

EXECUTIVE SUMMARY

**OF
DRAFT ENVIRONMENTAL IMPACT ASSESSMENT REPORT
FOR**

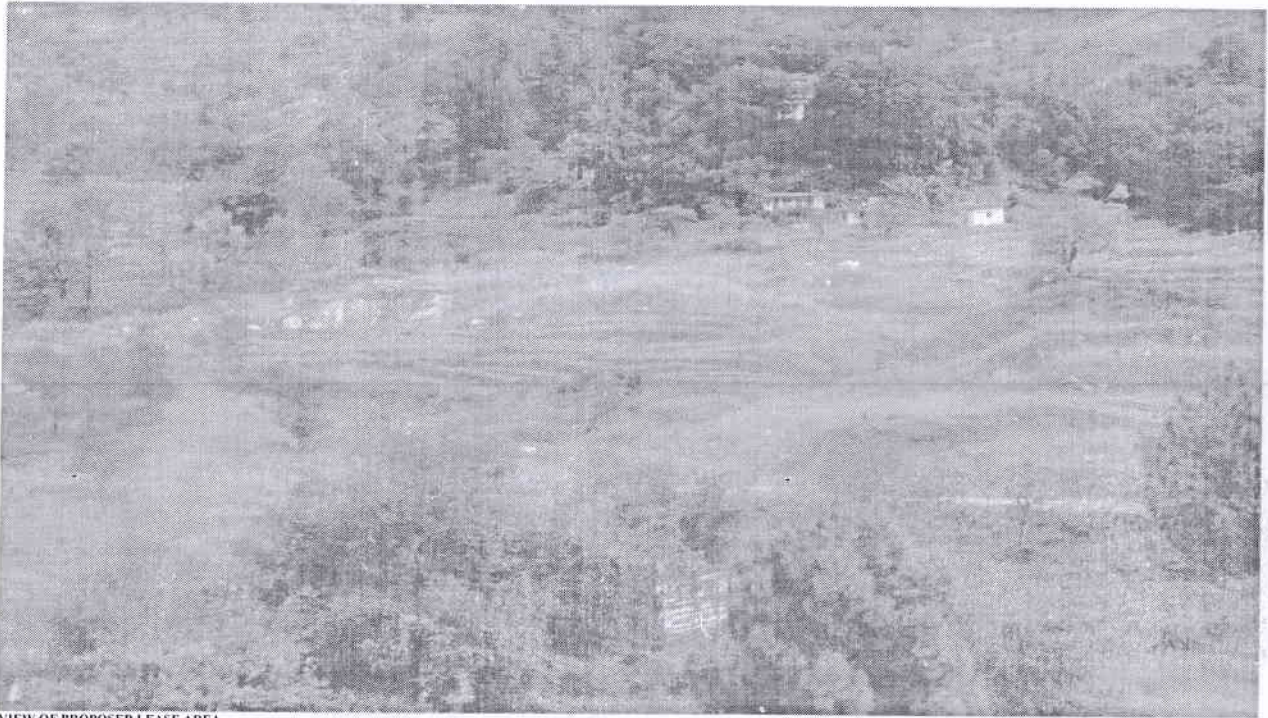
SOAPSTONE MINING PROJECT

PROPOSED AT:

VILLAGE- LOHAKOT, TEHSIL- DIDIHAT, DISTRICT- PITHORAGARH

TOTAL AREA: 3.720 HA. (NONE FOREST)

PROPOSED PRODUCTION CAPACITY: 11311 TONNES/ANNUM



A VIEW OF PROPOSED LEASE AREA

APPLICANT/PROJECT PROPONENT

**M/S LOHAKOT MINES & MINERALS
VILLAGE- BAJWALPUR, RAMPUR ROAD, HALDWANI,
DISTRICT- NAINITAL
UTTARAKHAND**

CONSULTANT

ECO LABORATORIES AND CONSULTANTS PVT. LTD.

