

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

MCDR INSPECTION REPORT

Bhubaneshwar regional office

Mine file No : ORI/GRPH/NUP/MCDR-4/BBS

Mine code : 28ORI24005

- (i) Name of the Inspecting : **AKP**) **ASHOK KUMAR PANY**
Officer and ID No.
- (ii) Designation : Assistant Mining Engineer
- (iii) Accompanying mine : Sri Subash Chandra Jayasingh (Mine Agent) and Sri Jag
Official with
Designation
- (iv) Date of Inspection : 18/11/2022
- (v) Prev.inspection date : 26/06/2021

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **GANDABAHALI (31.869 HA)**
- (b) **Registration NO.** : **IBM / 4399 /2011**
- (c) Category : A Other than Fully Mech.
- (d) Type of Working : Opencast
- (e) Postal address
- State : ORISSA
- District : NAWAPARA
- Village : GANDABAHALI
- Taluka : KHARIAR
- Post office : GANDABAHALI
- Pin Code :
- FAX No. : 0663-2533374
- E-mail : pratyush_agi@hotmail.com
- Phone : 0663-2403251
- (f) Police Station : SINAPALI
- (g) First opening date : 16/07/2005
- (h) Weekly day of rest : TUE
2. Address for : GANDABAHALI, SINAPALI, NUAPADA
correspondance ODISHA, 766118
3. (a) Lease Number : ORI0787
- (b) Lease area : 28.62
- (c) Period of lease : 20
- (d) Date of Expiry : 14/02/2025
4. Mineral worked : GRAPHITE Main

5. Name and Address of the

Lessee : P.C.AGARWAL
 FARM ROAD SAMBALPUR ORISSA
 SAMBALPUR ORISSA
 Phone:0663-2403251
 FAX :0663-2533374

Owner : P.C.AGARWAL
 FARM ROAD SAMBALPUR
 ORISSA
 Phone: 403651,400828
 FAX : 0663-533374

Geologist

Name : SHRI BIKRAM KESHARI SAHOO,Full Time
 Qualification : MSC GEOLOGY
 Appointment/ : 28/08/2021
 Termination date

Manager

Name : SHRI SURESH KUMAR AKUDARI
 Qualification :
 Appointment/ : 28/08/2020
 Termination date

6. Date of approval of Mining	:	Mining Scheme rule 12 MCDR1988	29/03/2016
Plan/Scheme of Mining		MP modif under 17(3) MCR 2016	08/06/2017
		MP review under 17(1) MCR 2016	18/11/2020

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	DURING PREVIOUS YEAR i.e. 2020-21, 20 NOS. OF BORE HOLES PROPOSED.	NIL	THE SAME HAS BEEN INCORPORATED IN THE NEXT REVIEW OF MINING PLAN EXPLORATION PROPOSAL.
1b	Exploration over lease area for geological axis 1 or 2	DURING THE YEAR 2021-22 DRILLING OF 43 NOS. OF EXPLORATORY BORE HOLES PROPOSED.	7 NOS. DRILLED	THE EXPLORATION PROPOSAL HAS NOT BEEN COMPLETED AS THE BALANCE HOLES ARE FALL UNDER NON-SURFACE RIGHT AREA. DELAY IN GETTING SURFACE RIGHT DUE TO PRIVATE TENATED LAND.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	NOT SPECIFIED	CARRIED OUT BY INHOUSE FACILITY	
1d	Balance area to be explored to bring Geological axis in 1 or 2		THE BALANCE UNEXPLORED AREA IS 4.893 HA	
1e	Balance reserve as on 01/04/20	NA	THE BALANCE RESERVE AS ON 01.04.2022 IS AS FOLLOWS:- RESERVE- 0.176 MILLION TONNE RESOURCE- 0.049 MILLION TONNE TOTAL- 0.225 MILLION TONNE	
1f	General remarks of inspecting officers on geology, exploration etc			GRAPHITE ORE OCCURED IN VEIN TYPE DEPOSIT. THE LEASE AREA HAS NOT BEEN FULLY EXPLORED. THE EXPLORATION WORK IS UNDER PROGRSS .

