# **Executive Summary of Draft EIA Report**

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# Minor Mineral Quarry Cluster Masonry Stone Block At Khasra no.- 147, Area- 8.92Ha. Village- Dakteng (Zewan), Tehsil- Panthachowk, District- Srinagar, State- J&K.

Schedule,	1(a) i,
Category	B1
Land/Plot Area/Revised Area	8.92 Ha
Production Capacity	1,50,000 MT/ annum
ToR Letter No.	JKEIAA/2021/410/8100-8103, Dated 19.06.2023
Lab Used	Ultra Testing & Research Laboratory
Approved By	NABL
Monitoring Period	March to May 2023(Summer Season)

# Submitted by

Mr. Mohd Amin Wani S/o Gh. Mohd Wani R/o: Sempora, Lasjan, District- Srinagar, State- J&K.

# Prepared by



ENGINEERING SERVICES Excellence in Environmental Sustainability

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# EIA NOTIFICATION 2006 APPENDIX III A (See Paragraphs 7)

# EXECUTIVE SUMMARY OF EIA REPORT

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# **EXECUTIVE SUMMARY**

# **1.1 PROJECT DESCRIPTION**

# 1.1.1 Introduction of the Project & Proponent

The proposed project is Minor mineral Mining Project which is proposed by Mr. Mohd Amin Wani. The proponent has applied for mining lease of Minor Mineral Quarry Cluster Masonry Stone Block at Khasra no.- 147, Area- 8.92 Ha, Village- Dakteng (Zewan), Tehsil- Panthachowk, District- Srinagar, State- J&K as per the provisions of EIA Notification 2006. It has been proposed to collect 2,00,000 MT per annum of Minor Mineral Quarry Cluster (Masonry Stone) Block.

Therefore, as per MoEF&CC, GoI O.M. No. L-11011/175/2018-IA-II (M) Dated: 12/12/2018 if a cluster or an individual lease exceeds 5.0 Ha the project is classified as Category – B since the project does not attracts the General Condition.

The mining lease area falls under cluster (if periphery of one lease is within 500 meters of the other lease) which is  $\geq 5.0$  ha therefore as per MoEF&CC GoI O.M. No. L-11011/175/2018-IA-II (M) Dated: 12/12/2018. It is applied under Cat-B1 and Cluster Certificate is attached as Annexure.

	0				
On-line Proposal No.	SIA/JK/MIN/5441	7/2020			
File No. allotted by SEIAA, JK	SEAC/JK/20/384				
Name of Proponent	Mr. Mohd Amin W	Mr. Mohd Amin Wani S/o Gh. Mohd Wani,			
Full correspondence address of	R/o: Sempora, Lasj	an			
proponent	District- Srinagar,	State- J&K			
Name of Project	Minor Mineral Qua	arry Cluster Masonry Ston	e Block		
Project location (Plot/Khasra/Gate	Khasra No: 147, V	illage- Dakteng (Zewan),			
No.)	Tehsil : Panthachov	wk, District: Srinagar, Stat	e: J&K.		
Name of Minor Mineral	Minor Mineral Qua	arry Cluster Masonry Ston	e Block		
Type of Land	Khalsa Sarkar				
Land utilization Pattern	The area is barren la	and.			
Sanctioned Lease Area (in Ha)	8.29 Ha				
Schedule (as per EIA notification 2006)	) 1(a)i				
Category of Project	B (1)				
Method of Mining	Open Cast, Semi-mechanized				
Sanctioned Period of Mine lease	New Mine, The applicant being the highest bidder was issued				
		nt (LOI) by DGM office vi			
		QK/16/3520-22 Dated: 22	-08-2017 for the		
	exploitation for 5 Years.				
Pillar Coordinates	Pillar Latitude Longitude				
	RP 34°02'38.98"N 74°54'25.28"				
	A 34°02'43.32"N 74°54'23.75"E				
	B 34°02'47.00"N 74°54'24.14"E				
	С	34°02'46.41"N	74°54'12.29"E		
	D	34°02'44.54"N	74°54'02.31"E		