Certificate No. NABET/EIA/1720/IA0032, Valid Till: Dec13, 2020

E 207, Phase VIII B, Sector 74, Industrial Area, SAS Nagar

Mohali, Punjab 160071

RQP and EMPANELLED CONSULTANT

BHUWAN JOSHI

Empanelled Geologist, RQP- IBM, UK, HP

DEHRADUN

Contact: 9412152105

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 3.720 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 State Govt. willing to grant Mining Lease over an area of **3.720 Hac.** to **M/s Lohakot Mines & Minerals**, Village- Bajwalpur, Rampur Road, Tehsil- Haldwani, District- Nainital, Uttarakhand vide **G.O. letter No. 3960/77-5-2000-449/83, dated 26.08.2000**, for a period of Twenty (20) years (GO Attached), after final demarcation of the proposed lease, area remained **3.720 Hac.** For the project, so mining plan is prepared for remained area.

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

SOAPSTONE MINING PROJECT (3.720HA)

M/s Lohakot Mines & Minerals

Village- Lohakot, District- Pithoragarh

Uttarakhand

**EXECUTIVE
SUMMARY**

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.

3. YEAR WISE PROPOSED PRODUCTION DETAILS**Table 1: Proposed year wise plan**

Year	Volume of soapstone (cum)	Saleable quantities of soapstone (Tonnes)
2018-19	3446	8959
2019-20 (upto October 2020)	4351	11311
Total	7797	20720

4. DISPOSAL OF WASTE

The top soil from the working benches will be removed by means of an excavator and stacked separately and used for backfilling from first year onwards. The inter burden is low grade magnesite and shall be removed manual means and to be dumped separately and used for backfilling from first year onwards. The top soil and inter burden material will be dumped separately on mineralized land, but these dumps are temporary in nature and it will be used in reclamation purpose. The yearly generation of soil and inter burden is given below:-

BLOCK-I

YEAR	TOP SOIL(CUM)	INTERBURDEN(CUM)
2018-19	706	3909
2019-20	-	1315
TOTAL	706	5224

SOAPSTONE MINING PROJECT (3.720HA)

M/s Lohakot Mines & Minerals

Village- Lohakot, District- Pithoragarh

Uttarakhand

**EXECUTIVE
SUMMARY****BLOCK-II**

YEAR	TOP SOIL(CUM)	INTERBURDEN(CUM)
2018-19	425	1531
2019-20	120	2271
TOTAL	545	3802

BLOCK-III

YEAR	TOP SOIL(CUM)	INTERBURDEN(CUM)
2019-20	522	3283
TOTAL	522	3283

5. STORAGE AND PRESERVATION OF TOP SOIL

The top soil shall be scraped & preserved for short period towards the slope side along the working pits. Dumping shall be carried out in single terrace & slope of dump shall be kept 35° to 40°. All the quantities shall be used in backfilling before the commencement monsoon period. Therefore no proposal has been envisaged for its separate dumping at mine side. Before the commencement of monsoon all the pits shall be backfilled.

The proposed mining project has been categorized as Category B1 project.

Proponent & Address

M/s Lohakot Mines & Minerals, Village- Bajwalpur, Rampur Road, Haldwani, District- Nainital.

6. 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 4: Details of the Project

(a)	Name of the Mine	Lohakot Soapstone Mine Project
	Lat/Long of the boundary points	29°41'36.69"N 80°12'55.90"E (Pillar No. 1, details about other pillars given below column)
	Date of grant of lease	Fresh Application
	Period/Expiry date	20 years

SOAPSTONE MINING PROJECT (3.720HA)

M/s Lohakot Mines & Minerals

Village- Lohakot, District- Pithoragarh

Uttarakhand

**EXECUTIVE
SUMMARY**

	Name of the lease holder/applicant	M/s Lohakot Mines & Minerals		
	Postal Address	Village- Bajwalpur, Rampur Road, Tehsil- Haldwani, District- Nainital Uttarakhand		
(b)	Details of applied/Area	Location Map is attached as Plate No. 1 None-Forest agriculture land		
	Total lease area/applied area	3.720 Ha.		
	District and State	Pithoragarh, Uttarakhand		
	Tehsil	Didihat		
	Village	Lohakot		
	Felling Series etc.	None		
	Area (hectares)	3.720 Ha.,		
	Whether the area is in forest (please specify whether protected, reserved etc.)	No, area does not fall under forest area.		
	Ownership/Occupancy	Private Individual		
	GEOGRAPHICAL PILLAR COORDINATES	Pillar No.	Latitude	Longitude
		BLOCK-I		
		A1	29°41'36.69"N	80°12'55.90"E
		A2	29°41'37.04"N	80°12'57.43"E
		A3	29°41'36.48"N	80°12'58.23"E
		A4	29°41'35.22"N	80°12'59.33"E
		A5	29°41'34.09"N	80°12'57.65"E
		BLOCK-II		

