

1. PURPOSE OF THE REPORT- Environmental Impact Assessment (EIA) is a decision making tool, in the hands of the Authorities which brings forth the factual position about a project that enables them in arriving at an appropriate conclusion for the proposed projects, to retain them if environmentally sound, and reject if found having deleterious overall impact. EIA identifies the extent of the environmental, social and economic impacts of a project prior to decision-making. EIA systematically examines both beneficial and adverse impacts of the proposed project over and above the prevailing conditions of environmental parameters and ensure that these impacts are taken into account during the project designing stage itself and the values of the combined impacts are never allowed to exceed and remain within the statutory norms. This process has been envisioned and set in motion by the Ministry of Environment and Forests for sustainable development and the final decision is arrived at only, when those to whom it matters are made known of the salient features of the project being envisaged close to them and their opinion has been sought in a widely advertised Public Hearing Event under the chairmanship of the district authorities so that public could also express their opinion free, without favour and fear. Environmental Impact Assessment report is prepared to comply with the Terms of Reference (TOR) received from SEIAA, Uttarakhand, under EIA Notification of the MoEF dated 19-8-2006, and its subsequent amendments and EIA Guidance Manual for Mining of Minerals of MoEF, Govt. of India, for seeking environmental clearance for mining of soapstone in the applied mining lease area measuring 3.909 Ha. The proposed project falls under Category “B2” as per EIA Notification 2006 its amendment 2009, 2011, 2012 & 2016 of the Ministry of Environment and Forests, New Delhi but due to NGT recent order it falls under B1 Category.

2. IDENTIFICATION OF PROJECT & PROJECT PROPONENT- The proposed project of Pagana Soapstone Mining Project (Shri Jitendra Aithani , S/o Shri Amar Singh Aithani), is for soapstone which covers an area of 3.909 Ha near Village- Pagana, Tehsil- Bageshwar, District- Bageshwar, Uttarakhand. LOI has been granted in favour of Shri Jitendra Aithani S/o Shri Amar Singh Aithani, vide Letter No. 1123/VII-1/2018/5/soapstone/2018, dated 16.07.2018. Soapstone finds its uses in all aspects of life and commercial business. Soapstone has wide applications across various industries. Some uses for soapstone or talc are paper, textile, cosmetics, paint, ceramics, detergents, animal feed, insecticide, plastics and various drying powder. Soapstone, also known as Talc or Talcum Powder, is a mineral that is naturally found in nature. The

chemical name for Talc or Talcum Powder is hydrated magnesium silicate. The region Uttarakhand accounts for 29% of India's soapstone production.

Highest production of soapstone will be 14,821Tonnes/ Annum.

YEAR	PIT-I (TONNES)	PIT-II (TONNES)	TOTAL PRODUCTION SOAPSTONE (TONNES)
FIRST	4326	3396	7722
SECOND	7166	2560	9726
THIRD	6313	5388	11701
FOURTH	7611	5452	13063
FIFTH	8206	6615	14821
TOTAL	33622	23411	57033

The proposed mining project has been categorized as Category B1 project, as per NGT order.

Proponent & Address

Shri Jitendra Aithani

S/o Shri Amar Singh Aithani, Village-Bijorijhal

Tehsil- Bageshwar

District-Bageshwar

3. Brief description of nature, size and location of the project:

Brief details of the project are described in the Table No.1 given below:

Table No. 1:- Details of the Project

S. No.	Particulars	Description
A	Mining Lease & Location Details	
1.	Name of the Project	Pagana Soapstone Mining Project
2.	Location	
a.	Village	Pagana
b.	Tehsil	Bageshwar
c.	District	Bageshwar
d.	State	Uttarakhand
3.	Lease Area Coordinate	Latitude: 29°47'20.80"N

		Longitude :79°48'12.80"E
4.	Lease Period of Mine	25 Years
5.	Cost of the project	Rs. 35 Lac (Approximate)
6.	Man Power Requirement	40 Nos.
7.	Water Requirement & Source	4.0 KLD approx. for Drinking & Dust Suppression / Plantation & Source: Nearby villages & natural springs.
B	Environmental Settings	
8.	Elevation(RL)	Highest & lowest levels found in the area are of RL 945m and 848 m RL
9.	Nearest National Highway /State Highway	SH-37, 1.80 km West (Aerial Distance)
10.	Nearest Railway Station	Kathgodam Railway Station; 68 Km SW direction
11.	Nearest Airport	Pithoragarh Airport; 42 Km SE (Aerial Distance)
12.	Ecological Sensitive Areas (Wildlife Sanctuaries)	None
13.	Reserved/Projected Forests	None
14.	Nearest Village/Town/City	Pagana, 1.00 Km S Bageshwar, 8-10 Km, W
15.	Nearest River	Saryu River; 0.11 Km E (Aerial)
16.	Seismic Zone	Zone V

