PRE FEASIBILITY REPORT

Of

River Bed Material

Lease Area- 4.63Hectare,
Mining Project - Category-"B1"
Village Lassipora
Tehsil Litter, District-Pulwama (Jammu & Kashmir)

PROJECT PROPONENT

Sh. Karanvir Singh

S/O Sh. Surinder Singh

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A QCI –NABET Accredited Organization

1. EXECUTIVE SUMMARY

The proposed sand mine area located in Village Lassipora, Tehsil- Litter, District-Pulwama, and State- Jammu & Kashmir. The total mining lease area is 4.63 Ha. Open cast Semi mechanized & partially manual mining method is the only suitable method of mining for such type of deposit. The Govt. of Jammu & Kashmir has given consent for mining to Sh. Karanvir Singh for 5 years through letter number - 896/MCC/DGM/B-2/Pul/20/3925-32 Dated: 14/08/2020.

Table 1.1:- Salient Features of the Project

Sl. No.	**Parameters**	**Description**		
1	Name of the project	Minor Mineral Block- 2B, A-Lassipora SIDCO Bridge, Downstream Nallah Rambiara, District-Pulwama. Jammu & Kashmir Area 4.63 Ha		
2	Nature of the project	River Bed Material		
3	Project Proponent	Sh. Karanvir Singh		
4	Lease Period	New Applied		
5	Details of the Lease Area	**Mines Area**	River bed material	
		Khasra no.	--	
		Area	4.63Ha	
6	Total Lease area	4.63 Ha		
7	Capacity of the project	92,600 TPA		
8	Category of the project	B1		
9	Location of the project	Village- Lassipora, Tehsil- Pulwama, District- Pulwama, State- Jammu & Kashmir		
10.	Lease area Coordinate	**Points**	**Latitude**	**Longitude**
		A	33°47'36.89"N	74°56'19.16"E
		B	33°47'40.97"N	74°56'30.34"E
		C	33°47'37.22"N	74°56'32.79"E
		D	33°47'32.23"N	74°56'21.32"E
11	Land Type	Flood affected Land		
12	Method of Mining	Opencast Semi mechanized mining method		
13	Operational days/year	270 days		
14	Life of Mines	5 Years		
15	Total Water	**Sl. No.**	**Purpose**	**Water requirement (KLD)**

Sl. No.	Parameters	Description		
	Requirement	1	Drinking & domestic	0.72
		2	Afforestation/Greenbelt	0.19
		3	Dust Suppression	1.95
		Total		**~3.0**
16	Source of water	Drinking water will be made available from the nearby existing sources or by private vendors. Water for dust suppression and green belt development will be sourced from surface water source i.e existing pond or by private tankers.		
17	Man power requirement	16 Persons		
18	Nearest Railway Station / Airport along with distance in km.	Sheikh ul-Alam International Airport at distance of about 28.40 km from the lease area in NW direction.		
		Pangom Railway Station about 10.81 km from the lease area in NE direction.		
19	Nearest Town, city, District Headquarters along with distance in kms.	Nearest Town- Pulwama situated at a distance of about 9.65 km in NNW direction		
		District Headquarter- Pulwama, about 9.65 km from the lease area in NNW direction.		
20	Ecological Sensitive Areas (Wild life Sanctuaries, National Parks, Biosphere Reserves, Reserve/ Protected Forest etc)	None		
21	Historical Places	None		
22	Financial & Social benefit	This proposed project is providing employment to local people directly and indirectly.		

2. INTRODUCTION OF THE PROJECT/BACKGROUND INFORMATION

2.1 IDENTIFICATION OF PROJECT PROPONENT. IN CASE OF MINING PROJECT, A COPY OF MINING LEASE /LETTER OF INTENT SHOULD BE GIVEN.

2.2 PROJECT PROPONENT: Sh. Karanvir Singh

2.3 ADDRESS OF THE LESSEE: S/O Sh. Surinder Singh R/O 01 Lane No. 03, Shaheed Udham Singh Nagar, Pathankot

2.4 MINING LEASE AREA: The mining lease area is 4.63 hectare and it is a Government land.

2.5 BRIEF DESCRIPTION OF NATURE OF PROJECT:

The proposed sand mine area is located in Lassipora Village, Tehsil Litter District-Pulwama, and State Jammu & Kashmir. The total mining lease area is 4.63Ha. Open cast Semi mechanized & partially manual mining method is the only suitable method of mining for such type of deposit. The Govt. of Jammu & Kashmir has given consent for mining to Sh. Karanvir Singh for 5 years through letter no. 896/MCC/DGM/B-2/Pul/20/3925-32 Dated:14/08/2020.

