INDIAN BUREAU OF MINES
MINERALS DEVELOPMEMT AND REGULATION DIVISION

MCDR INSPECTION REPORT

Ranchi regional office

Mine file No : JHK/PAL/GRP/568/RRO **Mine code : 28JHK14001**

(i) Name of the Inspecting Officer and ID No. : **S001) B K SINGH**

(ii) Designation : Assistant Mining Geologis

(iii) Accompaning mine Official with Designation : S/SRI MANGAL HASDA, MINE MANAGER, RAHUL JHA, GEOLOGIS

(iv) Date of Inspection : 19/08/2015

(v) Prev.inspection date : 04/02/2015

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **GAURA (MLA 6.41)**

(b) Registration NO. : **IBM/11373/2012**

(c) Category : A Other than Fully Mech.

(d) Type of Working : Opencast

(e) Postal address

State : JHARKHAND

District : PALAMAU

Village : GAURA

Taluka : SATBARWA

Post office : SATBARWA

Pin Code :

FAX No. : 0651-2300971

E-mail : tccplrnc@gmail.com

Phone : 0651-2313292/93

(f) Police Station :

(g) First opening date : 02/05/2002

(h) Weekly day of rest : SUN

2. Address for correspondance : VILL.- GAURA,
P.O.- SATBARWA,
DISTT.- PALAMAU (JHK)

3. (a) Lease Number : JHK0147

(b) Lease area : 6.61

(c) Period of lease : 20

(d) Date of Expiry : 11/02/2006

4. Mineral worked : GRAPHITE Main

5. Name and Address of the

Lessee	:	SHISHIR KUMAR PODDAR 3P SHREE GOPAL COMPLEX COURT ROAD, RANCHI RANCHI JHARKHAND Phone:0651-2203789, mob. 9934362408 FAX :N.A
Owner	:	SHISHIR KUMAR PODDAR C/O M/S CHHOTANAGPUR GRAPHITE INDS. 3P, SHREE GOPAL COMPLEX, COURT ROAD RANCHI - 834001 (JHK) RANCHI JHARKHAND Phone: 0651-2313292/23 FAX : 0651-2300971
Agent	:	AJAY SHANKAR 3P SHREE GOPAL COMPLEX COUR ROAD, RANCHI JHARKHAND RANCHI JHARKHAND Phone: 9771403710 FAX : 0651-2300971

Mining Engineer

Name	:	MANGAL HANSDA,Full Time
Qualification	:	B. TECH. (MINING)
Appointment/ Termination date	:	01/07/2014

Geologist

Name	:	RAHUL KUMAR JHA,Full Time
Qualification	:	M. Sc. (GEOLOGY)
Appointment/ Termination date	:	07/06/2014

6. Date of approval of Mining Plan/Scheme of Mining :

Fresh under rule 22 MCR1960	24/07/1996
FMCP under 23C(1)	18/02/2013
Modif.of approved Mining Plan	20/03/2013
Mining Scheme rule 12 MCDR1988	12/07/2013

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	02 Borehole was proposed	02 BH was drilled during 2014-15.	
1b	Exploration over lease area for geological axis 1 or 2	No proposal	Araea already explored.	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No proposal during 2015-16.	The amount of expenditure incurred towards exploration during the year 2013-14 amounts to approximately Rs. 4.23 Lakh.	
1d	Balance area to be explored to bring Geological axis in 1 or 2	No such proposal.	About 1.314 hect area still unexplored.	
1e	Balance reserve as on 01/04/20	As per approved Mining Plan dated 12.07.2013 Reserve as on 01.04.2012 is (111)-228896 MT FC <10% (122) - 41663 MT -	Reserve as on 01.04.2012 (111)-228896 MT, production during 2012-13: 4102 , 2013-14:9260 and 2014-15 : 12178 MT Reserve as on 01.04.2015 228896MT- 25540 MT=203356 MT	
1f	General remarks of inspecting officers on geology, exploration etc	NA	The Graphite schist is exposed within the qaurry along with Pegmatite. Granite gneiss and Calc Silicate are there on the Western and Eastern side of the lease area. The graphite bearing body shows a general trend of NNE-SSW with dip of about 70 degree towards WNW. The Graphite content(FC content) in the host rock varies from 15-30% which can be upgraded upto 85-90% FC by proper beneficiation.	

