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 2.261 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 M/s. Kishor Singh Mines is for soapstone which covers an area of 2.261 Ha near Village –Talla Sanyuda, Tehsil – Bageshwar, Dist - Bageshwar. LOI has been granted in favour of M/s. Kishor Singh S/o. Vijay Singh, vide Letter No. 1923/VII-1/22-Soapstone/2016 dated 22.12.2016, attached as Annexure I.

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 per year will be 16473 Tonnes/ Annum.

| Year | Top Soil (Cum) | Production of Soapstone (Tonnes) |
|---------|-------------------|--|
| 2017-18 | 1898 | 10282 |
| 2018-19 | 1656 | 12114 |
| 2019-20 | 1410 | 12496 |
| 2020-21 | 1564 | 15045 |
| 2021-22 | 1145 | 16473 |
| TOTAL | 7673 | 66410 |

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

Proponent & Address

M/s. Kishor Singh S/o. Vijay Singh Registered Address: Village- Chadayal Nayak, Post-Haripur Tehsil- Haldwani, District- Nainital, Uttarakhand.

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:

| S. | Particulars | Description | | |
|-----|---------------------------------|--|--|--|
| No. | | | | |
| A | Mining Lease & Location Details | | | |
| 1. | Name of the Project | M/s. Kishor Singh Mines Soapstone Mine Project | | |
| 2. | Location | | | |
| a. | Village | Talla Sanyuda | | |
| b. | Tehsil | Bageshwar | | |
| c. | District | Bageshwar | | |
| d. | State | Uttarakhand | | |
| е. | Lease Area Coordinate | PillarNE | | |

| Uttarakh | and | | | |
|----------|-----------------------------|---|--|----------------------|
| | | No. | | |
| | | A | 29°51'8.04"N | 79°51'21.79"E |
| | | В | 29°51'0.06"N | 79°51'25.19"E |
| | | C | 29°50'59.58"N | 79°51'23.04"E |
| | | D | 29°51'2.05"N | 79°51'21.47"E |
| | | E | 29°51'2.47"N | 79°51'19.29"E |
| | | F | 29°51'4.02"N | 79°51'18.74"E |
| | | G | 29°51'5.15"N | 79°51'19.61"E |
| | | Н | 29°51'6.81"N | 79°51'18.83"E |
| | Lease Period of Mine | 25 Year | s | |
| | Cost of the project | 30 Lac (Approximate) | | |
| | Man Power Requirement | 49 No.s 4.0 KLD Approx. for Drinking & Dust Suppression/Plantation. & Source: villages & natural springs. | | |
| | Water Requirement & Source | | | |
| | | | | |
| | | | | |
| | | | | |
| B | Environmental Settings | 1 | | |
| 2. | Elevation(RL) | Highest & lowest levels found in the | | |
| | | area are of 1207 mRL and 1153 mRL respectively | | |
| 3. | Nearest National Highway | NH-309A, 2.18 km (Aerial Distance) in S direction; | | |
| | /State Highway | Bageshwar – Munshyari Road | | |
| | | SH-37, 2.52 km (Arial Distance), in N direction; | | |
| 4. | Negrest Railway Station | Bageshwar- Dofar- Dharmghar Road | | |
| | Nearest Railway Station | | Kathgodam Railway Station; 70 Km SW (Aerial) | |
| 5. | Nearest Airport | | garh Airport , About 45 | Km (Aerial Distance |
| | |) in SE c | lirection | |
| 6. | Ecological Sensitive | None Within 10 Km | | |
| | Areas(Wildlife Sanctuaries) | | Vildlife Sanctuary, 19 lirection. | KM (Aerial Distance) |

| Shri Kish Located | at Village – Talla Sanyuda, Bageshwar, Dist- Bageshwar | EXECUTIVI SUMMAR |
|----------------------|---|--|
| 7. | Reserved/Projected Forests | None Within 10 Km |
| | | Nanda Devi National Park, 59.21 Km (Aerial |
| | | Distance) in NNE direction. |
| 8. | Nearest Village/Town/City | Town-Bageshwar 8 Km W (Aerial) |
| 9. | Nearest River | Saryu River – 6.86 Km W |
| 10. | Seismic Zone | Zone – V |

EXECUTIVE SUMMARY



Fig: 1 - Project Location



Fig: 2-10 KM Study area

4. STATUS OF REGULATORY CLEARANCES OF THE PROJECT

The Mining plan has been approved by DGM vide. - मुख्य Khanij 825 / खननyojana -85 / भ0खनि0ई0 / 2017-18, Dated 29.08.2017.

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 stockyard.

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 mariner by forming 3m height and 3m width benches. The face slope of benches shall be $70^{\circ} - 45^{\circ}$ 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.

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 shall be carried out in one pit. The mining will be carried out in two trial pits via Pit-I & Pit-II and that have been converted into one single pit, will be open cast semimechanized method in quite a systematic mariner by forming 3m height and 3m width benches. The face slope of benches shall be $70^{\circ} - 45^{\circ}$ 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.

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. | | Activities | Allocation of Fund |
|-----|--------------|------------|--------------------|
| No. | | | (Rs. Lacks) |
| 1 | Health Camps | | 0.78945 |

| Utta | ittaraknand | | | |
|------|-------------|---|----------|--|
| | 2 | Up gradation of toilets of government school in nearby villages | 1.1842 | |
| | 3 | Distribution of Books and Notebooks among meritorious girl | 0.2368 | |
| | | child belonging to Scheduled Caste and Scheduled Tribe | | |
| | | population. | | |
| | 4 | Repair and Painting of School Building in the project village | 0.78945 | |
| | | Total | 3.0 Lacs | |

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 | 1,00,000 | 1,00,000 |
| | ii) Water pollution | 60,000 | 60,000 |
| | iii) Soil Pollution | 40,000 | 40,000 |
| | iv) Noise Pollution | 20,000 | 20,000 |
| 3 | Plantation/ Green belt | 3,67,875 | 6,67,875 |
| 4 | Reclamation of mined out | | 10,09,380 |
| | area | | |
| 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.

<u>11. CONCLUSIONS</u>

•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.