps has been stabilized at present.	Same is observed during the inspections.	one dump of mill tailings is stabilized.
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes retaining wall is present all along the mill tailings..	yes, retaining wal is present & taken photographs during the inspections.	The lessee company is taking care of the mill tailings through proper protectins.
4i	Length of Retaining wall or garland drain all along dumps	not indicated in the proposals.	But during the inspection it was observed garland drain & the retaining wall constructed for protecting from wash offs.	Yes, it was observed during the inspections.
4j	Number of settling ponds	not proposed.	but found two in the ML area.	yes it was observed during the inspections.

4k	Specific comments of inspecting officer on waste dump management	Yes proposal to maintain the mill tailings in the common mine proposals.	Yes the lessee company has taken effort to maintain the mill tailings dumps to prevent wash offs.	Protection measures are taken to guard against the wash offs.
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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 proposals as such it is underground mine.	Yes, the mine is working through shafts, winze, levels, stoping with open stoping and partly supported with the pillars in between.	Yes, extraction is being done in each stoping, and not completed.
5b	Area under backfilling of mined out area	Not proposed.	No back filling as such in this mine, since the method of working and the proposal for open stoping does not require back filling as supports.	Yes, systematic developemnt work is in progress. as such no back filling proposals is made as on date in the approved documents.
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Not applicable, since this is an u/g mine.	Not applicable.	No such activities exist.
5d	Total area fully reclaimed and rehabilitated	Not applicable.	the mine is u/g method, open stoping, with pillar supports and such reclamation & rehabilitations.	Execept, some in open cast area and not in underground area.
5e	General remarks of inspecting officers on backfilling and reclamation etc.	Purely underground mine, hence such activities are not practiced. No poposals.	U/g method mining, only open stoping & partly supported with pillars as planned in the approved document.	Yes, the same is practiced.

Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
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6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	No annual report was not received in this office.	Not received and the party not sent.	It was reported that the party entrusted the work to the NABL and awaits the reports.
6b	Area available for rehabilitation (ha) .	No proposal made in the approved document, since it is a u/g mine.	No rehabilitation possible in this u/g mine.	In u/g mine, no such work, except supporting the workings through pillars.
6c	afforestation done (ha).	4500 with 70% survival in the acquired area. for 2015-16 is 6000 nos. of saplings.	2014-15= 4500 70% Western Part 2015-16= 6000 60% Further Western Most part (this will be undertaken in the current year)	2014-15 is completed and the 2015-16 is going to start in the current year.
6d	No. of saplings planted during the year	6000 for the current year.	yet to start.	As reported by the Mine manager that the work will be undertaken in the present.
6e	Cumulative no .of plants	20,000 nos. of plantations for the five years period from 2011-12 to 2015-16.	14000 nos of plantation	The company is taking care of the plantations proposals.
6f	Any other method of rehabilitation	No other proposals.	No proposals.	NA.
6g	Cost incurred on watch and care during the year	Not proposed.	Not reported.	Though the company is having own common watch & care unit.
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (L x B x D	Not proposed.	No such reclamation & rehabilitation by back filling.	No voids available for backfilling.
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Not proposed.	Tailings are used for common tailings dump area.	No proposal as such to carry out any back filling.

6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	Not proposed as such.	No proposals made.	yes no proposals to carry out any work.
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposals as such	no any work undertaken.	Nothing as such.
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	No such proposals.	no such proposals.	nothing.
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	No proposals.	Whatever the land available near by the office, residential areas are used and developed for making aesthetic beauty.	Company is taking care step by step, though no proposals as such in the approved documents.
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	No proposals.	As stated above, some of the areas are being done without any such proposals in the approved documents.	No any such work undertaken.
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	No proposals.	No work as such.	Lessee company does in many places, which are not depicted in the approved plan.
6p	Compliance of environmental monitoring (core zone and buffer zone)	Yes proposal are made in the approved document.	The Environmental Monitoring work is being carried out in core zone and buffer zone of the mine as per the IBM circulars by NABL certified laboratory, M/s.MSV Analytical Laboratory, Ballari.	The report is yet to be submitted by the lessee company.