Development :

Sl.No.	Item	Propasals	Actual work	Remarks

2a	Location of development w.r.t.lease area	Quarry no -1.	Quarry no -1.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Proposal for seprate bencches for soil ,OB and graphite is there.	Seprate benches for OB and Graphite is maitained.
2c	Stripping ratio or ore to OB ratio	During 2014-15 Ore :OB ratio as proposed was 1:2.10	During 2014-15 poroduction was 12178 MT and OB and waste 57000MT/m3
2d	Quantity of topsoil generation in m3	No soil removal	No soil removal during 2014-15.
2e	Quantity of overburden generation in m3	Total OB Genration during 2014-15 was 21094 MT and Wsate-2501MT	total OB and waste generatedduring 2014-15- 57000T/m3
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	NA	NA

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	only one i,e Quarry no-1	Quarry no -1is working.	
3b	Quantity of ROM mineral production proposed	Proposed production during 2014-15 was 1000 MT	Actual production during 2014-15 was 12178 MT.	
3c	Recovery of sailable/usable mineral from ROM production	Recovery about 80%.	about 30-32% due to high intercalated waste.	
3d	Quantity of mineral reject generation	No proposal for reject generation.	No reject generated.	
3e	Grade of mineral rejects generation and threshold value declared.	NA	NA	

3f	Quantity of sub grade mineral generation.	NA	NA
3g	Grade of sub grade mineral generation	NA	NA
3h	Manual / Mechanised method adopted for segregating from ROM	Manualy	Manualy
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No such proposal	As no subgrade mineral or reject are generated hence no analysis or beneficiation study proposed.
3j	Provision of drilling and blasting in mineral benches	No drilling Blasting was proposed.	No drilling or blasting,Ore and OB excavated by excavator.
3k	Provision of mining machineries in mineral benches	Use of Hydaulic excavator, Tiper,Water pump,and disel generated were proposed.	Hydaulic excavator, Tiper,Water pump,and disel generated were used.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Bench height and width were proposed to kept within 6m.	Bench height and width are to kept within 6m.
3m	Total area covered under excavation/pits	About 1.82 hect area was proposed.	About 1.43hect area was under excavation /pits.
3n	Ore to OB ratio for the pit/mine during the year.	During 2014-15 or to OB proposed ratio was 1:2.10.	During 2014-15 or to OB ratio was 1:4.
3o	Total area put in use under different heads at the end of year	Quarry-1.82hect dump-0.99hect	Quarry-1.43 hect Dump-0.99 hect

3p	Production of ROM mineral during the last five year period as applicable	Proposed production during theplan period from 2012-13 to 2016-17 was given below. 2012-13 : 10584 MT 2013-14 9577 MT 2014-15 :1003 MT 2015-16 : 10534 MT 2016-17 : 11934 MT	Actual Production Yearwise given below: 2010-11 : NIL 2011-12 : NIL 2012-13 ;4102.MT 2013-14 : 9260 MT 2014-15 : 12178 MT
3q	General remarks of inspecting officers on method of mining etc.	NA	NA

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Proposal is there for seprate dumping of OB and rejects.	OB nad rejects are dumped seprately.	
4b	Location of topsoil, OB and mineral reject dumps	Proposed dumping towards North Westernside.	Dumping towards North Westernside as proposed..	
4c	Number of dumps within lease area and outside of lease area	one dump within the lease area.	one dump within the lease area.	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Proposed to keep in SWesten part o f the lese area.	The dump has been created in South western part of the lease area outside ultimate pit limit.	
4e	Number of active and alive dumps.	only one dump was proposed.	The dump has been created in South western part of the lease area outside ultimate pit limit.	
4f	Number of dead dumps.	NA	NA	
4g	Number of dumps established.	NA	NA	

4h	Whether Retaining wall or garland drain all along dumps are there.	Garland drain along the dump was proposed .	Garland drain and parapet wall was constructed along the dump length of the retaining wall was 174m.	
4i	Length of Retaining wall or garland drain all along dumps	Retaining wall was proposed.	174m retaining wall was constructed during the plan period.	
4j	Number of settling ponds	No proposal.	No such settling pond was there	
4k	Specific comments of inspecting officer on waste dump management	NA	NA	

