

INDIAN BUREAU OF MINES
MINERALS DEVELOPMENT AND REGULATION DIVISION
MCDR REPORT
Dehradun regional office

Mine File No.

Minecode: 38HPR01003

(i)	Name of the Inspecting Officer	Deepak Sharma
(ii)	Designation	Senior Mining Geologist
(iii)	Accompanying mine official with designation	Shri Kanchan, Shri Dheeraj
(iv)	Date of Inspection	11.03.2024
(v)	Prev. Inspection date	-

PART-I: GENERAL INFORMATION

1	(a)	Mine Name	Gagal Lst Mine
	(b)	Registration No.	IBM/256/2011
	(c)	Category	A-Category
	(d)	Type of Working	Opencast
	(e)	Postal Address	
		State	Himachal Pradesh
		District	Bilaspur
		Village	Nalag, Bhateh, Uprali, Barmana, Gagal
		Taluka/Tehsil	Sadar
		Post Office	Barmana
		Pin Code	174013
		FAX No.	NA
		E-mail	kanchan.kumar@adani.com
		Phone	-
	(f)	Police Station	Barmana
	(g)	First Opening Date	NA
	(h)	Weekly day of rest	-
2		Address for Correspondence	M/s ACC Limited
			121 Mahakali Karve Road
			Near Chruch Gate
			Mumbai 400020 Maharashtha
3	(a)	Lease Number	-
	(b)	Lease Area	231.25
	(c)	Period of Lease	50 Years
	(d)	Date of Expiry	31.03.2023
4		Mineral Worked	Limestone, Shale & Quartzite

PART-II: OBSERVATION / COMMENT OF INSPECTING OFFICER

1. Exploration:

S.N.	Item	Proposals	Actual Work	Remarks
1a	Backlog of previous year	No exploration was proposed in the reporting year 2022-23	NO exploration carried out in the reporting year 2022-23	
1b	Exploration over lease area for Geological axis 1 or 2.	Potential mineralized area is explored up to G1 level	Potential mineralized area is explored upto G1 level	
1c	Exploration Agency & Expenditure in Lakh Rupees during the year	NO proposal	Not available	
1d	Balance area to be explored to bring Geological axis in 1 or 2.	Potential Mineralized area explored upto G1 level i.e. 135.76 hect	Potential Mineralized area already explored upto G1 level i.e. 135.76 hect	95.49 hect declared as non-mineralized 135.76+95.49=231.25 hect (total ML area)
1e	Balance reserves as on 01.04.2017	111-142205587.50 122-16902500 211-302191800	111-142205587.50 122-16902500 211-302191800	(As per approved mining plan dated 29.03.2023)
1f	General remarks of Inspecting officer on geology, exploration etc.	Limestone of the ML area belongs to krol formation, limestone of ML area has various colour appearance with grain size, in nature the limestone of the is hard and compact, limestone found with shale in the ML area.		

2. Development:

S.N.	Item	Proposals	Actual Work	Remarks
2a	Location of Development w.r.t. lease area	It was proposed to work in the pit 1 towards the SE-NW direction forming benches of 10-meters in height and width	Working was is the proposed location with irregular benches in some places	ML holder was advised to correct the irregular benches.
2b	Separate benches in topsoil overburden and mineral (Rule 15)	It was proposed to prepare and maintain benches in OB and Mineral	Bench are maintained in OB and Mineral Limestone	
2c	Stripping ratio or ore to OB ratio	1:0.00	1:0.00	
2d	Quantity of topsoil generation in m ³	Nil	Nil	No Soil generated in the reporting year
2e	Quantity of overburden generation in m ³	Nil	Nil	
2f	General remarks of Inspecting officer on development of pit w.r.t type of deposit etc.	Some places irregular benches were observed advised to ML holder to correct the irregular benches, irregular benches are considered those benches where shale and other loose rocks broke down due to exposing to the weather after mining.		

3. Exploitation:

S.N.	Item	Proposals	Actual Work	Remarks
3a	Number of pits proposed for production	Single Pit Mining were proposed in Pit-1 named Gagal	Working was done in pit 1 as per proposal named Gagal pit	
3b	Quantity of ROM mineral production proposed	5012000	2763650	
3c	Recovery of Salable/usable mineral from ROM production	90-95%	90-95%	
3d	Quantity of mineral reject generation	Not Proposed	Nil	
3e	Grade of mineral reject generation and threshold value declared	Not Proposed	Nil	
3f	Quantity of sub-grade mineral generation	Not Proposed	Nil	
3g	Grade of sub-grade mineral generation	Not Proposed	Nil	
3h	Manual/Mechanized method adopted for segregation from ROM	Mechanized method	Mechanical method adopted	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	Not proposed	Nil	
3j	Provision of drilling & blasting in mineral benches	Proposed	As per approved mining plan	
3k	Provision of mining machineries in mineral benches	HEMM is proposed to be used in the mineral benches	HEMM is being used in the mineral benches	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Proposed	Bench height and width are as per mining i.e. 10 meter	
3m	Total area covered under excavation /pits	59.32 hect	58.31 hect	
3n	Ore to OB ratio for the pit/mine during the year	1:0.00	1:0.00	
3o	Total area put in use under different heads at the end of year	202.29 hect	193.51 hect	
3p	Production of ROM mineral during last five-years period, as Applicable	2022-23=5012000 2021-22=4983000 2020-21=5002400 2019-20=4906450 2018-19=4981675	2022-23=2763650 2021-22=3882200 2020-21=3084550 2019-20=3734350 2018-19=3728492 2017-18=3670813	
3q	General remarks of inspecting officer on method of mining etc.	Bench height and width are maintained as per proposal, location of working was as per proposal.		

