

**Physical Data of Morak Limestone Mines, of M/s Mangalam Cement Ltd.
Village-Morak , Tehsil -Ramganjmandi ,Distt Kota (Raj)**

S. No.	Item	Description
1	Mining lease Area	895.42 Hectors
2	ROM Limestone Production (During 2021-2022)	3.4622 Million Ton
3	Lease Period (After promulgation of Govt. ordinance dt. 12.012015)	21.02.1977 to 31.03.2030
4	Date of commencement of Work	1st January ,1980

**Quality of stored rain water in mined out pits sump & Piezometers within Morak
Limestone Mines. Date of Monitoring : 17.05.2022**

Parameters	Unit	Mines Sump Block-1 (S-1)	Mines Sump Block-2 (S-2)	Piezometer (PZ-2A)	Piezometer (PZ-3)
pH		6.63	7.16	7.28	7.15
Total Hardness as CaCO ₃	Mg/L	116.0	72.0	186.0	136.0
Total Alkalinity	Mg/L	106.0	84.0	172.0	118.0
Total Dissolved Solids	Mg/L	252.0	236.0	388.0	248.0
Fluoride (as F)	Mg/L	0.20	0.20	0.40	0.30
Sulphates as SO ₄	Mg/L	20.60	21.20	31.30	29.60
Nitrates as NO ₃	Mg/L	1.20	1.10	4.20	1.60
Chloride (as Cl-)	Mg/L	18.0	42.0	46.0	23.0

**Ground Vibration observed (At distance of 100 Mtr) for the event of Blasting at
Morak Limestone Mines (Pit No.-3 ,block-II) on dt 03.02.2022 at 14.21.43 PM**

Axis	Dominant Frequency (In Hz)	Pea k Particle Velocity(In mm/s)
Radial	51.2	1.778
Transverse	102.40	2.032
Vertical	46.50	1.270

**Ambient Air Quality Report with in Core and Buffer Zone of Morak Limestone
Mines, Morak Date of Monitoring : 16.05.2022 to 18.06.2022**

Location of Monitoring Station	SPM µg/m ³	PM _{2.5} µg/m ³	PM ₁₀ µg/m ³	SO ₂ µg/m ³	NO _x µg/m ³
Core Zone :					
Near Nala Pit-1 Block-I	343.59	35.22	65.12	11.88	16.96
Mines Work shop Block-I	354.73	38.05	66.61	9.36	13.61
Near Nala Pit-3 Block-II	382.32	40.42	79.95	10.81	13.55
Near Explosive Magazine	383.17	42.86	79.37	10.98	14.91
GSS RSEB , Gumanpura Village	391.86	38.14	71.21	10.69	15.39
GSS RSEB, Chechat Village	398.14	33.12	66.89	11.28	16.47
Railway Yard, Morak Village	383.34	41.38	73.04	10.44	12.86
Fatehpur Village Chouraha	376.90	37.10	64.60	11.14	15.13

Details of Plantation of last 7-year within Mining Lease area

Year	No. of sapling Planted	Rate of Survival %	species
2014-15	9055	82	Neem, Karanj, Subabool,
2015-16	5070	85	Kachnar, PaltaForm, Peepal
2016-17	5688	92	,Bad, Gulmohar,Jamphal,
2017-18	6025	83	Nimbu, Amwala, Bgaun Belia,
2018-19	5774	85	Seerus , Shhesham, Palash ,
2019-20	5644	83	Astronia etc.
2020-21	6075	84	
2021-22	6070	83.03	

June-2022