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 proposal for backfilling as mine is not going to exhaust during the plan period.	No backfilling.	
5b	Area under backfilling of mined out area	No proposal.	Not Applicable	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No Proposal.	NA	
5d	Total area fully reclaimed and rehabilitated	No proposal.	Not applicable	
5e	General remarks of inspecting officers on backfilling and reclamation etc.	NA	NA	

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).	NA	Lessee has sent PMCP report in response to Violation letter.
6b	Area available for rehabilitation (ha) .	NA	NA
6c	afforestation done (ha).	0.13 hect proposed for afforestation.	0.3hect area afforested.
6d	No. of saplings planted during the year	210 spplings were proposed to be planted during 2014-15.	200plants were planted during 2014-15.
6e	Cumulative no .of plants	2012-13 to 2014-15 proposed cumulative plantation was 470 plants	430 plantation .
6f	Any other method of rehabilitation	NA	NA
6g	Cost incurred on watch and care during the year	NA	NA
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	NA	NA
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	NA	NA
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	NA	NA

6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	NA	NA	
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	NA	NA	
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	NA	Waste land is being used for afforestation.	
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	NA	NA	
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	NA	NA	
6p	Compliance of environmental monitoring (core zone and buffer zone)	NA	NA	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	NA	NA	

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	NO	NA	

7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	NA	NA	
7c	Different grade of mineral sorted out at mines.	NA	ROM sent to Processing plant at Rajderwa.	
7d	Any beneficiation process at mines .	NA	NO	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	NA	NA	

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	NO proposal.	NA	
8b	Concurrent use or storage of topsoil	No proposal	No top soil generation.	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	proposed	There is no generation of top soil or sub grade. Waste materials are dumped at southwestern part of the leasehold area.	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	N o backfilling was proposed.	No restoration of land as backfilling was not proposed.	

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not proposed.	NA
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	During 214-15 p,210 plants on 0.13 ha area. and 2015-16,220 plants on 0.14hect area.	Cummulative plantaion as on 01.04.2015 was 430 plants on 0.45 hect area within ML area and 100plants out side lease area of 0.3hect.
8g	Survival rate	Not proposed.	survival rate was 50%.
8h	Water sprinkling on roads to control airborne dust	Proposed	Water sprinkler is used to control airborne dust.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	NA	NA

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Lesee has submitted Monthly and annual Returns.	Lesee has submitted Monthly and annual Returns.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mr Rahul Kumar Jha is working as Geologist and Sri Sudhanshu kumar mishra as mining Engineer.	Mr Rahul Kumar Jha is working as Geologist and Sri Sudhanshu kumar mishra as mining Engineer.	

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	0.06 hect alredy exploited,0.48 hect under current working,0.28hect-waste disposal,0.117 hect for office building.	up to 2015-16, current working -1.221ha,road-0.26ha,OB dump-0.99ha,total area put on use -2.69ha.
9d	Scrutiny of Annual return on afforestation	150 plants during 2014-15 with 50% survival rate.	As on 01.04.2015-430plants with 50% survival rate.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	NA	No mineral reject generation.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Opening stock-80.038T production -12178MT,Closing stock-40.698 MT. Grade-8-10% carbon	Opening stock-80.038T production -12178MT,Closing stock-40.698 MT. Grade-8-10% carbon
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Cost of production-Rs 447.83/MT	
9h	Scrutiny of Annual return on fixed assets	Not mentioned.	NA
9k	Scrutiny of Annual return on mining machineries	Excavator 0.5cum-01.and 0.32cum-01 Dumper-10T-03no.	

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
Rule 13(1)	15/10/2015		Rule 13(1)	15/10/2015	
Rule 23E(2)	15/10/2015	30/12/2015			
Rule 27(4)	15/10/2015	30/12/2015			
Rule 29	15/10/2015	30/12/2015			
Rule 42(1)(C)(I)	15/10/2015	30/12/2015			

Date :

(**B K SINGH**)

Indian Bureau of Mines