

**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 2024-2025 up to 31 st Dec.)	2.163 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: 25.11.2024**

Parameters	Unit	Mines Sump Block-1(S-1)	Mines Sump Block-2 (S-2)	Piezometer (PZ-2A)	Piezometer (PZ-3)
pH		8.12	7.96	6.67	7.31
Total Hardness as CaCO3	Mg/Li	144.0	138.0	396.0	78.0
Total Alkalinity	Mg/Li	90.0	110.0	284.0	180.0
Total Dissolved Solids	Mg/Li	278.0	288.0	468.0	196.0
Fluoride (as F)	Mg/Li	0.36	0.38	0.50	0.28
Sulphates as SO4	Mg/Li	34.2	24.2	23.2	19.8
Nitrates as NO3	Mg/Li	2.90	2.80	3.5	2.60
Chloride (as Cl)	Mg/Li	42.0	42.0	20.0	36.0

**Ground Vibration observed (At distance of 52.5 Mtr) for the event of Blasting at
Morak Limestone Mines (Pit No.-3 ,Block-II) on dt 29.11.2024 at 13.31 PM**

Axis	Dominant Frequency (In Hz)	Peak Particle Velocity (In mm/s)
Radial	36.5	2.159
Transverse	64.0	2.413
Vertical	51.2	2.667

**Ambient Air Quality Report with in Core and Buffer Zone of Morak Limestone
Mines, Morak , Date of Monitoring: 25.11.2024 to 26.11.2024**

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	352.04	33.75	64.91	10.71	13.09
Mines Work shop Block-I	379.82	36.80	69.44	9.27	12.64
Near Nala Pit-3 Block-II	364.09	39.11	71.97	10.98	13.52
Near Explosive Magazine	382.18	42.94	73.86	11.31	14.06
Buffer Zone :					
GSS RSEB , Gumanpura	323.61	37.17	65.23	8.24	9.01
GSS RSEB, Chechat	329.78	32.22	62.71	8.31	9.94
Railway Yard, Morak	354.08	32.90	67.84	8.54	9.13
Fatehpur Village Chouraha	340.61	30.62	61.78	10.11	14.47

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 etc.
2018-19	5774	85	
2019-20	5644	83	
2020-21	6075	84	
2021-22	6070	82	
2022-23	6373	89.86	
2023-24	4506	80.12	
2024-25	11156	Under Observation	

Dec-2024

