

# **EXECUTIVE SUMMARY**

**FOR**

**Soapstone Mining Project**

**Near Village – Bhanyadhi, Tehsil – Gangolihat  
(Ganai Gangoli) , District -Pithoragarh, State -  
Uttarakhand**

**Area: 4.049Ha**

**Proposed Production: 16727 TPA**

**APPLICANT**

**Shri Trilok Singh Manral S/O Late Shri  
Narayan Singh Manral  
R/o-Damuwadhunga, Jawahar Jyoti,  
Haldwani District-Nainital, Uttarakhand**

**Environment Consultant :**

**P and M Solution**

**(Recognized by Quality Council of India)**

**C-88, Sector 65, Noida Uttar Pradesh**

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# EXECUTIVE SUMMARY

## INTRODUCTION

As per MoEF & CC, New Delhi Gazette dated 14<sup>th</sup> September 2006 and amended thereof, the proposed mining project is categorized as **Category 'B1'** project.

## Soapstone mine

The project has been proposed by Shri Trilok Singh Manral S/o Late Shri Narayan Singh Manral The proposed project is over an area of 4.049 Ha Village – Bhanyadhi, Tehsil-Gangolihat (Ganai Gangoli) & District-Pithoragarh, State- Uttarakhand

The proposed project has been awarded EC by DEIAA via vide letter no. 02/DEIAA/2017-18 dated 28.02.2018. So As per the EC received from DEIAA the production is 16727 tonnes per annum.

As per NGT Order & Office Memorandum by MoEF& CC Dated-28 April 2023, we apply for Reappraisal for EC.

The Draft EIA report has been prepared according to EIA notification 2006 and its subsequent amendment thereof. TOR of the proposed project has been issued by SEIAA Uttarakhand dated 29-08-2023.

It has been proposed to mine around 16727 TPA. The estimated project cost for the proposed project is **Rs 41.906 lakhs**.

The total lease area of the proposed project is less than 5 ha and also the proposed project is a part of cluster where in the total cluster area comes out to be 13.42 Ha. So, as per the EIA notification 2006 and its subsequent amendment, proposed project fall in category B1.

## **Detail of the Cluster Situation**

<b>S. No</b>	<b>Village</b>	<b>Lease Area (Ha.)</b>	<b>Name of applicant</b>	<b>Mineral</b>	<b>Production (TPA)</b>	<b>Status</b>
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1	Bhanyadhi	4.511	M/s Associate Soapstone Distributing Pvt. Ltd.	Soapstone	8000	The mining lease proceedings are in progress at the government level.
2	Bhanyadhi and Dasilakhet	4.860	M/s Vishnu Minerals, Prof. Gaurav Singh Manral, S/O Shri Trilok Manral, Singh	Soapstone	10004	The mining lease proceedings are in progress at the government level.
3	Bhanyadhi	4.049	Shri Trilok Singh Manral S/O Shri Narayan Singh Manral	Soapstone	16727	Mining lease is approved from the year 2009. At present the mine is closed.
<b>Total Area</b>		<b>13.42</b>			<b>34,731</b>	

#### **Details of mining lease area**

<b>Proponent</b>	<b>Village</b>	<b>Area (Ha)</b>	<b>Production (TPA)</b>
Shri Trilok Singh Manral S/O Late Shri Narayan Singh Manral	Bhanyadhi	4.049	16727

#### **Project Proponent Details**

<b>Proponent</b>	<b>Address</b>
Shri Trilok Singh Manral S/O Late Shri Narayan Singh Manral	R/O- Village & Post Gadera, Tehsil - Kapkot, District – Bageshwar, Uttarakhand

### **PROJECT DESCRIPTION**

#### **LOCATION**

The proposed mining lease area comes under Survey of India Toposheet Topo Sheet No.53 O/14. The proposed Soapstone mine located near Village – Village – Bhanyadhi, Tehsil-Gangolihat (Ganai Gangoli) & District-Pithoragarh, State- Uttarakhand. The mine lease co-ordinates are listed below:

