

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

S. No.	Item	Description
1	Mining lease Area	895.42 Hectors
2	Limestone ROM Production (During 2025-2026 up to 31 st Dec.)	1.5466 Million Ton
3	Lease Period (After promulgation of Govt. ordinance dt. 12.01.2015)	21.02.1977 to 31.03.2030
4	Date of commencement of Work	1st January ,1980

**Quality of stored rainwater in mined out pits sump & Piezometers within Morak
Limestone Mines. Date of Monitoring: 11.11.2025**

Parameters	Unit	Mines Sump Block-1(S-1)	Mines Sump Block-2 (S-2)		Piezometer (PZ-2A)	Piezometer (PZ-3)
pH		7.92	7.71		6.61	7.57
Total Hardness as CaCO ₃	Mg/Li	138	166		372	92
Total Alkalinity	Mg/Li	100	124		290	196
Total Dissolved Solids	Mg/Li	278	320		430	232
Fluoride (as F)	Mg/Li	0.40	0.41		0.45	0.42
Sulphates as SO ₄	Mg/Li	36.70	31.80		18.90	25.20
Nitrates as NO ₃	Mg/Li	3.50	4.0		3.70	4.40
Chloride (as Cl)	Mg/Li	46.0	62.0		21.0	44.0

**Ground Vibration observed (At distance of 52.5 Mtr) for the event of Blasting at
Morak Limestone Mines (Pit No.-2 ,Block-II) on dt 23.10.2025 at 13.42 PM**

Axis	Dominant Frequency (In Hz)	Peak Particle Velocity (In mm/s)
Radial	16.5	7.620
Transverse	28.4	7.112
Vertical	21.3	4.953

**Ambient Air Quality Report with in Core and Buffer Zone of Morak Limestone
Mines, Morak , Date of Monitoring: 10.11.2025 to 11.11.2025**

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	377.53	43.35	72.40	12.28	15.35
Mines Work shop Block-I	388.92	42.04	75.97	11.68	14.57
Near Nala Pit-3 Block-II	326.37	33.82	67.23	12.12	15.33
Near Explosive Magazine	40.3.06	49.97	77.77	14.32	17.13
GSS RSEB , Gumanpura	332.00	40.11	71.49	10.74	11.82
GSS RSEB, Chechat	350.82	38.25	69.31	10.89	12.86
Railway Yard, Morak	389.25	45.19	74.16	12.74	16.18
Fatehpur Village Chouraha	362.97	38.55	72.62	12.54	14.35

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

Year	No. of sapling Planted	Rate of Survival %	species
2019-20	5644	83	Neem, Karanj, Subabool, Kachnar, PaltaForm, Peepal ,Bad, Gulmohar,Jamphal, Nimbu, Amwala, Bgaun Belia, Seerus , Shhesham , Palash etc.
2020-21	6075	84	
2021-22	6070	82	
2022-23	6373	89.86	
2023-24	4506	80.12	
2024-25	11156	76.55	
2025-26	16432	Under Observation	

Dec-2025