SOAPSTONE MINING PROJECT (3.720HA)

M/s Lohakot Mines & Minerals

Village- Lohakot, District- Pithoragarh

Uttarakhand

**EXECUTIVE
SUMMARY**

		B1	29°41'37.16"N	80°12'57.85"E
		B2	29°41'37.29"N	80°12'58.40"E
		B3	29°41'36.91"N	80°12'59.64"E
		B4	29°41'37.46"N	80°12'59.13"E
		B5	29°41'37.79"N	80°13'0.36"E
		B6	29°41'37.61"N	80°13'0.80"E
		B7	29°41'37.91"N	80°13'0.88"E
		B8	29°41'37.35"N	80°13'1.83"E
		B9	29°41'37.07"N	80°13'2.04"E
		B10	29°41'36.73"N	80°13'2.09"E
		B11	29°41'36.50"N	80°13'2.34"E
		B12	29°41'36.29"N	80°13'2.15"E
		B13	29°41'36.49"N	80°13'1.76"E
		B14	29°41'36.08"N	80°13'0.71"E
		B15	29°41'35.76"N	80°12'59.94"E
		B16	29°41'36.14"N	80°12'59.18"E
		B17	29°41'36.79"N	80°12'59.01"E
		B18	29°41'36.83"N	80°12'58.26"E
		BLOCK-III		
		C1	29°41'38.10"N	80°13'1.67"E
		C2	29°41'38.84"N	80°13'4.58"E
		C3	29°41'37.72"N	80°13'5.02"E
		C4	29°41'37.28"N	80°13'4.45"E
		C5	29°41'36.73"N	80°13'4.39"E
		C6	29°41'34.58"N	80°13'5.41"E
		C7	29°41'34.41"N	80°13'5.14"E
		C8	29°41'34.78"N	80°13'4.10"E
		C9	29°41'34.13"N	80°13'4.26"E
		C10	29°41'33.95"N	80°13'3.67"E
		C11	29°41'35.52"N	80°13'1.72"E
		C12	29°41'36.19"N	80°13'2.74"E

SOAPSTONE MINING PROJECT (3.720HA)

M/s Lohakot Mines & Minerals

Village- Lohakot, District- Pithoragarh

Uttarakhand

**EXECUTIVE
SUMMARY**

		C13	29°41'36.87"N	80°13'3.75"E
		C14	29°41'37.24"N	80°13'2.49"E
		BLOCK-IV		
		D1	29°41'36.42"N	80°13'7.71"E
		D2	29°41'35.04"N	80°13'9.40"E
		D3	29°41'33.46"N	80°13'7.85"E
		D4	29°41'33.85"N	80°13'7.17"E
		D5	29°41'34.88"N	80°13'6.98"E
		D6	29°41'34.61"N	80°13'6.07"E
		D7	29°41'35.16"N	80°13'5.53"E
		D8	29°41'36.43"N	80°13'6.42"E
		BLOCK-V		
		E1	29°41'30.07"N	80°13'4.69"E
		E2	29°41'30.80"N	80°13'5.45"E
		E3	29°41'30.28"N	80°13'6.08"E
		E4	29°41'30.88"N	80°13'6.65"E
		E5	29°41'31.38"N	80°13'6.01"E
		E6	29°41'32.33"N	80°13'6.99"E
		E7	29°41'32.54"N	80°13'7.55"E
		E8	29°41'34.29"N	80°13'9.10"E
		E9	29°41'32.69"N	80°13'9.84"E
		E10	29°41'31.60"N	80°13'8.75"E
		E11	29°41'31.57"N	80°13'8.11"E
		E12	29°41'31.07"N	80°13'7.75"E
		E13	29°41'30.81"N	80°13'7.90"E
		E14	29°41'30.19"N	80°13'7.25"E
		E15	29°41'29.25"N	80°13'7.23"E
		E16	29°41'29.01"N	80°13'6.96"E
		E17	29°41'29.10"N	80°13'5.91"E