Soapstone Mining

Client: Shri Jitendra Aithani, S/o Shri Amar Singh Aithani

Executive Summary

Location: Village- Pagana, Tehsil-Bageshwar,
District-Bageshwar, Uttarakhand

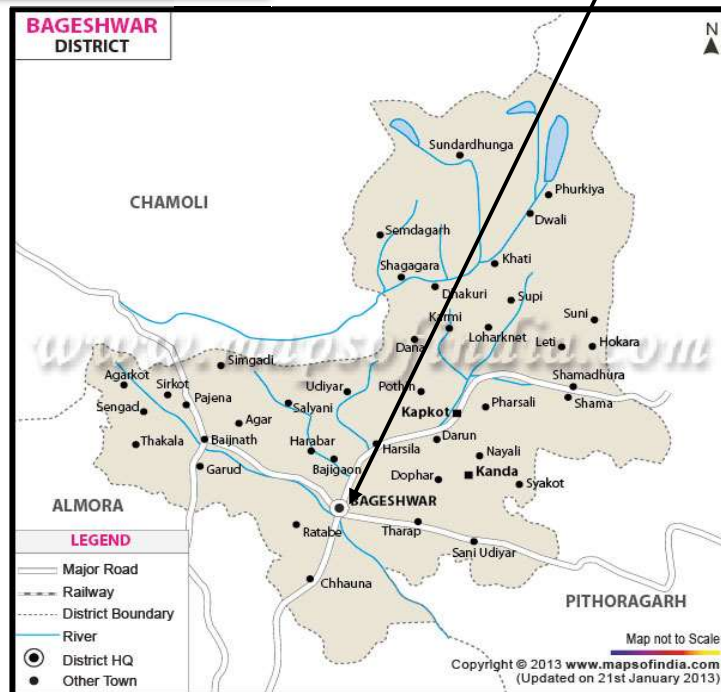
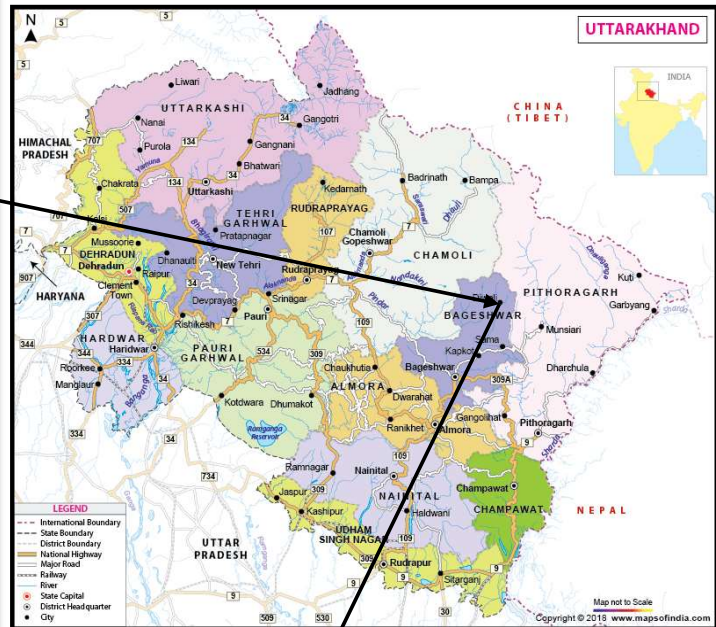


Figure-1: Project Location



Figure-1: 10 KM Study Area

4. STATUS OF REGULATORY CLEARANCES OF THE PROJECT

The Mining plan has been approved by DGMU vide Letter No. 1718 MukhyaKhanij/MA-Plan-72/BHU.KHANIJ.E/2017-18, dated 25.08.2021. There is no National Park, Wildlife Sanctuary & National Monument, within core zone or 10 km radius of the ML area. There is no legal issue against the project in the court of law.

MINE DEVELOPMENT AND PRODUCTION

The mining will be done semi-mechanized way in open cast method in quite a systematic manner by forming 3m high benches. However, there may be minor variation in the width and height which the lessee will keep on mending. The top soil and interburden to be scrapped with the help of JCB machine, dozer, shovels, pickaxe, spade & crowbar and will be stacked separately in dump yard located near the working pit. The developmental working will be done by construction of road/track to different working benches, removal of top soil and interburden. The soil will be filled into the bags, loaded on mules and unload into stock yard.

