

**REPORT ON CHECK UP INSPECTION OF EAMAMI CEMENT LIMESTONE
MINE OF EMAMI CEMENT LIMITED (OWNER) SITUATED IN VILLAGE
RISDA, TEHSIL BALODA BAZAR, DISTRICT BALODA BAZAR, STATE
CHHATTISHGARH.**

1	File No:	CHG/BBR/LST/01/RPR/38CHG19001
2	Mine Code...	<u>38CHG19001</u>
3	Name & Designation of the Inspecting Officer:	<i>Shri B.L. Gurjar Regional Controller of Mines Indian Bureau of Mines Shri Arun Kumar Gadatia , AME</i>
4	Date of inspection:	31.08.2019

1. GENERAL INFORMATION ABOUT THE MINE

I	Mine Name :	Emami Cement Limestone Mines
Ii	Owner	Emami Cement Limited
Iii	Nominated owner	Shri. Vivek Chawla
Iv	Mining Engineer	Shri. Jay Prakash Dwivedi
V	Agent	Shri. Anant Kumar Mahobe
Vi	Mines Manager	Shri. Dinesh Dixit
Vii	Lease Area	395.05 Ha.
Viii	Location	Risda, Baloda Bazar
Ix	Lease Period	From 2009 to 2059
X	Date of Expiry	07.09.2059
Xi	Date of Approval of mining Plan	Modified mining plan approved on 6/10/2017 Period 2017-18 to 2018-19
Xii	Date of Approval of Review of Mining Plan	14/12/2018 Year 2019-20 to 2023-24 five year
Xiii	Period of Review of Mining Plan	Year 2019-20 to 2023-24 five year
Xiv	Production (Last five years)	(in Tonnes)
	2014-15	NIL
	2015-16	NIL
	2016-17	985990 tones
	2017-18	3169838 tonnes
	2018-19	4790760 tnes

2. a) Brief Description of the Mine

i)	Method of mining	Mining is by Mechanized Open-Cast Method adopting deep hole drilling (115 mm /150mm dia) and blasting. Shovel dumper combination for loading and transportation upto crusher.
ii)	Drilling & blasting	Top Hammer drilling by 115 mm /150mm dia and blasting techniques is used in the limestone. spacing and burden approx . 6m X 4 m pattern to achieve desired fragmentation.
iii)	Excavation & Loading	An excavator of EX. PC1250 KOMATSU -6.5m ³ bucket capacity are deployed for loading of blasted limestone.
iv)	Transportation	8 dumpers of 60 tones capacity are deployed for transportation of ore from mine face to crusher over a lead distance of 1.5 kms to 2.5ms.
v)	Beneficiation	ROM of -1200mm is being passed through apron feeder to crusher of 1500 TPH via wobbler conveyor to separate -40mm and +40mm sizes. +40mm product is fed to crusher to crush at 40mm. -40mm material is passed through a double deck vibrating screen to separate – minus 10mm material with clay part and it is considered as waste and sent to waste dumps.

2.b) Description on deployment of mining machinery

Sl. No	Machinery	Capacity of Each Unit	No. of Unit	H.P. of Each Unit	Elect./Non-Elect.(Specify)	Used in O/C or U/G
1	EX. PC1250 KOMATSU	6.5 m ³	3	672	Non-Electric	O/C
2	EX. 300 KOMATSU	2 m ³	1	240	Non-Electric	O/C
3	DUMPER KOMATSU	60 tons	6	715	Non-Electric	O/C
4	DUMPER CAT	60 tons	2	715	Non-Electric	O/C
5	DRILL MACHINE	150/115mm	2	261	Non-Electric	O/C
6	WHEEL LOADER	5.0 m ³	1	188	Non-Electric	O/C
7	DOZER KOMATSU	-	2	354	Non-Electric	O/C

