

**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	Limestone Production (During 2021-2022)	2.7603 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
Limestone Mines. Date of Monitoring : 26.05.2021**

Parameters	Unit	Mines Sump Block-1 (S-1)	Mines Sump Block-2 (S-2)	Piezometer (PZ-2A)	Piezometer (PZ-3)
pH		6.72	7.23	7.12	7.12
Total Hardness as CaCO3	Mg/L	102	92	196	132
Total Alkalinity	Mg/L	100	96	168	126
Total Dissolved Solids	Mg/L	228	226	458	262
Fluoride (as F)	Mg/L	0.20	0.20	0.20	0.20
Sulphates as SO4	Mg/L	21.4	23.4	34.6	25.5
Nitrates as NO3	Mg/L	1.5	0.92	4.1	1.4
Chloride (as Cl)	Mg/L	23	31	59	23

**Ground Vibration observed (At distance of 100 Mtr) for the event of Blasting at
Morak Limestone Mines (Pit No.-3 ,block-I) on dt 18.12.2021 at 13.33.52 PM**

Axis	Dominant Frequency (In Hz)	Pea k Particle Velocity(In mm/s)
Radial	73.1	1.778
Transverse	56.8	1.270
Vertical	85.30	1.143

**Ambient Air Quality Report with in Core and Buffer Zone of Morak Limestone
Mines, Morak Date of Monitoring : 26.05.2021 to 01.06.2021**

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	358.18	42.87	74.27	15.65	17.63
Mines Work shop Block-I	365.74	46.45	75.31	12.60	13.27
Near Nala Pit-3 Block-II	375.09	48.76	77.40	13.21	14.38
Near Explosive Magazine	386.07	42.78	76.70	11.63	15.64
Buffer Zone:					
GSS RSEB , Gumanpura Village	405.61	40.18	76.27	12.27	16.78
GSS RSEB, Chechat Village	404.19	37.74	69.47	12.62	16.81
Railway Yard, Morak Village	391.43	40.66	75.16	11.39	14.55
Fatehpur Village Chouraha	388.19	36.41	70.67	12.93	16.0

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

Year	No. of sapling Planted	Rate of Survival %	species
2014-15	9055	82	Neem, Karanj, Subabool,
2015-16	5070	85	Kachnar, PaltaForm, Peepal
2016-17	5688	92	,Bad, Gulmohar,Jamphal,
2017-18	6025	83	Nimbu, Amwala, Bgaun Belia,
2018-19	5774	85	Seerus , Shhesham, Palash ,
2019-20	5644	83	Astronia etc.
2020-21	6075	84	
2021-2022			

June-2021