SOAPSTONE MINING PROJECT (3.720HA)

M/s Lohakot Mines & Minerals

Village- Lohakot, District- Pithoragarh

Uttarakhand

EXECUTIVE SUMMARY

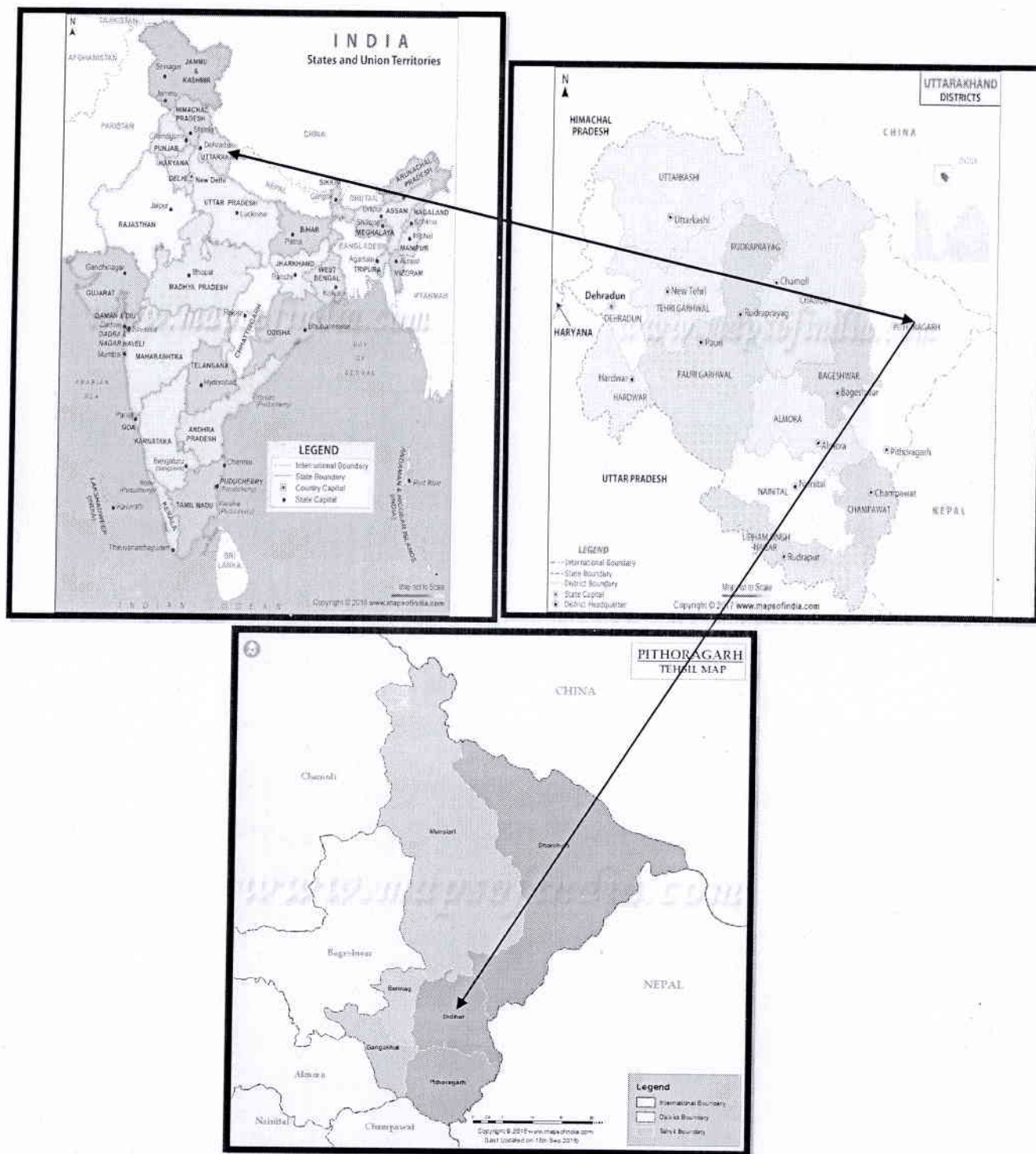


Fig: 1 - Project Location

SOAPSTONE MINING PROJECT (3.720HA)