	E		34°	02'38.83"N	74°54'08.65"E
	F		34°	02'39.25"N	74°54'15.77"E
	G		34°	02'43.07"N	74°54'18.14"E
Toposheet No	43 J/16				
Total Geological Reserves	23,59,740 MT				
Total Mineable Reserves	20,43,510	MT			
Proposed Production/year in Mining	1,50,000 N	MT/Annui	m (Avera	ge Annual Produ	ction)
Plan Approval Letter					
Production of mine/day	500 MT/d	ay			
No. of Working days	300 Days				
Working hours/day	8 hours/da	ıy			
No. of Workers	34 Manpo	wer			
No. of vehicles movement/day	50 Units (	Assumed	Loading	Capacity: 10 Tor	nnes/Unit)
Altitude of the Area	The Highest Point : 2510m amsl The Lowest Point : 1600m amsl				
Ultimate Depth of Mining (Bench	8-12 m (av		-		
Level)	(1775 mR				
	(Source: Approved Mining Plan)				
Ground Water Level	1.50 – 2.50 mbgl Source:http://cgwb.gov.in/District_Profile/JandK/srinagar.pdf				
Nearest metalled road from site	-			y from the mine s	
Water Requirement	Source	Purp	-	Detail	Avg. Demand/ Day
	Portable Tankers	Drinking @15lpcc r		34 workers x 15 lpcd = $510$ lpcd	0.51 KLD
		Land reclamat plantatio Lit/Tree (@ 100 Ha)	on @5	446  Trees x 5 lpcd) = 2230	2.23 KLD
		reclamat plantatio Lit/Tree (@ 100	n @5 trees/	446  Trees x 5 lpcd) = 2230	2.23 KLD 1.0 KLD
		reclamat plantatio Lit/Tree (@ 100 Ha)	n @5 trees/ peration ion	446 Trees x 5 lpcd) = 2230 lpcd	
		reclamat plantatio Lit/Tree (@ 100 Ha) Mine Op Dust suppress	n @5 trees/ peration ion	446 Trees x 5 lpcd) = 2230 lpcd - Approach Road Area = (570 m Length x 7m Width =	1.0 KLD
Name of QCI Accredited Consultant with QCI No. and period of validity.	Certificat	reclamat plantatio Lit/Tree (@ 100 Ha) Mine Op Dust suppress @1 Lit/S	n @5 trees/ peration ion ion iq.m <b>Total</b> <b>Total</b> BET/EIA	446 Trees x 5 lpcd) = 2230 lpcd - Approach Road Area = (570 m Length x 7m Width =	1.0 KLD 3.99 KLD 7.73 KLD

**Project:** Minor Mineral Quarry Cluster Masonry Stone Block **Project Proponent:** Mr. Mohd Amin Wani **Khasra No:** 147, **Area:** 8.92 Ha, **Village:** Dakteng (Zewan), **Tehsil:** Panthachowk **District:** Srinagar, **State:** J & K.

project or land in any court	
Total Proposed Project Cost	Rs. 97.33 Lakhs
Proposed CER cost	Rs. 4.87 Lakhs (5% of the total Project Cost)
Proposed EMP cost	Rs. 14.41 Lakhs (Haulage Road repair, Dust Suppression, Plantation & Environmental Monitoring)
Length and breadth of Haul Road	Haul Road Length 570 m Length & Width 7 m
No. of Trees to be Planted	446 trees will be planted

# **1.2 DESCRIPTION OF ENVIRONMENT**

**1.2.1 BASE LINE DATA:** This section contains the description of baseline studies of the 10 km radius of the area (Core Zone and Buffer Zone) surrounding the mine lease area located at Minor Mineral Quarry Cluster Masonry Stone Block at Khasra no.- 147, Area- 8.92 Ha, Village- Dakteng (Zewan), Tehsil- Panthachowck, District- Srinagar, State- J&K. The data collected has been used to understand the existing environment scenario around the proposed mining project against which the potential impacts of the project can be assessed.

Environmental data has been collected in relation to proposed mining for:-

(a)	Air	( <b>b</b> )	Noise
(c)	Water	( <b>d</b> )	Soil

(e) Ecology and Biodiversity (f) Socio-economy

Attribute	Baseline status			
Ambient Air Quality	Ambient Air Quality Monitoring reveals that the maximum & minimum			
	concentrations of $PM_{10}$ & $PM_{2.5}$ for all the 8 AQ monitoring stations were found to be within the prescribed limit of CPCB. As far as the gaseous pollutants SO <sub>2</sub> and NO <sub>2</sub> are concerned, the prescribed CPCB limit of $80\mu g/m^3$ for residential and rural areas has never been surpassed at any station.			
Noise Levels	Noise monitoring was carried out at 8 locations. The results of the			
	monitoring program indicated that both the daytime and night time levels of noise were well within the prescribed limits of NAAQS, at all the four locations monitored.			
Water Quality	8 Groundwater samples and 2 surface water samples were analyzed and			
	concluded that: The ground water from all sources remains suitable for			
	drinking purposes as all the constituents are within the limits prescribed by			
	drinking water standards by Indian Standards IS: 10500.			
Soil Quality	Samples collected from identified locations indicate the soil is sandy Clay, Sandy Clay Loam type and Clay loam type.			
Ecology and Bio-	There are no Ecologically Sensitive Areas present in the study area.			
diversity				
Socio-economy	The implementation of the mining project in the district will throw			
	opportunities to local people for both direct and indirect employment. The			
	study area is still lacking in education, health, housing, water, electricity			