2.6 NEED FOR THE PROJECT AND ITS IMPORTANCE TO THE COUNTRY AND REGION

The Project is a mining lease for River bed mine that should be used for infrastructure development. The material is used for building construction and road construction. The sediment in the form of river bed material (RBM) deposited in the last many years had changed the shape of the Nallah Rambiara from a valley to a raised land. Hence, it is necessary to remove the materials so that the stream gets channelized. Due to rapid infrastructure development in India, the demand of construction material has increased. To supply this demand, mining of river bed material is done. The impact due to mining on the socio-economic front will be beneficial. About 16 people will be directly benefited by mining through employment. With continuation of mining, other infrastructural developments will increase the socio-economic status of the local inhabitants.

2.7 DEMAND AND SUPPLY GAP

The demand for river bed material is ever growing with the growth of the infrastructure sector in our country. The mineral is used mainly in the construction activities like buildings, bridges etc. The requirement for the mineral is always high in the cities and towns. Therefore there is always a good demand of the mineral in the domestic market.

2.8 IMPORTS V/S INDIGENOUS PRODUCTION

Development needs will be met only through indigenous produced stone.

2.9 EXPORT POSSIBILITY

There is no proposal to export the River bed material. However, River bed material produced from the mine will fulfill the needs of the region.

2.10 DOMESTIC/EXPORTS MARKETS

The proposed mining activity is for indigenous consumption only for construction. There is no proposal to export the mineral.

2.11 EMPLOYMENT GENERATION (DIRECT & INDIRECT) DUE TO THE PROJECT

16 persons will be employed from nearest villages. The workers are coming from semi-skilled and unskilled both sectors.

3. PROJECT DESCRIPTION

3.1 TYPE OF PROJECT INCLUDING INTERLINKED AND INTERDEPENDENT PROJECTS, IF ANY

The proposed project is for the extraction of river bed material from the bed of a water stream by Open cast Semi mechanized & partially manual mining method. This is an independent project.

3.2 LOCATION (MAP SHOWING GENERAL LOCATION, SPECIFIC LOCATION, AND PROJECT BOUNDARY & PROJECT SITE LAYOUT) WITH COORDINATES.

This is a proposed Mining project and located in Village- Lassipora, Tehsil- Litter, District- Pulwama, and State- Jammu & Kashmir over an area of 4.63 Ha. The details of the project co-ordinate are described in below Table 3.1. Location map and coordinate map is given below;

Table 3-1:- Project Coordinates

Points	Latitude	Longitude
A	33°47'36.89"N	74°56'19.16"E
B	33°47'40.97"N	74°56'30.34"E
C	33°47'37.22"N	74°56'32.79"E
D	33°47'32.23"N	74°56'21.32"E