Pillar No	N	E
1.	N-29 <sup>0</sup> -45'-25.53"	E-79 <sup>0</sup> -55'-33.59"
2.	N-29 <sup>0</sup> -45'-24.91"	E-79 <sup>0</sup> -55'-33.41"
3.	N-29 <sup>0</sup> -45'-24.71"	E-79 <sup>0</sup> -55'-33.47"
4.	N-29 <sup>0</sup> -45'-24.12"	E-79 <sup>0</sup> -55'-33.34"
5.	N-29 <sup>0</sup> -45'-24.11"	E-79 <sup>0</sup> -55'-33.58"
6.	N-29 <sup>0</sup> -45'-23.84"	E-79 <sup>0</sup> -55'-33.68"
7.	N-29 <sup>0</sup> -45'-23.40"	E-79 <sup>0</sup> -55'-33.51"
8.	N-29 <sup>0</sup> -45'-23.47"	E-79 <sup>0</sup> -55'-32.99"
9.	N-29 <sup>0</sup> -45'-23.12"	E-79 <sup>0</sup> -55'-33.38"
10.	N-29 <sup>0</sup> -45'-23.22"	E-79 <sup>0</sup> -55'-33.84"

**Area & production:** The total ML area is 4.049 Ha Proposed rate of production will be 22000 TPA.

**Connectivity:**

The nearest railway station is Kathgodam Railway station, approx. 65.39 km towards SW direction. The nearest airport is Pantnagar Airport, approx. 91.42 km towards SSW direction. The area is well connected with Dhari Road approx. 0.08km towards East direction and NH- 309 A, Approx. 2.43 km towards SSE direction.

**Salient Features of Project**

Name of the applicant	Shri Trilok Singh Manral S/O Late Shri Narayan Singh
Address of Lessee	R/O Village – Bhanyadhi, Tehsil-Gangolihat (Ganai Gangoli) & District-Pithoragarh, State- Uttarakhand.
Name of Mine	Extraction of Soapstone near Village – Bhanyadhi, Tehsil-Gangolihat (Ganai Gangoli) & District-Pithoragarh, State-Uttarakhand.
Village	Bhanyadhi
District & State	Pithoragarh, Uttarakhand
Mineral	Soapstone
Area (ha)	4.049 ha
Manpower	16

## **DRILLING**

No Drilling & blasting is required.

## **USE OF MINERALS**

After grinding the soapstone, the powder will be used in the paper and detergent industries. The state will benefit from the production of minerals in the form of royalty.

## **MINING**

Mining will be done by open cast mechanized method. Soapstone is a soft mineral so no drilling and blasting will be required. Mining shall be carried out in two pits viz. pit I & II The height of the bench will be kept at 6.0 meters, width of the bench will be kept at 8.0 meters and face slope will be kept at 70°. Excavators will be deployed to remove overburden and interburden. Soapstone will be extracted manually with the help of chisel, pick, hammer, shovel etc. Apart from plucking and sorting, no other beneficial work will be required.

## **RESERVE AND PRODUCTION**

The Cross-section area of each section line has been calculated for each category of reserves. The Cross-sectional area is multiplied by the strike influence to get the volume. The volume is multiplied by bulk density to get the tonnage in each section line.

### **Total Movable Reserves**

<b>Geological Reserve (Tonnes)</b>	<b>Mineable Reserv (Tonnes)</b>
586031	303264

**Total Mineable Reserve = 303264 Tonnes**

### **Mining area and production**

The total area of this project is 4.049 Ha.

Proposed rate of production will be 16727 TPA.

## **SITE FACILITIES AND UTILITIES**

### **Water Supply**

Water will be provided to workers for drinking & domestic purpose. Water will also be required for dust suppression. A total water of 10.16~10.00 KLD will be required for the proposed project. Fresh water will be only used for drinking purpose. The water will be supplied from available sources from nearby village.

### **Temporary Rest Shelter**

A temporary rest shelter will be provided for the workers near to the site for rest. In addition, First aid box along with anti-venoms to counteract poison produced by certain species of small insects, if any and sanitation facility i.e. septic tank or community toilet facility will be provided for the workers.

### **BASELINE ENVIRONMENTAL STATUS**

Environmental data has been collected in relation to proposed mining for Air, Noise, Water, Soil, Flora & Fauna. The baseline environment study was carried out over an area with radial distance of 10 km around the mining lease area during post monsoon season from October to December 2023.

