

**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 2024-2025)	3.210 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
OLimestone Mines. Date of Monitoring : 16..05.2025**

Parameters	Unit	Mines Sump Block-1 (S-1)	Mines Sump Block-2 (S-2)	Piezometer (PZ-2A)	Piezometer (PZ-3)
pH		8.12	7.75	6.65	7.41
Total Hardness as CaCO3	Mg/L	158	162	396	94
Total Alkalinity	Mg/L	112	128	290	202
Total Dissolved Solids	Mg/L	316	324	472	238
Fluoride (as F)	Mg/L	0.46	0.42	0.49	0.42
Sulphates as SO4	Mg/L	42.9	31.70	24.30	25.70
Nitrates as NO3	Mg/L	4.0	3.9	4.20	4.30
Chloride (as Cl-)	Mg/L	56.0	57.0	23.0	48.0

**Ground Vibration observed (At distance of 100 Mtr.) for the event of Blasting at
Morak Limestone Mines (Pit No.-2 ,block-II) on dt 29.11.2024 at 13.31.02 PM**

Axis	Dominant Frequency (In Hz)	Peak Particle Velocity(In mm/s)
Radial	36.5	2.159
Transverse	64.0	2.413
Vertical	51.20	2.667

**Ambient Air Quality Report with in Core and Buffer Zone of Morak Limestone
Mines, Morak Date of Monitoring : 14.05.2025 to 16.05.2025**

Location of Monitoring Station	SPM µg/m3	PM2.5 µg/m3	PM10 µg/m3	SO2 µg/m3	NOX µg/m3
Core Zone :					
Near Nala Pit-1 Block-I	364.11	35.02	66.49	11.41	13.73
Mines Work shop Block-I	382.97	39.07	72.89	10.43	13.61
Near Nala Pit-3 Block-II	337.34	31.39	64.11	11.08	14.17
Near Explosive Magazine	389.44	45.67	75.49	12.33	14.81
Buffer Zone:					
GSS RSEB , Gumanpura Village	326.82	35.56	68.24	9.12	10.41
GSS RSEB, Chechat Village	334.08	33.59	64.17	9.11	10.76
Railway Yard, Morak Village	371.74	43.54	73.49	12.37	15.01
Fatehpur Village Chouraha	357.82	35.71	68.67	9.56	10.33

Details of Plantation of last 8-year within Mining Lease area

Year	No. of sapling Planted	Rate of Survival %	species
2017-18	6025	83	Neem, Karanj, Subabool, Kachnar, PaltaForm, Peepal ,Bad, Gulmohar,Jamphal, Nimbu, Amwala, Bgaun Belia, Seerus , Shhesham, Palash , Astronia etc.
2018-19	5774	85	
2019-20	5644	83	
2020-21	6075	84	
2021-22	6070	83.03	
2022-23	6373	85.91	
2023-24	4506	80.12	
2024-25	11,156	76.55	

June-2025