

**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 2023-2024 )	3.330146 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  
O Limestone Mines. Date of Monitoring : 22..05.2024**

Parameters	Unit	Mines Sump Block-1 (S-1 )	Mines Sump Block-2 (S-2 )	Piezometer (PZ-2A)	Piezometer (PZ-3)
pH		6.70	7.29	7.79	6.59
Total Hardness as CaCO3	Mg/L	150	102	150	100
Total Alkalinity	Mg/L	34	86	66	36
Total Dissolved Solids	Mg/L	298	304	338	256
Fluoride (as F )	Mg/L	0.40	0.45	0.80	0.35
Sulphates as SO4	Mg/L	38.2	35.20	35.2	34.4
Nitrates as NO3	Mg/L	3.2	2.70	3.1	2.90
Chloride ( as Cl-)	Mg/L	34.0	58.0	35.0	28.0

**Ground Vibration observed (At distance of 100 Mtr.) for the event of Blasting at  
Morak Limestone Mines (Pit No.-2 ,block-II ) on dt 10.01.2024 at 13.33.01 PM**

Axis	Dominant Frequency (In Hz)	Peak Particle Velocity( In mm/s )
Radial	28.4	2.286
Transverse	39.3	2.794
Vertical	36.5	2.794

**Ambient Air Quality Report with in Core and Buffer Zone of Morak Limestone  
Mines, Morak Date of Monitoring : 20.05.2024 to 22.05.2024**

Location of Monitoring Station	SPM µg/m3	PM2.5 µg/m3	PM10 µg/m3	SO2 µg/m3	NOX µg/m3
<b>Core Zone :</b>					
Near Nala Pit-1 Block-I	328.99	30.84	60.67	8.65	10.45
Mines Work shop Block-I	344.55	34.83	67.50	7.84	10.0
Near Nala Pit-3 Block-II	313.82	28.70	58.18	9.80	13.48
Near Explosive Magazine	356.94	37.24	70.91	9.59	10.20
<b>Buffer Zone:</b>					
GSS RSEB , Gumanpura Village	366.47	34.08	61.79	7.09	8.05
GSS RSEB, Chechat Village	361.34	31.78	60.94	7.79	8.10
Railway Yard, Morak Village	373.36	37.51	72.72	9.05	10.83
Fatehpur Village Chouraha	365.88	30.97	64.33	7.13	8.72

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

Year	No. of sapling Planted	Rate of Survival %	species
2016-17	5688	92	Neem, Karanj, Subabool, Kachnar, PaltaForm, Peepal ,Bad, Gulmohar,Jamphal, Nimbu, Amwala, Bgaun Belia, Seerus , Shhesham, Palash , Astronia etc.
2017-18	6025	83	
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	

June-2024