### **Meteorology**

The Summarized Meteorological Data for the Monitoring Period (October to December 2023) is given below:

<b>Month</b>	<b>Wind Speed (km/h)</b>		<b>Temperature (°C)</b>		
	<b>Max</b>	<b>Avg.</b>	<b>Max</b>	<b>Min</b>	<b>Avg</b>
October, 2023	9.8	7.3	28	15	21
November, 2023	9.7	7.4	26	14	19
December, 2023	9.2	7.3	22	10	15

### **Baseline Environmental Status**

<b>Attribute</b>	<b>Baseline status</b>
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Ambient Air Quality	Ambient Air Quality Monitoring reveals that the minimum & maximum concentrations of PM <sub>2.5</sub> amongst all the 08 AQ monitoring stations were found to 25.72 µg/m <sup>3</sup> to 48.38µg/m <sup>3</sup> respectively; PM <sub>10</sub> was in the range of <b>51.28 µg/m<sup>3</sup> to 81.29µg/m<sup>3</sup></b> & SO <sub>2</sub> recorded within the study area was <b>4.82 µg/m<sup>3</sup> to 9.81 µg/m<sup>3</sup></b> respectively; NO <sub>2</sub> recorded within the study area was in the range of was <b>8.15 µg/m<sup>3</sup> to 18.38 µg/m<sup>3</sup></b> with Free Silica recorded within the study area was in the range of was <b>0.25 µg/m<sup>3</sup> to 1.25 µg/m<sup>3</sup></b> . The results thus obtained indicate that the concentrations of PM <sub>10</sub> , SO <sub>2</sub> and NO <sub>2</sub> in the ambient air are well within the National Ambient Air Quality (NAAQ) standards for Residential and Rural areas.
Noise Levels	Noise monitoring reveals that the minimum & maximum noise levels at night time Leq (Ln) varies from 38.8 to 43.6 dB (A) and the hourly daytime Leq (Ld) varies from 50.4 to 58.8 dB (A) within the study area. The status of noise quality within the 10 km zone of the study area is, therefore, within the MoEF standards.
Water Quality	The ground water from all sources remains suitable for drinking purposes as all the constituents are within the limits prescribed by drinking water standards promulgated by IS: 10500. Surface water analysis from River results it is evident that most of the parameters of the samples comply with 'Category B' standards of CPCB, indicating their suitability for outdoor bathing.
Soil Quality	Five soil samples were collected in and around the mine lease area to assess the present soil quality of the region. The pH of the soil indicates that the soil is slightly acidic to alkaline in nature. Based on the results, it is evident that the soils are not contaminated by any polluting sources.
Ecology and Biodiversity	There is no Eco-Sensitive Areas in the study area.
Socioeconomic	Implementation of the mining project will provide both direct and indirect employment opportunities to the local people.

	Education, health, housing, water, electricity etc. can be further improved in the study area. It is expected that this will further improve to a great extent due to the proposed mining project and associated industrial and commercial activities.
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## **ANTICIPATED ENVIRONMENTAL IMPACTS**

### **Impact on Air Environment**

The proposed mining activities loading and movement of other transport vehicles used in mining will generate dust (SPM/RSPM). Proper water sprinkling shall be carried out at the mine site.

### **Impact on Water Environment**

There is no surface water body present in the lease area. There is a possibility of fresh disturbed material getting mixed with rain water during the mining activity period. For which filled pits and earth and retaining walls with inter burden dump will be provided. All mining pits will be filled before the rains start so that rain water does not accumulate in the mining pits.

### **Impact on Land Environment**

At the end of the conceptual period, there will be no mining pits and all mining pits will be backfilled to retain maximum of the original topography of the area.

### **Impact on Noise Environment**

The proposed mining activity is open cast mechanized method in nature. No drilling and blasting is envisaged for the mining activity. Therefore, only the impact due to movement of vehicles deployed to transport minerals has been estimated. The vehicles will be maintained in good working condition so that noise is reduced to the lowest possible level.