M/s Lohakot Mines & Minerals
Village- Lohakot, District- Pithoragarh
Uttarakhand

EXECUTIVE SUMMARY



Fig: 2- 10 KM Study area

7. STATUS OF REGULATORY CLEARANCES OF THE PROJECT- The Mining plan has been approved by DGM vide. –No218 mukhya *khanij/sche- 148/bhu.khanij.e/2017-18* dated 08.05.2019. 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.

8. 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 inter burden 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 inter burden. The soil will be filled into the bags, loaded on mules and unload into stockyard.

9. Method of Mining

The mining will be carried out in two trial pits via Pit-I & Pit-II 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 70 ° – 45 ° pit slope. Average thickness of soil has been

SOAPSTONE MINING PROJECT (3.720HA)

M/s Lohakot Mines & Minerals
Village- Lohakot, District- Pithoragarh
Uttarakhand

**EXECUTIVE
SUMMARY**

considered as 0.75 m. 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.

10. 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 shall be carried out in two pits. The mining will be carried out in two trial pits via Pit-I & Pit-II and that have been converted into Mining pits, 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 70 ° – 45 ° pit slope. Average thickness of soil has been considered as 0.75 m. 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. 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.

11. LAND USE PATTERN

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

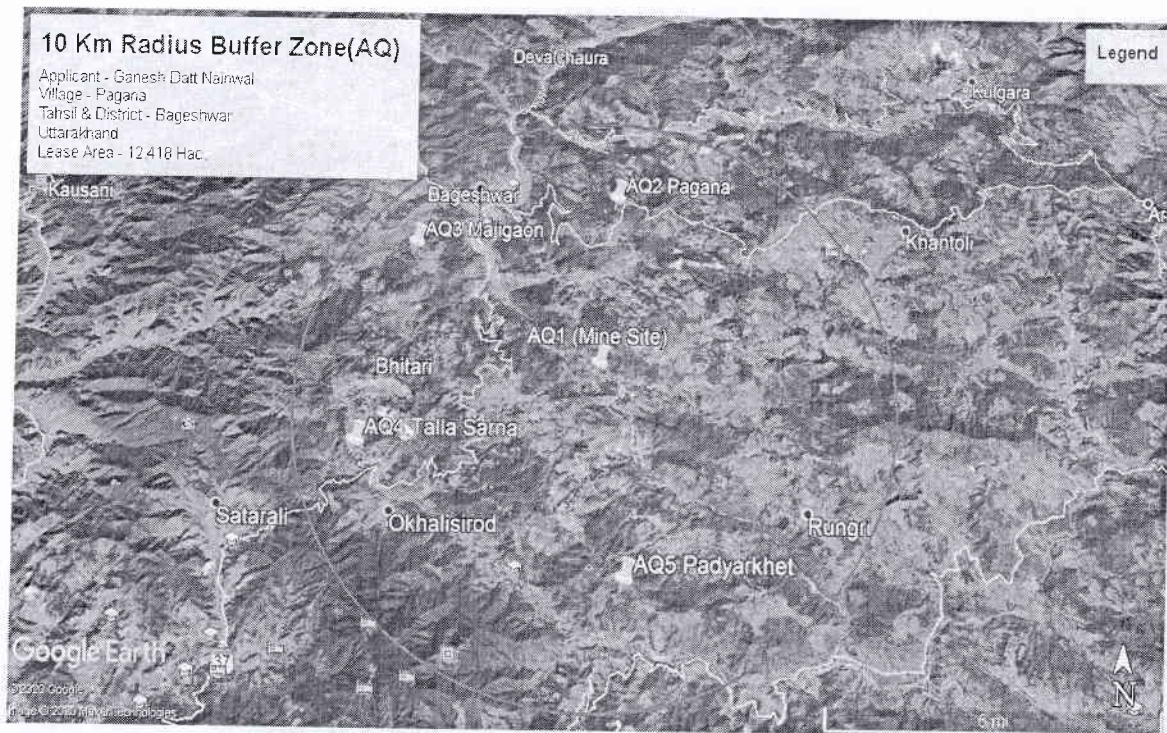
SOAPSTONE MINING PROJECT (3.720HA)