#### Table 1.2: Baseline Environmental Status

etc. It is expected that same will improve to a great extent due to proposed
mining project and associated industrial and business activities.

## Table 1.3 ENVIRONMENTAL MONITORING

PARAMETERS		DESCRIPTION			
Ambient Air	$^{-1}$ PM <sub>10</sub> - 60.93 (Min.) at AQ-3 to 73.54 $\mu$ g/m <sup>3</sup> (Max.) at AQ-8				
Quality	$^{-1}$ PM <sub>2.5</sub> – 31.38 (Min.) at AQ-3 to 38.6 $\mu$ g/m <sup>3</sup> (Max.) at AQ-8				
Monitoring	$^{\square}$ $\mathrm{SO}_2$ – 5.73 (Min.) at AQ-3 to 13.5 $\mu$ g/m <sup>3</sup> (Max.) at AQ-8				
	$\square$ NOX – 1	5.57 (Min.) at AQ-3 to 23.59 μg/m <sup>3</sup> (Max.) at AQ-8			
		<0.5 (Min.) to <0.5 µg/m <sup>3</sup> (Max.)			
Noise Quality		vel during day time $-51.1$ dB (A) (Min.) at AQ-3 to 60.8 dB (A)			
Monitoring	(Max.) a				
		Levels during night time – 40.1 dB (A) (Min.) at AQ-4 to 44.3 dB (A)			
	(Max.) a	t AQ-1.			
Water Quality	Ground	Analysis results of ground water in the study area reveal the			
Sampling &	Water	following: -			
Analysis		<sup>1</sup> pH 7.15 (Min.) at GW-6 to 7.56 (Max.) at GW-8,			
, i i i i i i i i i i i i i i i i i i i		<sup>1</sup> Total Hardness 116 (Min.) mg/l at GW-6 to 192 mg/l (Max.)			
		at GW-4,			
		<sup>1</sup> TDS 179 (Min) mg/l at GW -6 to 303 mg/l (Max) at GW -1,			
	<sup>11</sup> Sulphate 3.67 (Min.) mg/l at GW-6 to 13.31 mg/l (Max.) at				
	GW- 4,				
	<sup>U</sup> Chloride 14.09 (Min.) at GW-6 to 25.44 mg/l (Max.) at GW-1				
	Surface The parameters results are as follows:				
	water $\square$ pH value is 7.18 to 7.27				
	<sup>1</sup> TDS was observed as 121 mg/l to 128 mg/l <sup>1</sup> Chloridae ware found as 21.68 to 22.65 mg/l				
		<sup>U</sup> Chlorides were found as 21.68 to 23.65 mg/l			
		<ul> <li>Sulphates were found as 10.62 to 12.32 mg/l</li> <li>Total hardness was observed 64 to 72 mg/l.</li> </ul>			
Soil Quality	$\square \mathbf{pH} = 6.56 \text{ to } 7.46.$				
Son Quanty	<b>Organic matter</b> 0.92 to 1.24 %				
	<b>Total Kjeldahl Nitrogen</b> 0.051 to 0.075%.				
	<sup>11</sup> Phosp	<b>10rous</b> 58.87 to 74.24 mg/kg.			
	<sup>U</sup> Potassi	<b>um</b> 178.39 to 204.13 mg/kg			

# **1.3 ANTICIPATED ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES 1.3.1 BIOLOGICAL ENVIRONMENT**

The biological environment mainly consists of flora and fauna and its relationship with surroundings. Biological environment includes species of native plants and animals and one may measures the degradation of environment by noting the decrease in the commonly occurring species. As regards to fauna, the activity will have negative impact on them. At the beginning the animal will recede to distances due to noise generated from Transportation. They will trace back to an optimum distance after some time, on being habituated by disturbances. After the mining activity and growth of forest local fauna will again be reinstated even in a better way due to the generated forest cover in lieu of the existing denuded tract of land. There is no rare and endangered fauna species close to the mining area. Considering the small area of mining, insignificant impact is envisaged on biological environment.