### **Impact on Biological Environment**

As the proposed mining will be carried out in a scientific manner, not much significant impact is anticipated. No mining will be carried out during the monsoon season to minimize impact on aquatic life. The mining site has no vegetation; no clearance of vegetation will be done. Haul roads will be sprinkled with water which would reduce the dust emission, thus avoiding damage to the crops.



## **Impact on Socio Economic Environment**

The impact of mining activity in the area is positive on the socio-economic environment of the region. Soapstone mining will be providing employment to local people whenever there is requirement of manpower.

## **ADDITIONAL STUDIES**

### **Public Hearing**

Public hearing is yet to be conducted.

### **Disaster Management Plan**

Emergency preparedness is an important aspect in the planning of Disaster Management. Personnel would be trained suitably and prepared mentally and physically in emergency response through carefully planned, simulated procedures. Similarly, the key personnel and essential personnel shall be trained in the operations.

## **PROJECT BENEFITS**

**Physical Benefits:** Road Transport, Market, Enhancement of green cover & Creation of community assets.

**Social Benefits:** Increase in Employment Potential, Contribution to the Exchequer, Increased Health related activities, Educational attainments & Strengthening of existing community facilities.

### **Environmental Benefits:**

This project will prove to be beneficial for the people as the company has already agreed to provide basic infrastructure facilities like education facilities, medical facilities, transfer facilities and water supply etc. to the villagers. Due to which the socio-economic environment of this area will improve.

## **CER DETAILS**

Soapstone mine has proposed to provide financial assistance of Rs. 2.09 lakh for the development of social infrastructure of the area

<b>S. No.</b>	<b>Activity</b>	<b>Total (Rs.)</b>
1.	Fund for Chemistry lab in Village School	85,000
2.	Distribution of Stationary in nearby School	10,000
3.	Provision of drinking water facility through installation of hand pumps or by tankers.	50,000
4.	Maintenance of temple	14,530
5.	Installation of Solar lamps/Street Light	50,000
	<b>Total</b>	<b>2,09,530</b>

### **PLANTATION:**

Plantation will be done @ 1000 plant/ha outside the lease area over Van Panchayat Land.

<b>Year</b>	<b>Total no. of sapling</b>
2021-22	1368
2022-23	1366
2023-24	1366
<b>Total</b>	<b>4100</b>

### **ENVIRONMENTAL MANAGEMENT PLAN (EMP)**

It is necessary to include the environmental cost as a part of the budgetary cost component. The project authorities propose to undertake the following environmental works to achieve the environmental quality as desired. The budget for environmental protection has been formulated and given below.

### **BUDGET ALLOCATION FOR EMP IMPLEMENTATION**

#### **Environment Management Budget**

<b>S. No.</b>	<b>Description</b>	<b>Capital Cost (Rs.)</b>	<b>Recurring Cost (Rs.)</b>
1.	<b>Haulage Road Repair &amp; Maintenance Annual 300 m (L) x 6 m (W)</b>	1,20,000	1,00,000
2.	<b>Water Sprinkling on Haulage Path for Dust Suppression</b>	--	1,50,000

<b>3.</b>	<b>Plantation &amp; Post Plantation Care</b> (4100 saplings @ Rs 100 per saplings = 4,10,000/- Rs)	4,10,000	1,00,000
<b>4.</b>	<b>Environmental Monitoring &amp; Compliances.</b> i) Air pollution ii) Water pollution iii) Soil pollution iv) Noise Pollution	--	50,000 40,000 10,000 10,000
<b>5.</b>	<b>Budget for Retaining wall along the boundary</b>	1,50,000	50,000
	<b>Total</b>	<b>6,80,000/-</b>	<b>5,10,000/-</b>

### CONCLUSION

Based on the EIA study it is observed that there will be an increase in the dust pollution, which will be controlled by sprinkling of water and plantation. There will be an insignificant impact on ambient environment and ecology due to the mining activities moreover the mining operation will lead to direct and indirect employment generation in the area. Green belt development around the area will also be taken up as an effective pollution mitigative technique, as well as to control the pollutants released from the premises of the Mine. Monitoring program will be followed till the mining operations continue. Hence, it can be summarized that the development of the mine will have a positive impact on the socio-economic environment of the area and lead to sustainable development of the region.

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