4. Solid Waste Management-Dumping:

S.N.	Item	Proposals	Actual Work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32,33)	Proposed	Separate benches are prepared in mineral	No OB present in the ML
4b	Location of topsoil, OB & mineral reject dumps	Proposed	Within lease area	
4c	Number of Dumps within lease area and outside lease area	Within lease area	2	
4d	Location of Dumps w.r.t. ultimate pit limit (Rule 16)	Outside the UPL	Outside the UPL	
4e	Number of Active & Alive dumps	2	2	Mineral reject has been removed from the dumps and being used to reduce the quantity as per advised.
4f	Number of deed dumps	Not Available	Nil	
4g	Number of dumps established	Not Proposed	Nil	
4h	Whether Retaining wall or garland drain all along dumps are there	Proposed	Garland drain and retaining wall prepared	
4i	Length of Retaining wall or garland drain all along dump	500 meters	650 meters	
4j	Number of settling ponds	Not Proposed	1	
4k	Specific commends of inspecting officer on waste dump management	Dumps are being reduces and material available in the dumps are being used in cement plan to reduce the quantity and from the mineral conversation point of view.		

5. Solid Waste Management-Backfilling:

S.N.	Item	Proposals	Actual Work	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	Not Proposed	Full extraction of mineral is not done yet, mineral continuity still exists	
5b	Area under backfilling of mined out area	Not Proposed	No area fully mature for backfilling	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	No top soil generated during the reporting year	Nil	

5d	Total area fully reclaimed & rehabilitated	Not Proposed	No area fully mature enough for reclamation program	
5e	General remarks of inspecting officer on backfilling, reclamation etc	Mineral is still continued in the pits, pits are not fully extracted yet, reclamation and rehabilitation program not started yet.		

6. Progressive Mine Closer Plan:

S.N	Item	Proposals	Actual Work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly-Rule 23E(2). Details should be given in the format as given in Annexure-20	Proposed	Submitted	
6b	Management of worked/mined out benches			
	i) Area available for rehabilitation (Ha)	Proposed	Plantation	
	ii) Afforestation done (ha)	1.2	1.2	
	iii) No. of saplings planted during the year	3000	2550	
	iv) Cumulative no. of plants	18500	19000	
	v) Any other specific method of rehabilitation	Not Proposed	Nil	
	vi) Cost incurred on watch & care during the year	Not Proposed	Nil	
6c	Compliance on reclamation and rehabilitation by backfilling			
	i) Voids available for backfilling (L*B*D)	Not Proposed	Nil	
	ii) Void filled by waste/tailings	Not Proposed	Nil	
	iii) Afforestation on the backfilling	Not Proposed	Nil	
	iv) Rehabilitation by making water reservoir	Not Proposed	Nil	
	v) Any other specific means	Not Proposed	Nil	
6d	Compliance of Rehabilitation of waste land within lease			
	i) Afforestation	Proposed	2550 numbers of plats were plated in the reporting year	
	ii) Area rehabilitation	Not Proposed	Nil	
	iii) Method of rehabilitation	Not Proposed	Nil	
6e	Compliance of Environment monitoring (core zone & buffer zone)	Proposed	As per approved mining plan	

6f	General remarks of inspecting officer on PMCP compliance & progressive closer operations	Only plantation work was being done in the lease area in the reporting year.
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7. Mineral Conservation:

S.N.	Item	Proposals	Actual Work	Remarks
7a	ROM mineral dispatch or grade wise sorting within lease area	ROM dispatch is proposed	ROM is being dispatched to cement plant	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Mechanical method	Screener were used	
7c	Different grade of mineral sort out at mine	Not Proposed	Nil	
7d	Any beneficiation process at mines	Not Proposed	Nil	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	ROM is being dispatch to captive cement plant		

8. Environment:

S.N.	Item	Proposals	Actual Work	Remarks
8a	Separate removal and utilization of topsoil (Rule32)	Proposed	NIL	During the reporting year no soil generated as the working was done depth wise
8b	Concurrent use or storage of topsoil	Proposed	Nil	During the reporting year no soil generated
8c	Separate dumps for overburden waste rock, rejects and fines (Rule 33)	Proposed	Nil	No OB or waste generated during the reporting year
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Proposed	As and when generated	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not Proposed	No area mature enough for the process	

8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	Proposed	As per approved mining plan	
8g	Survival rate	90%	85%	Due to extreme weather conditions
8h	Water sprinkling on roads to control airborne dust	Proposed	By using water tanker and sprinklers	
8i	General remarks of inspecting officer on aesthetic beauty in and around mine area	Plantation work was done in the reporting year, total 2550 nos of saplings were planted.		

9. Compliance of Rule 45:

S.N.	Item	Comments	Remarks
9a	Status of submission of monthly and Annual returns	AR and MR submitted	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer Dheeraj, Manager-Pankaj Nayan	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Furnished	
9d	Scrutiny of Annual return on afforestation	Furnished	
9e	Scrutiny of Annual return on mineral reject generation (Grade & Quantity)	Furnished	
9f	Scrutiny of Annual return on ROM stock and/or grade ore	Furnished	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production costs	Furnished	
9i	Scrutiny of Annual return on Fixed assets	Furnished	
9k	Scrutiny of Annual return on mining Machinerics	Furnished	