M/s Lohakot Mines & Minerals

Village- Lohakot, District- Pithoragarh

Uttarakhand

EXECUTIVE SUMMARY



ENVIRONMENTAL MONITORING LOCATIONS- AQ



ENVIRONMENTAL MONITORING LOCATIONS- GW

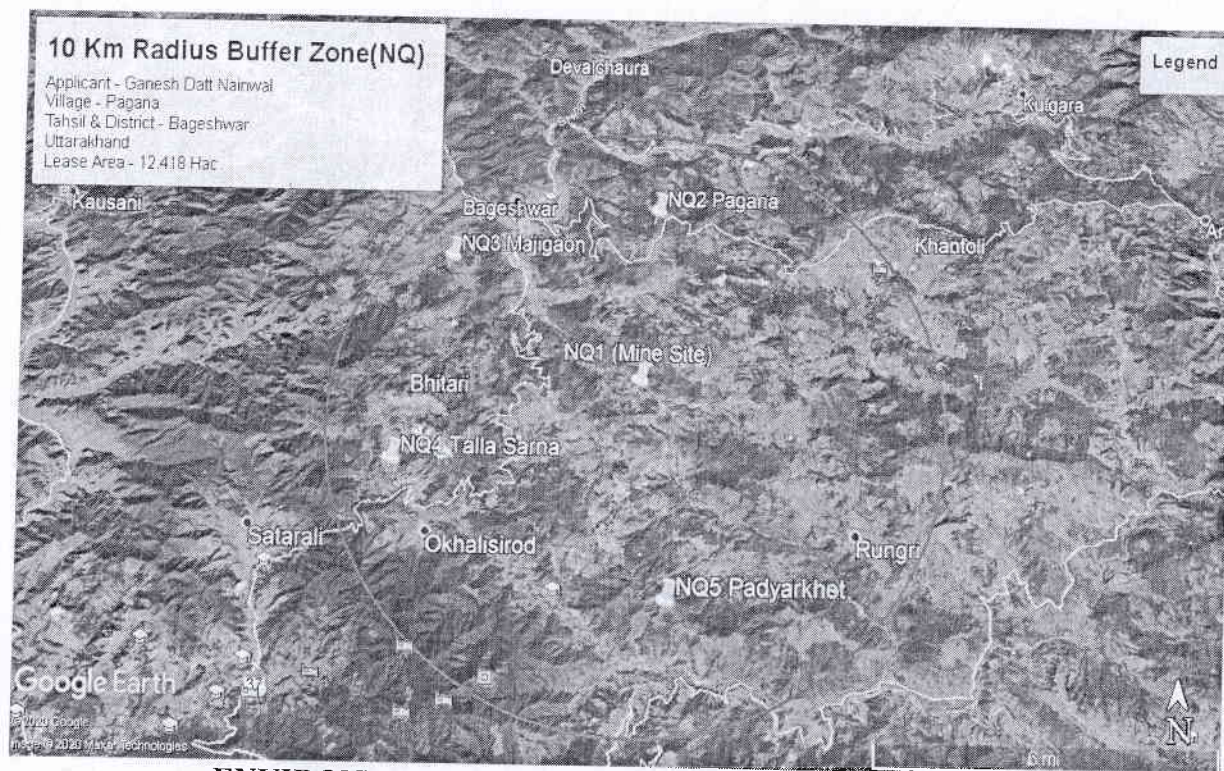
SOAPSTONE MINING PROJECT (3.720HA)

