EXECUTIVE SUMMARY

Project Name:

Extraction of Sand, Stone & Bajri by Sh. Harbhajan Singh

Prop:M/s Shiv Om Stone Crusher.

For
Mining of minor minerals (Sand, Stones & Bajri)

Khasra no. 2619/2579/2204/1 falling in Mauza & Mohal-Kishanpura, Tehsil-Baddi, District- Solan, State- HimachalPradesh.
Total Area &Type: 42-14-65 Hect
(Government-Land River Bed of Sirsa river)

Capacity: 1,126,015 MT for the period of five years.
or
2,25,203 Metric tons per year.
[Project or Activity of Schedule 1(a), Mining of minerals, Cat-B-1]

Study Period: 15.03.2023. to 15.06.2023.

Prepared by
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EXECUTIVE SUMMARY

1.0 PROJECT NAME AND LOCATION:

Sh. Harbhajan Singh, Prop: M/s Shiv Om Stone Crusher, Village-Kishanpura, P.O. and Tehsil-Baddi, District-Solan, State- Himachal Pradesh has been issued a **"Letter of Intent** "for grant of mining lease vide letter No. Udyog- Bhu (khani-4) Laghu-220/2000-6678 on dated 28/08/2022. For the grant of mining lease area for the extraction of Stone, Bajri and Sand over an area situated in Khasra no. 2916/2579/2204/1 measuring 500 Bighas (42-14-65 hects), (Govt land, River bed) falling in Mauza Kishanpura, Tehsil Baddi, District-Solan, Himachal Pradesh. Based on a mining plan prepared by a registered Geologist and subsequently approved by the Industries Department. The project falls in category B1; hence the Environmental Clearance is to be given by SEIAA, Shimla, H.P. As per the latest requirement they have to get Environmental Clearance according to the G.O.I Notification.

2.0 YEAR WISE PRODUCTION PROGRAMME:

Details of the production of the stone, sand and Bajri during the five-year period is given below.

Showing Year-wise production programme

YEAR	Boulder 40%(MT)	Bajri 35%(MT)	Sand 10%(MT)	Silt/Clay 15 % (MT)	Total Potential(MT)
1st Year	**78,821**	56,301	56301	33,780	2,25,203
2nd Year	**78,821**	56,301	56301	33,780	2,25,203
3rd Year	**78,821**	56,301	56301	33,780	2,25,203
4th Year	**78,821**	56,301	56301	33,780	2,25,203
5th Year	**78,821**	56,301	56301	33,780	2,25,203
TOTAL	**3,94,105**	2,81,505	2,81,505	1,68,900	11,26,015

Thus, during five-year total production shall be 78821 metric tons of Boulders, 56,301 metric tonsof Bajri, 56,301 metric tons of sand and 33,780 MT Thus, during five-year total production of minerals shall be 2,25,203 metric tons for first year**.**

3.0 WASTE DISPOSAL & ARRANGEMENT:

As the silt and clay are inseparable mine waste it will go along with other minerals that will feed to the already established stone crusher.

4.0 RECLAMATION PLAN:

The mined area being part of the river course cannot be reclaimed for any other purpose. The mining depth will be upto one meter or up to water level whichever is less, thus water regimewill not be disturbed.

The entire quarried area will be replenished and reclaimed by the river during monsoon. Thus, the topography or land use of the river bed will not change.

4.1 PLANTATION:

The area lies within the channelization of the regular course of the river. As the maximum part of the river falls outside the HFL, plantation will be done there, Tree species like Kher, Kachnar, Simbal, Tun, Shisham and Baheda conducive to agro-climatic conditions of the area willbe planted.

The year wise plantation plan is given in the table below.

Year	Area proposed or planation in square meter	Number of tresses to be planted	Estimated cost (cost of plants, maintenance and salary of gardener
1st year	2000	200	80,000
2nd year	2000	200	80,000
3rd year	2000	200	80,000
4th year	2000	200	80,000
5th year	2000	200	80,000
Total	10,000	1,000	4,00,000

4.2 CHECK DAM:

The six check dams are proposed at vulnerable locations as per the table below.

Number of checks dams	Length (m)	Width (m)	Height (m)	Cost (Rs)
1.	35	2	2	50,000

2.	35	2	2	50,000
3.	35	2	2	50,000
4.	35	2	2	50,000
5.	35	2	2	50,000
Total	--	--	--	2,50,000

5.0 MANPOWER REQUIREMENT:

Total production for five years including silt and clay: 11,26,015

MT

Total production for first year including silt and clay: 2,25,203 MT

No. of working days in a year - 300

Total production for one day-

750 MT, Labour caters 2 Ton

material per day:

Labours required for 750 MT=750/2=375

Most of the work force will be sourced from surrounding area

The manpower will comprise:

Clerk: 1
Mine supervisor: 2
Drivers: 50
Accountant: 1
Unskilled workers mostly locals: 321

6.0 COST DETAILS:

Capital cost of the project is Rs 20.0 Lakh and that of EMP is Rs.7 Lakh.

7.0 END USE OF MINERALS:

The extracted material will be feed to the already established stone crusher.

8.0 SITE DETAILS:

The mining lease area is situated in the river bed of

Sirsa river.

9.0 BASELINE ENVIRONMENTAL DATA AND THEIR IMPACTS:

Various Environmental factors as existing in the study area which are liable to be affected by the activities have been assessed both quantitatively and qualitatively. Baseline environmental data generation of study area was carried out during the period of 15.03.2023. to 15.06.2023.