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	THE QUARRY LOCATED ON THE NORTH SIDE OF THE LEASE AREA (69S-54S, 12E- 215E).	THE QUARRY LOCATED ON THE NORTH SIDE OF THE LEASE AREA (69S-54S, 12E- 215E).	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	SEPARATE BENCHES PROPOSED	CARRIED OUT	
2c	Stripping ratio or ore to OB ratio	1:9.4	1:13.5	
2d	Quantity of topsoil generation in m3	312 CUM	300 CUM	
2e	Quantity of overburden generation in m3	109418 CUM	63579 CUM	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			THE MINING OPERATION HAS BEEN CARRIED OUT IN OPENCAST MECHANISED METHOD AND THE DEVELOPMENT WORK IS WITHIN THE PROPOSED AREA.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	ONE PIT - QUARRY-1	ONE PIT - QUARRY-1	
3b	Quantity of ROM mineral production proposed	24364 TONNE	4710 TONNE	LESS PRODUCTION DUE TO UNAVAILABILITY OF ENVIRONMENT CLEARANCE FOR ENHANCE QUANTITY. THE CURRENT EC CAPACITY IS 4750 TONNE.

3c	Recovery of sailable/usable mineral from ROM production	21657 TONNE	4710 TONNE
3d	Quantity of mineral reject generation	2707 TONNE	NIL
3e	Grade of mineral rejects generation and threshold value declared.	THRESHOLD VALUE 2% F.C. MINERAL REJECT GRADE- BELOW 5% F.C.	THRESHOLD VALUE 2% F.C. MINERAL REJECT GRADE- BELOW 5% F.C.
3f	Quantity of sub grade mineral generation.	SAME AS MINERAL REJECT.	SAME AS MINERAL REJECT.
3g	Grade of sub grade mineral generation	SAME AS MINERAL REJECT.	SAME AS MINERAL REJECT.
3h	Manual / Mechanised method adopted for segregating from ROM	MECHANISED	MECHANISED
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	NIL	NIL
3j	Provision of drilling and blasting in mineral benches	NIL	NIL
3k	Provision of mining machineries in mineral benches	SHOVEL AND DUMPER COMBINATION	SHOVEL AND DUMPER COMBINATION
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	HEIGHT OF BENCH-5M	HEIGHT OF BENCH-5M
3m	Total area covered under excavation/pits	1.87 HA	1.87 HA

3n	Ore to OB ratio for the pit/mine during the year.	1:9.4	1:13.5	
3o	Total area put in use under different heads at the end of year	6.938 HA	6.938 HA	
3p	Production of ROM mineral during the last five year period as applicable	2017-18-24364 TONNE 2108-19-26104 TONNE 2019-20-27052 TONNE 2020-21-24364 TONNE 2021-22-24364 TONNE	2017-18-4681.6 TONNE 2108-19-4733.0 TONNE 2019-20-4749.5 TONNE 2020-21-4704.6 TONNE 2021-22-4710.0 TONNE	LESS PRODUCTION DUE TO UNAVAILABILITY OF EC FOR ENHANCED QUANTITY.
3q	General remarks of inspecting officers on method of mining etc.			MINING IS CARRIED OUT WITH MECHANISED OPENCAST METHOD.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	SEPARATE DUMPING PROPOSED	CARRIED OUT	
4b	Location of topsoil, OB and mineral reject dumps	7 NOS. OF WASTE DUMPS AND ONE MINERAL REJECT STACK EXISTS WITHIN THE LEASE AREA.	7 NOS. OF WASTE DUMPS AND ONE MINERAL REJECT STACK EXISTS WITHIN THE LEASE AREA.	
4c	Number of dumps within lease area and outside of lease area	7 NOS. OF WASTE DUMPS EXISTS WITHIN THE LEASE AREA AND NO DUMPS OUTSIDE.	7 NOS. OF WASTE DUMPS EXISTS WITHIN THE LEASE AREA AND NO DUMPS OUTSIDE.	

4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	WITHIN AND OUTSIDE UPL	WITHIN AND OUTSIDE UPL
4e	Number of active and alive dumps.	7 NOS.	7 NOS.
4f	Number of dead dumps.	NIL	NIL
4g	Number of dumps established.	NIL	NIL
4h	Whether Retaining wall or garland drain all along dumps are there.	YES	YES
4i	Length of Retaining wall or garland drain all along dumps	335 M RETAINING WALL AND 200M GARLAND DRAIN	MAINTENANCE
4j	Number of settling ponds	NIL	NIL
4k	Specific comments of inspecting officer on waste dump management		MINING CARRIED OUT IN SMALL SCALE AND THE OLD DUMPS ARE STABILISED BY PLANTATION.