## **1.3.2 Direct Impact:**

The Minor Mineral Quarry Cluster Masonry Stone Block which proposes production of 1,50,000 MT/Annum of minor mineral. No direct impact is anticipated from the project on biodiversity.

#### **Indirect Impact:**

The major indirect impact include following.

- Mining activity is likely to affect the movement of the animal and birds.
- Increase in noise may affect the feeding, breeding and movement of animals.
- Likely settling of dust to be generated by movement of vehicles on leaves may results in to stunted growth of vegetation and may also affect the capacity of production.
- Large numbers of labor population will influx the area during mining operation.

The major threat to surrounding flora is through collection of fuel wood by labor for cooking purposes and thereby loss of trees.

#### **Cumulative Impact:**

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Indirect and cumulative impacts are associated with various mining activities such as clearing of vegetation for establishment of various project units, movement of vehicles, Mining equipment s& machineries etc., interferences due to influx of labours etc.

\*\*

The losses of land for various project units will also not adversity affect the fauna as similar habitat is present throughout the project immediate influenced area. Therefore, impact due to loss of habitat for birds, reptiles and mammals of the project area is not expected.

#### **1. 3.2: LAND ENVIRONMENT**

The sanctioned MLA is a virgin land and the mining for the extraction of granted quantity of minor mineral will be started after the grant of environment clearance. At present, there is no any type of pit is present in the mining lease area. However, at the end of the first year period of mining lease granted period the impact on land use will be limited.

#### **1.3.3: AIR ENVIRONMENT**

#### Anticipated impacts and evaluation:

In mining operations, loading, transportation and unloading operations may cause deterioration in air quality due to handling dry materials. In the present case, only wet materials will be handled, thus eliminating problems of fugitive dust.

#### **MITIGATION MEASURES:**

The collection and lifting of minerals will be done manually. Therefore the dust generated is likely to be insignificant as there will be no drilling. The only air pollution sources are the road transport network of the trucks. The mitigation measures like the following will be resorted.

\*

Water sprinkling will be done on the roads regularly. This will reduce dust emission further by 75%.

#### \*\*

Care will be taken to prevent spillage by covering the carrying vehicles with tarpaulin and sprinkling of water, if dry.

- Fortnightly scraping of road in order to keep the roads almost leveled. This will ensure smooth flow of vehicles and also prevent spillage.
- Overloading will be kept under check by giving prior awareness.
- \* Proper Tuning of vehicles to keep the gas emissions under check.
- Plantation of trees along the roads to help reduce the impact of dust in the nearby villages.
- Care will be taken to use PUC certified trucks.

## **1.3.4: WATER ENVIRONMENT**

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\*

Various surface and ground water samples are collected and analyzed in the reputed laboratory. The report indicated that the water available in the area is potable and all values are within the permissible limit.

Hand pumps and dug wells are situated within 500 m Core Zone in which drinking water facilities are available.

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No pumping of water will be done in any surface body directly. The mine water will be pump out during rainy seasons. The pumped out water will be stored and utilized for sprinkling of water on haul roads, watering of plants, drilling and other dust suppression measures.

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Post-monsoon and Pre-monsoon groundwater level will be monitored regularly through nearby hand pumps and dug wells.

- Awareness programs will be taken up to educate public for conservation of water.
- \* Mobile toilets will be used at site.

ML area under reference is water scarce and water reservoir will be a source of water to villagers. It will also attract birds and will improve aquatic environment.

#### **1.3.5 NOISE ENVIRONMENT**

#### Anticipated impacts and evaluation:

The mining methodology is done in semi mechanized process so there will not be any major impact on noise level due to the mining. The only impact will be due to transportation of materials by trucks.

- Mental disturbance, stress & impaired hearing.
- ✤ Decrease in speech reception & communication.
- \* Distraction and diminished concentration affecting job performance efficiency.

#### Mitigation measures

- Well maintained vehicle will be used which will reduced the noise level.
- Plantation: Plantation of trees along the road will be done to dampen the noise, if possible.
  - The vehicles will be maintained in good running condition so that noise will be reduced to minimum possible level.

Awareness will be imparted prior to mining operations that smoke silencers remain in a good conditions not to generate noise.

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- In addition, truck drivers will be instructed to make minimum use of horns at the village area.
- Where ever space is made available by the authorities' plantation will be done and also post Plantation care will be provided.

# **1.4 ENVIRONMENT MONITORING PROGRAME**

Regular Monitoring of all the environmental parameters *viz.*, air, water, noise and soil as per the formulated program based on CPCB and MoEF&CC guidelines will be carried out every year in order to detect any changes from the baseline status.