10.0 AMBIENT AIR QUALITY:

The PM2.5, PM10, SO2, NO2, CO levels were monitored at eight locations in the study for threemonths study period. The baseline air quality level is within the National Ambient Air Quality Standards prescribed for Industrial, Residential, Rural & Other area and also satisfies the Air Quality Index (AQI) w.r.t. health bracket for all the monitoring. (**Standards are 60, 100, 80 and 80µg/m3 for PM2.5, PM10, SO2 and NO2 respectively).**

11.0 WATER QUALITY:

Eight groundwater sample was collected from the study area for chemical, metallic and biological analysis. The groundwater quality of the study is satisfactory. No metallic or bacterial contamination was found in the water sample.

12.0 NOISE ENVIRONMENT:

Ambient noise levels were monitored at 8 locations in the study area. Noise levels in the study areavary from 51.6 dB (A) to 42.2 dB (A) in day time and 39.8 dB (A) to 32.6 dB (A) during night. The baseline noise levels at all locations are well within the CPCB standards for Noise.

16.0 ECOLOGICAL ENVIRONMENT:

Ecological data has been collected through secondary sources and by site visits. The tree species Poplar, Pipal, Jangli Tut Sarini, Jamun, etc are the dominant plant species in the study area. Leopard, Hare, Jackal, Monkey, Sambar, Crow, Woodpecker and variety of birds are the commonanimals found in the study area. No endangered species of plants and animals are found in the study area.

17.0 SENSITIVE ECOSYSTEM:

Within 5 km distance of the project site, no plant or animal species were found to be on the endangered list. No ecologically sensitive area like biosphere reserve, tiger reserve, migratory corridors of wild elephant, wetland, national park and wildlife sanctuary are present within 5 km radius of the project site.

18.0 SOCIOECONOMIC CONDITION:

Socioeconomic status has been studied from secondary sources and by site visits. The social requirements such as drinking water requirement, promotion of educational and

medical facilities to the villagers (especially Senior Citizens and infants or pregnant ladies) were identified. Community centers, recreation facilities etc will be developed as part of social responsibility.

19.0 POSSIBLE RISK AND ITS MANAGEMENT:

Inundation - It is the filling of mine due to excessive rains. Mining will be done during non- monsoon season thereby problem of inundation is not likely to occur.

Dewatering – Dewatering is required only when water table is intersected. Since, mining is limited to 1m depth or the water table which average less, thereby no water intersection and dewatering operation is involved.

Failure of Pit Slope – Since, mining is limited to 1m depth and with the maintenance of proper slope, risk due to pit failure is not anticipated

Failure of Waste dumps & its control – During mining silt and clay will be removed as waste materials. The waste material will be partly used for embankment and road levelling and the balance will be stacked and stabilized before being disposed off. The waste dump will be protected by suitable gabion structure. Therefore, there is no risk associated with failure of wastedumps.

Risk of Accidents due to Trucks and Dumpers – During transportation, vehicles are involvedwhich may result in accidents. Factors that may lead to accident are:

- Rough access roads
- Time pressure
- Inadequate brakes
- Carelessly parked vehicles
- Unsafe coupling of trailer
- Untrained drivers
- Overtaking by vehicles

LIST OF OCCUPATIONAL RISK

S.No.	Activities	Human Risk		
		Probability of Occurrence	Consequence	Risk Level
1	**Mineral Loading**	Possible	Critical	Low
2	**Transport/Vehicular Movement**	Possible	Critical	High
3	**Mineral Dumping and Storage**	Possible	Critical	Low
4	**Inundation/Flooding**	Possible	Minor	Moderate

20.0 RECOMMENDATION FOR RISK EDUCTION:

Being a riverbed there shall not be any mining operation during monsoon or rainy days. Whenever there is any alert of flooding the workers will be moved to safer area along the banks.The truck shall be brought to lower level so that the loading operation suits to the ergonomiccondition of the workers

- The loading will be done from one side of the truck only
- The workers shall be provided with gloves and safety shoes during loading
- The maximum permissible speed limit shall be ensured.
- The truck drivers with proper driving license would only be employed.
- Vehicles will be periodically checked and maintained in good condition.

21.0 CER ACTIVITIES (CORPORATE ENVIRONMENTAL RESPONSIBILITY):

An estimated Rs.**3 Lac** shall be spent during the execution of project towards charitable work within the concerned Panchayat. Details of the CER activities are mentioned as under-

S.No.	Item	Capital Cost (Rs. inLacs)	Time Frame
1.	The project proponent shall make provisionto provide four plastic waste shredder, four plastic waste compactors to the concerned ULBs/PRIs through Department of Environment, Science & Technology, GOHP.	2,00,000	After grant of EC
2.	The project proponent shall inform the public consultation & EIA process etc to Department of Environment, Science & Technology, so that the official of the department could be associated in the EIA process.	1,00,000	After grant of EC
	Total	**3,00,000/-**	

22.0 BUDGET ALLOCATION OF ENVIRONMENT MANAGEMENT PLAN.

Details of expenditure on environment given below.

Expenditure on environmental measures

Sr. No.	Title	Capital Cost (Lacs)	Recurring Cost per annum (for5 years) (Lacs)	Time frame to Implement
1.	Air pollution control management of haulage road including water sprinkling with the help of tanker and trolleys	2.0	0.25	Twice as day or as per requirement
2.	Green belt development which covers plants and temporary Gardner	2.5	0.30	As per approved scheduled in the mining plan
3.	Construction of check dams having length 2.0 meter and height 10.0 m, total 5 check dam will be provided	1.5	0.05	As per schedule approved in the mining plan
4.	Waste management	0.5	2.5	Along the execution of project
5.	Occupational healt h, measures- provision of PPE, first aid and other misc.	0.5	0.05	As per requirement
6.	Testing of air, water and noise parameters as per norms of HP Pollution Control board	----	0.25	As per requirement
Total		7.0	3.4	