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.	NIL	NIL	MINERAL NOT EXHAUSTED AND NO BACKFILLING PROPOSAL
5b	Area under backfilling of mined out area	NIL	NIL	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	NIL	NIL	

5d	Total area fully reclaimed and rehabilitated	NIL	NIL	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			MINERAL NOT EXHAUSTED FULLY/PARTIALLY, THEREFORE NO BACKFILLING AND RECLAMATION PROPOSAL.

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).		ANNUAL REPORT ON PMCP FOR THE YAER 2021-22 SUBMITTED	
6b	Area available for rehabilitation (ha) .	NIL	NIL	
6c	afforestation done (ha).	0.5 HA	0.596 HA	
6d	No. of saplings planted during the year	1250 NOS.	1491 NOS.	
6e	Cumulative no .of plants	NA	1491 NOS.	
6f	Any other method of rehabilitation	NIL	NIL	
6g	Cost incurred on watch and care during the year	RS. 50000/-	RS. 80000/-	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	NIL	NIL	

6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	NIL	NIL
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	NIL	NIL
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	NIL	NIL
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	NIL	NIL
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	NIL	NIL
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	NIL	NIL
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	NIL	NIL

6p	Compliance of environmental monitoring (core zone and buffer zone)	MONITORING PROPOSED	CARRIED OUT	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			THE PMCP WORK WAS CARRIED OUT AS PER PROPOSAL.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM DISPATCH PROPOSED	ROM DISPATCH CARRIED OUT	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	NO SORTING PROPOSED	NIL	
7c	Different grade of mineral sorted out at mines.	NO GRADEWISE SORTING	NIL	
7d	Any beneficiation process at mines .	NO BENEFICIATION PROCESS WITHIN THE LEASE AREA	NIL	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			THE ROM DISPATCHED FROM THE LEASE AREA AND BENEFICIATION CARRIED OUT OUTSIDE THE LEASE AREA.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
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8a	Separate removal and utilization of topsoil (Rule 32)	SEAPARATE REMOVAL OF TOP SOIL PROPOSED	CARRIED OUT.	
8b	Concurrent use or storage of topsoil	STORAGE OF TOPSOIL	AS PER PROPOSAL	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	SEPARATE DUMPS FOR WASTE AND MINERAL REJECT PROPOSED.	CARRIED OUT.	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	NOT PROPOSED	NIL	LEASE AREA NOT MATURED FOR RESTORATION.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	NIL	NIL	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	1250 NOS. OF PLANTATION PROPOSED DURING THE YEAR	1491 NOS. OF PLANTATION	
8g	Survival rate	NA	68%	
8h	Water sprinkling on roads to control airborne dust	PROPOSED	CARRIED OUT	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			MINING CARRIED OUT IN SMALL CSALE AND THE AESTHETIC BEAUTY MAINTAINED AROUND THE LEASE AREA.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns		THE MONTHLY AND ANUAL RETURN SUBMITTED.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	THE INFORMATION ON MANAGER AND GEOLOGIST FURNISHED IN THE ANUAL RETURN.	THE SAME HAS BEEN APPOINTED.	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	AREA UNDER PIT- 1.163 HA AREA UNDER DUMP- 1.967 HA	AS PER APPROVED RMP THE AREA UNDER EXCAVATION - 1.87 HA WASTE DUMP-3.537 HA	
9d	Scrutiny of Annual return on afforestation	NO OF TREE PLANTED DURING THE YEAR IS 316 NOS.	DURING INSPECTION AND IN PMCP REPORT IT WAS REPORTED 1491 NOS.	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	NIL	NIL	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	THE ROM STOCK IS 5159.325 TONNE	THE ROM STOCK IS 5159.325 TONNE	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	THE COST OF PRODUCTION IS RS. 1130.00/-	THE COST OF PRODUCTION IS RS. 1130.00/-	
9h	Scrutiny of Annual return on fixed assets	THE VALUE OF FIXED ASSET IS RS. 595960/-	THE VALUE OF FIXED ASSET IS RS. 595960/-	
9k	Scrutiny of Annual return on mining machineries	SHOVEL- 1 NOS. DUMPER - 2 NOS.	SHOVEL- 1 NOS. DUMPER - 2 NOS.	

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
MCDR17	Rule 34(1)	14/12/2022			

Date :

(ASHOK KUMAR PANY)

Indian Bureau of Mines