6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	Yes proposed in the approved document.	The work is need to be undertaken in the underground mine and not in surface. The mine is not matured for such work.	This is an u/g mine and the PMCP work is possible in the later period.
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Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	All the ROM produced from the mine is need to be transported to the Common Beneficiation plant located at Hutti.	Yes, as per the proposals, the ROM are sent to the common Beneficiation plant for extraction of Gold metal from the ROM.	Yes, the Hirrabuddin ore is transported to Hutti Mines for Beneficiation to extract the Gold metal for the complete year and present trend is being continued.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	No sorting in the mine underground, whatever the ROM from the different stopes are sent to the Beneficiation plant for crushing and for other process.	Directly the ROM is sent for crushing and followed with other process to extract the Gold metal. No any manual or mechanical sorting is under taken as such.	The trend of the ROM is such no manual or mechanical sorting is possible, except while doing drive or cross cuts, that time itself, it will be sent to the ore bin or waste bin.
7c	Different grade of mineral sorted out at mines.	Not proposed.	Not proposed, whatever the ROM produced are sent to the Beneficiation plant, segregating the ROM & waste at the bottom of the u/g shaft.	No grade wise, mineral sorting is possible in the mine, except separating the ore & waste from the drives or cross cuts. All materials excavated from the drives taken as ore or ROM, all the materials excavated from the cross cuts are waste rock.

7d	Any beneficiation process at mines .	No beneficiation process available at mines site.	Common Beneficiation plant available at Hutti ML area, belongs to the common lessee company.	Yes, common Beneficiation plant only available for all the mines of M/s Hutti Gold Mines Ltd.
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	A proposed in the approved document, conservation point is taken care, while making drives, cross cuts, shaft deepening, stoping, sub level excavations.	During the above operation, the ROM & the waste are brought out to the Surface through skip hoisting and the Ores are sent to the plant for further process and the waste rock are sent to the waste rock dump yard or used for some other useful purposes depends upon the need.	Conservation point is taken care by the company to avoid any loss of ores in the planning part itself.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposals.	The mine is operating in u/g method, no any such excvaton, execept at the initial stage of the mine opening.	Presently, the mining operation concentrated on the surface only.
8b	Concurrent use or storage of topsoil	No proposals.	yes, no such proposlas.	Only in the initial stage not at the present stage.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes proposals given for OB, waste rock, fines.	Whatever the materials that are operating inside the mine, which are hoisted to the surface and kept & used accordingly.	Yes, depends on the materials hoisted from surface are stored in the designated places.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not proposed.	If at all any such situation arises, which will be kept in the respective places.	At times and not regular, execept the ROM.

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not as such proposals.	It is a u/g mine, no such activities are present in the mine, if at all anything comes will be taken care.	No such reclamtion & rehabilitation proposals in the mine.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	No proposals.	Afforestation will be done in the area acquired particularly in parts shown in the land use plan. Earlier afforestation has shown about 55 to 70% survival rate. It is planned to plant about 6000 species & will be carried out in the phased manner. During the year 2014-15 4500 numbers of saplings were planted.	The ML area presently workings reveals very thin vegetations, and the company taking care to plant in the acquired area as indicated above.
8g	Survival rate	Not proposed.	70%	Company taking care for maintenance.
8h	Water sprinkling on roads to control airborne dust	Yes proposed.	Yes water sprinkling is being done regularly.	This system is being followed regularly.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Not proposed.	Taking care to maintain the aesthetic beauty.	Taking care to maintain the aesthetic beauty, still additional effort is required. .

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
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9a	Status of submission of Monthly and Annual returns	The MR for the month of July 2015 and the AR for the year 2014-15 has been received in this office.	MR received in this office on 4/9/15, & dy.No. 2796 on 8/9/15 where it is supposed to be on received 10/8/15. The information furnished pertaining to the mine are relevant. The exploration pertaining to the year 2014-15, has not commented, though there was drilling exploratory holes programme. In the AR, the tonnage of ore blocked for stoping is not dealt.	Almost 25 days delayed in sending the July & the August,2015 is yet to be received in this office.
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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
Rule 13(1)	05/10/2015				
Rule 45(7)	05/10/2015				
Rule 23E(2)	05/10/2015				
Rule 29	05/10/2015				

Date :
(C.PARAMESHWARAN)

Indian Bureau of Mines