SN	Proposal in the Approved MP/SOM	Observations regarding implementation of proposals given in Approved review of mining plan	Remarks
1. Conservation of Minerals			
a)	Exploration	Review of mining plan approved on 14/12/2018- Year 2019-20 to 2023- In year 2019-20 total 14 nos of bore holes proposed but same are not drilled till now.	
b)	Utilization of subgrade mineral	25% of low grade limestone blended with high grade and made cement grade to have Lime sturation factor-LSF around 100. .	
c)	Any other proposal for monitoring	wobbler conveyor to separate -40mm and +40mm sizes. +40mm product is fed to crusher to crush at 40mm. - 40mm material is passed through a double deck vibrating screen to separate – minus 10mm material with clay part and it is considered as waste and sent to waste dumps.	Clay material is separated by wobbler and screening
2. Scientific Mining			
	Mine development & method of mining	Mining is by Mechanized Open-Cast Method adopting deep hole drilling and blasting.	Benches in overburden have not been kept sufficiently in advance and is interfering with working of limestone benches at places in mine. At places proposed working area for 2019-20 has not been acquired yet and working is shifted to other part within five year plan period.
	Handling of waste / subgrade material	During 2018-19 around 5,58,677 tonnes waste material was handled	None
	Area reclamation & restoration	No reclamation	This is new mine and area has not matured for reclamation.
	Any other proposal for monitoring	Nil	To separate clay material from limestone, a beneficiation study is carried out by IBM, OD division in year 2017 .With scrubbling limestone ROM is enriched from CaO- 39.88 %, Mgo-1.95 % Silica -14.39

			to Cao- 46.25 %, Mgo-2.65 % , Silica-8.35 with recovery of Cao-71.8 % and Yield 61.6 %
3. Protection of Environment			
	Afforestation	Afforestation along the Nallah and canal. Greenbelt along the lease boundary.	40,000 nos in year 2018-19
	Quality of Air	Suspended particulate matter (mg/m3) – 1.13 & Location : near haul road	
	Quality of Water	7.44 pH value (mine pit)	
	Noise Level	Location: Near Mines office Day time : 63.8 dB(A) Night time: 56.9 dB(A)	
	Vibration	2.671mm/s at 0.410sec	
	Any other proposal for monitoring	Air data is displayed at Factory gate near to mine	

3. History of violations after approval of SOM

SN	Date of Inspection	Name of Inspecting Officer	Violation of MCDR,1988 Observed & pointed out	Rectification of violation	Remarks
2	25.05.2018	Shri. R.N. Mishra	11(1), 65(1), (2) rules of MCDR-2017 vide letter No.CHG/BBR/LST-1/RPR/283	Found complied with .	During the present inspection rule no 13(2), 45(5)(a) & (c) violated

4. Socio Economic Development Plan

SN	Proposed action plan towards socio economic development	Expenditure proposed (in Rs.)	Expenditure incurred (in Rs.)	Remarks
1.	General development in the area			
	i) Housing	1358000	1358000	
	ii)Water supply	600000	600000	
	iii)Sanitation	787000	787000	
	iv)Health, Safety & medical facilities	239000	239000	
2.	Education & Training	1891000	1891000	

3.	Employment of local inhabitants	-	-	
4.	Public Transportation & communication	-	-	
5.	Recreation & other sports activities	2807000	2807000	
6.	Expenditure for environment	4311000	4311000	(Harihar Chhattisgarh)
7.	Others (religious activity)	-	-	
8.	Total	7118000	7118000	

Monthly and Annual return - From scrutiny of monthly returns of mines , it is observed that cost of production/Ex- mine price per tone is less than the cost of production/Ex- mine price reported in Annual return. From analysis it is found that in monthly return's cost of Production , depreciation and over head cost are not included resulting in lower reporting of cost of production.

6- STAR RATING-

Lessee submitted star rating of the year 2018-19 of mine online and self assessed Four star rating with 88 % mark. Same was validated during inspection and final validated score is three star with 78 % marks.

7-- Recommendation/Action-

- 1) Comment on earlier inspection- The earlier inspection report was scrutinized with field condition of mine and found broadly in order and other aspect are covered in new mining plan approved for period of 2019-20 to 2023-24.
- 2) During this inspection following violation pointed out and pointed out on 13/9/2019.

13(2)	Benches in overburden have not been kept sufficiently in advance and is interfering with working of limestone benches at places in mine
45(5)(a)	From scrutiny of monthly returns of mines for the year 2019 , it is observed that cost of production/Ex- mine price per tone is less than the cost of production reported Rs 197.45/- in Annual return of 2018-19 . It is found that depreciation cost/ over head cost are not included while reporting cost of production in monthly return.
45(5)(c)	In captive lease cost of production is considered as Ex mine price whereas in annual return for the year 2018-19 cost of production is Rs 197.45 and Ex mine price reported is 182.5 which is not correct.

B.L.Gurjar
Regional Controller of Mines