S.No.	Attributes	Parameters for	Frequency	Locations
		monitoring		
1.	Meteorology	Wind speed, Wind direction, Dry bulb temperature, Wet bulb temperature, Relative humidity, Rainfall	Minimum 1 site in the project impact area	Regularly in one season by Weather Monitoring Station
2.	Ambient Air	PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , NOx, Free Silica	hourly monitoring for one month in each season except monsoon.	
3.	Noise	Noise level at Day and Night – Leq dB (A), Day Time: Leq (6.00 AM to 10.00 PM), Night Time: Leq (10.00 PM) To 6.00 AM)		One location in core Zone (Mine Boundary) & High noise generating areas within buffer Zone
4.	Water Quality & Surface Water Quality	TDS, Total Hardness, Calcium hardness, Magnesium hardness, Chloride, Fluoride, Sulphate, Nitrates, pH ,Alkalinity, Iron, Odour, Zinc, Cyanide, Taste, Copper & Microbiological Parameter As per IS 10500:2012	Diurnal and Season wise As per IS 10500-2012	Set of grab samples during pre monsoon for ground and surface water for 10 km distance.
5.	Soil quality Monitoring	pH, Bulk Density, Soil texture, Nitrogen, Available Phosphorus, Potassium, Calcium, Magnesium, Sodium, Electrical Conductivity, Organic	Yearly	8 location in the Project impact area

# Table 1.4: Monitoring Schedule & Parameters

Project: Minor Mineral Quarry Cluster Masonry Stone Block Project Proponent: Mr. Mohd Amin Wani Khasra No: 147, Area: 8.92 Ha, Village: Dakteng (Zewan), Tehsil: Panthachowk District: Srinagar, State: J & K.

**Executive Summary** 

		Matter, Chloride		
6.	Socioecono mic Status	<ul> <li>Demographic structure</li> <li>Infrastructure resource base</li> <li>Economic resource base</li> <li>Health status: Morbidity pattern</li> <li>Cultural and aesthetic attributes</li> <li>Education</li> </ul>	Yearly	Socio -economic survey is based on proportionate, stratified and random sampling Method. Secondary data from census records, statistical hard books, Topo-sheets, health records and relevant official records available with Govt. Agencies.
7.	Ecological Impact	<ul> <li>Green Belt Development</li> <li>Conservation of Wild Life</li> </ul>	Yearly	Survey Secondary data from statistical hard books, toposheets and relevant official records available with Govt. agencies

# Table 1.5: Budget Allocation for Environment Monitoring Programme

1	Air Quality:	@20000 x 8	1,60,000
2	Water Quality	@10000 x 10	1,00,000
3	Ambient Noise Level	@10000 x 8	80,000
4	Soil Quality	@10000 x 8	80,000
5	Biodiversity Survey	-	80,000
6	Socio Economic Survey	-	80,000
	TOTAL		5,80,000

# **Corporate Environment Responsibility (CER)**

Total Cost of the Project = 97.33 Lakhs

> 5% of the total Project Cost will be expended towards CER i.e. 4.87 Lakhs

As Per The G.O.I Notification, File No. 22-65/2017-I A, III dated on 1<sup>st</sup> May, 2018

	Table 1.0. The Hoposed Cost for CER Han								
This is th	This is the Proposed cost CER Plan, Activities and actual cost will be Finalized as per the Actual								
	need of the area.								
(ON THE BASIS OF NEED BASE ASSESSMENT SURVEY)									
S. No.	Activity	Cost per Unit (Rs)	Quantity	Total (Rs)					

#### Table 1.6: The Proposed Cost for CER Plan

Project: Minor Mineral Quarry Cluster Masonry Stone Block Project Proponent: Mr. Mohd Amin Wani Khasra No: 147, Area: 8.92 Ha, Village: Dakteng (Zewan), Tehsil: Panthachowk District: Srinagar, State: J & K.

1.	Solar street light Installation in rural areas	15,000	15	2,25,000
2.	Toilets for women nearby primary school	60,000	3	1,80,000
3.	Awareness Program on Personal Hygiene (COVID 19) and distribution of Mask and Sanitizers	82,000	-	82,000
	Total Proposed CER Cost			4,87,000 (4.87 Lakhs)

## **Conclusion:**

In general, socio-economic environment will have positive impact due to the mining project in the area. The lessee has already allocated Rs 4.87 Lakhs (As per demand) for Socio-Economic measures. mic measures.