Method of Mining

The mining shall be carried out in two pits and will be open cast semi-mechanized method in quite a systematic manner by forming 3m height and 3m width benches. The face slope of benches shall be 45° overall pit slope. Average thickness of soil has been considered as 0.50 m it shall be stacked separately. All operations of mining will be carried by using JCB as well as conventional manual means using crowbars, spades and chisel etc as well as by using excavator. The production has been proposed in quarry of the ML area. No deep hole drilling and blasting is proposed.

5. IMPACT ON LAND USE & RECLAMATION OF MINED OUT AREAS

Opencast mining activities may alter the landscape of the lease area and also cause some disturbance to the surface features of the surrounding areas. Mining will be done after leaving 7.5 m safety barrier. Plantation will be developed in consultation with district administration/ local authority, wherever feasible.

Proposal for reclamation of land affected by mining activities:

The mining will commence from the higher levels and will advance towards lower levels. Intermittent backfilling will commence from the higher levels and subsequently advance towards the lower elevation so that terraced agriculture fields would undertake in such a manner that original land use will be restored i.e. before the onset of monsoon will be handed over to cultivators for cultivation. The final backfilling will be started once the ultimate benches are formed and pit reaches the optimum economic depth. All recovery of the mineral will be of the saleable grade. Plantation will be raised in 7.5m barrier zone along the boundaries of the mining lease area by planting the native species around ML area, backfilled and reclaimed area, around water body, roads etc. in consultation with the local DFO/Agriculture department.

6. LAND USE PATTERN

Presently (pre-mining), the land covered under the mine lease area is non-forest land.

7. COST ESTIMATES

The details of the cost to for the Environmental Management plan for 5 years, the budget for Corporate Environmental Responsibility (CER) (per year) and year wise allocation of funds for

the various activities proposed to be taken up under CSR programme has been given in below Table.

S.No.	Activities	Allocation of Fund (Rs. Lakhs)
1	Health Camps	0.92
2	Up gradation of toilets of government school in nearby villages	1.38
3	Distribution of Books and Notebooks among meritorious girl Child belonging to Scheduled Caste and Scheduled Tribe population.	0.27
4	Repair and Painting of School Building in the project village	0.92
	Total	3.50

Budget for Environmental protection

S. No.	Measures	Capital Cost (In Rs.)	Recurring Cost (In Rs.) (for Subsequent Years)
1	Pollution Control ➤ Dust Suppression	1,00,000	1,00,000
2	Pollution Monitoring i) Air pollution ii) Water pollution iii) Soil Pollution iv) Noise Pollution	1,00,000 60,000 40,000 20,000	1,00,000 60,000 40,000 20,000
3	Plantation/ Green belt	3,67,875	6,67,875
4	Reclamation of mined out area	--	10,09,380
5	Occupational Health	1,00,000	50,000
	Total	7,87,875	20,47,255

8. ADDITIONAL STUDIES

Risk Assessment and Disaster Management Plan- The complete mining operation will be carried out under the management control and direction of a qualified mine manager holding

Mines Manager's Certificate of Competency. Moreover, mining staff will be sent to refresher courses from time to time to keep them updated.

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.

9. PUBLIC CONSULTATION

Public Hearing- In consonance with the EIA notification dated 14th September 2006, vide section 1 (a) related to Public Hearing, the draft EIA/EMP report shall be submitted to the Uttarakhand Environment Protection & Pollution Control Board (UEPPCB) for public hearing

10. PROJECT BENEFITS

The impact on the civic amenities will be substantial after the commencement of mining activities. Medical facilities will be provided in the form of first-aid facility at the mine. These medical facilities will also be available to local people in the surrounding in case of emergencies.

- Generation of employment and improved standard of living;
- Increased revenue to the State by way of royalty, taxes and duties; and
- Superior communication and transport facilities etc.

The employment of local people in primary and secondary sectors of project will upgrade the prosperity of the region.

11. CONCLUSIONS

- The mining operations will meet the compliance requirements of MoEF&CC;
- Community impacts will be beneficial, as the project will generate significant economic benefits for the region;
- Adoption of Best Available Technology and Best Management Practices with more environmental friendly process; and
- With the effective implementation of the Environment Management Plan (EMP) during the mining activities, the proposed project can proceed without any significant negative impact on environment.