

**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 <sup>st</sup> 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 CaCO3	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 SO4	Mg/Li	36.70	31.80		18.90	25.20
Nitrates as NO3	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 $\mu\text{g}/\text{m}^3$	PM2.5 $\mu\text{g}/\text{m}^3$	PM10 $\mu\text{g}/\text{m}^3$	SO2 $\mu\text{g}/\text{m}^3$	NOX $\mu\text{g}/\text{m}^3$
<b>Core Zone :</b>					
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	<u>Dec-2025</u>