M/s Lohakot Mines & Minerals

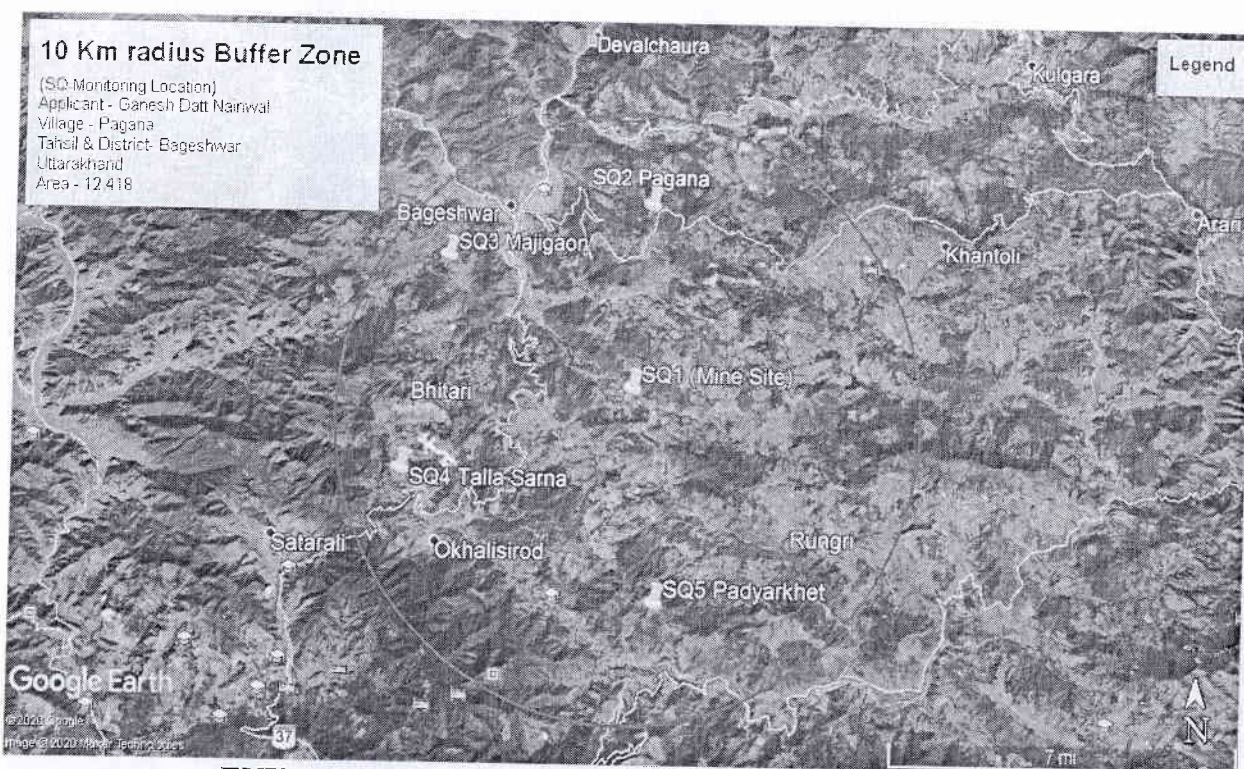
Village- Lohakot, District- Pithoragarh

Uttarakhand

EXECUTIVE SUMMARY



ENVIRONMENTAL MONITORING LOCATIONS- NQ



ENVIRONMENTAL MONITORING LOCATIONS- SQ

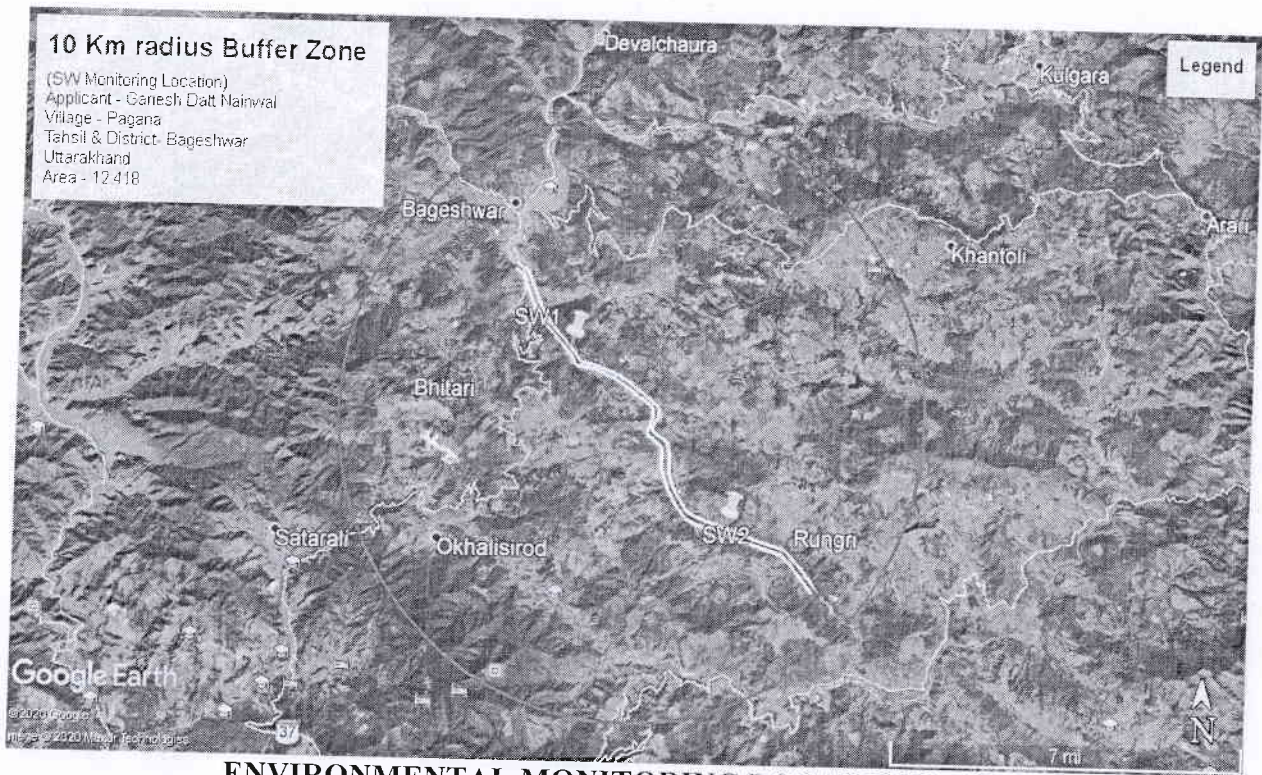
SOAPSTONE MINING PROJECT (3.720HA)

M/s Lohakot Mines & Minerals

Village- Lohakot, District- Pithoragarh

Uttarakhand

EXECUTIVE SUMMARY



ENVIRONMENTAL MONITORING LOCATIONS- SW

12. COST ESTIMATES

Presently the cost of the project been evaluated is about 30 Lacs. 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.

Table 5: Cost estimation of different activities

S. No.	Activities	Allocation of Fund (Rs. Lacs)
1	Health Camps	0.50
2	Up gradation of toilets of government school in nearby villages	1.50
3	Distribution of Books and Notebooks among meritorious girl child belonging to Scheduled Caste and Scheduled Tribe population.	0.50
4	Repair and Painting of School Building in the project village	1.0
	Total	3.5 Lacs

SOAPSTONE MINING PROJECT (3.720HA)

M/s Lohakot Mines & Minerals
Village- Lohakot, District- Pithoragarh
Uttarakhand

**EXECUTIVE
SUMMARY****Table 6: Budget for environmental protection**

S.No.	Measures	Capital Cost (In Rs.) (1 st Year)	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

13. ADDITIONAL STUDIES**13.1 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.

13.2 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.

14. PUBLIC CONSULTATION**14.1 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

SOAPSTONE MINING PROJECT (3.720HA)

M/s Lohakot Mines & Minerals
Village- Lohakot, District- Pithoragarh
Uttarakhand

**EXECUTIVE
SUMMARY****15. 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.

16. 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.