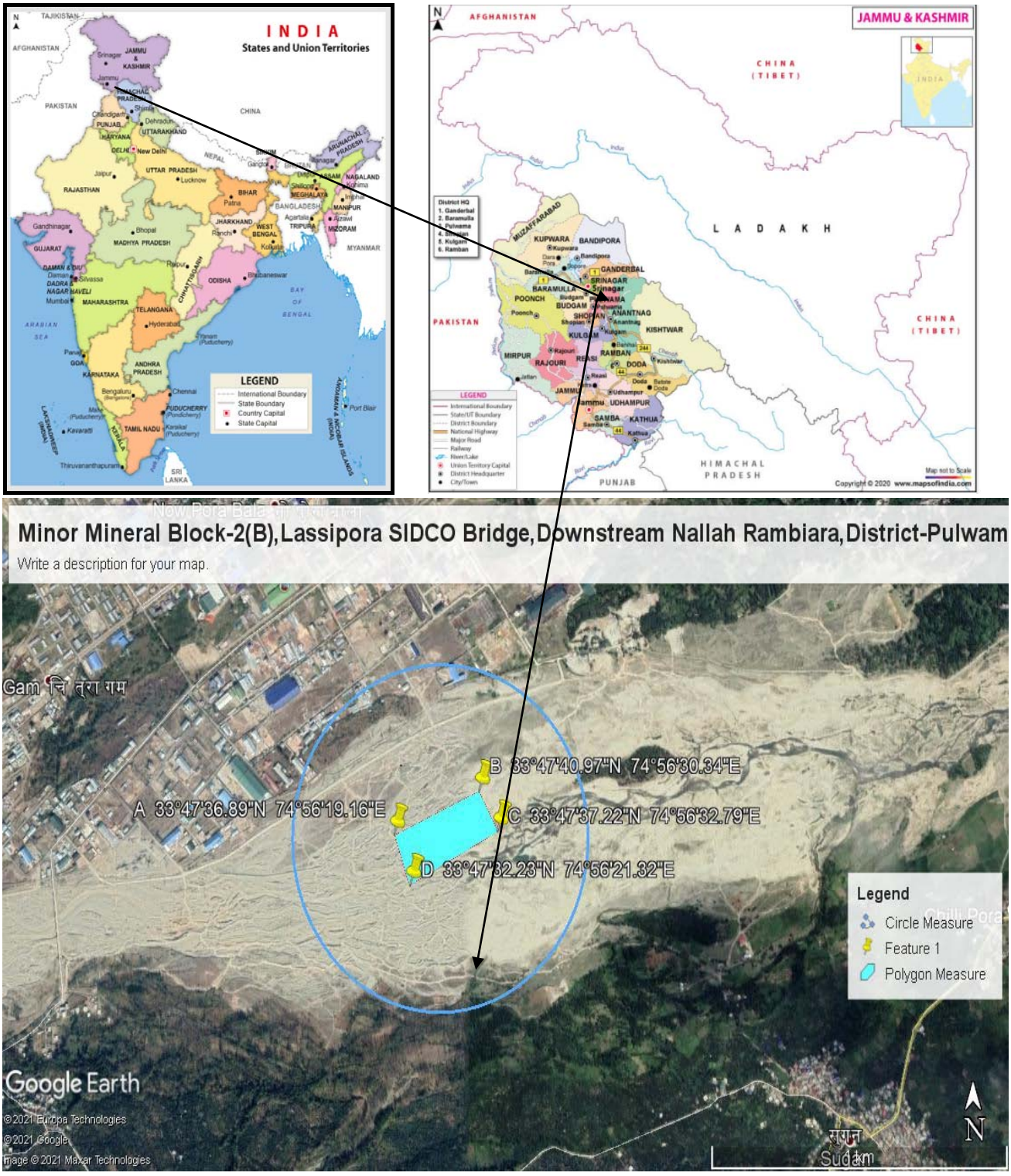

FIG 1- LOCATION OF THE PROJECT SITE

3.3 DETAILS OF ALTERNATE SITES CONSIDERED AND THE BASIS OF SELECTING THE PROPOSED SITE, PARTICULARLY THE ENVIRONMENTAL CONSIDERATIONS GONE INTO SHOULD BE HIGHLIGHTED.

There is no alternative sites/location are considered as this is a site specific surface mining project.

3.4 SIZE AND MAGNITUDE OF OPERATION

The proposed mine has lease over an area of 4.63 Ha. The total extractable material would be approx**. 92600 TPA**. The reserve calculation for the site is mentioned below:

Table 3-2:- Details of Proposed Production

Lease Area (Ha.)	Depth (meter)	Specific Gravity	Production Rate (TPA)
4.63	1	2	92600

Table 3-3:- Year wise Development and Production Programme

Year	Sectional Area (m^2)	Depth	Bulk Density	Tonnage/Production in Metric Tonnes
1st	46,300	1	2	92,600
2nd	46,300	1	2	92,600
3rd	46,300	1	2	92,600
4th	46,300	1	2	92,600
5th	46,300	1	2	92,600

3.5 PROJECT DESCRIPTION WITH PROCESS DETAILS

3.5.1 Method for developing and working the deposits

The River bed material deposited as stream bed material will be collected in its existing form.

3.5.2 Method of mining

The mining is confined to extraction of material from the dry river bed. The operation will be Open cast Semi mechanized & partially manual mining method in which the material will be collected in its existing form. Mining will be carried out only during the day time. Extraction of the minor mineral will be completely stopped during the monsoon season.

3.5.3 Working Depth (below ground level)

The deposits occur in the middle/bottom of the water stream. During the lease period, the mining will be restricted down to 1 m below river bed.

3.6 RAW MATERIAL REQUIRED ALONG WITH ESTIMATED QUANTITY, LIKELY SOURCE, MARKETING AREA OF FINAL PRODUCTS/S, MODE OF TRANSPORT OF RAW MATERIAL AND FINISHED PRODUCT.

No raw material will be required in the proposed project. The operation involves the extraction of material in its existing form and loaded into trucks/trolleys which will transport the material to the local market. The existing roads will be utilized for the transport of material from mine site to market.

3.6.1 Use of Mineral

Minor mineral is used as construction material for buildings, bridges etc.

3.6.2 Mineral Beneficiation

No mineral beneficiation is involved.

3.6.3 Surface Transport

The transportation of material will be carried out by the Proponent through their transport facilities. There are all weather metalled road and then an unmetalled road right up to the mines to dispatch the material from mines to the market. It will be purchased by the customers at mine site and transported by them through their own arrangement of trucks. The practice is quite sound in the area and ensure continuous lifting of the material. However necessary arrangement of truck can be done from the local truck operator union. .

3.7 RESOURCE OPTIMIZATION/RECYCLING AND REUSE ENVISAGED IN THE PROJECT, IF ANY, SHOULD BE BRIEFLY OUTLINED.

The proposed project is a minor mineral mining project for sand mining site in Village Lassipora, Tehsil Litter and District Pulwama. Minerals are generally depleting asset once mined; the mining activity will be conducted on the surface. The temporarily excavated pits shall be replenished with

gravel and sediments during succeeding monsoon flood. Thus a scientific approach will be taken up for excavation of mineral with systematic method.

AVAILABILITY OF WATER ITS SOURCE, ENERGY/POWER REQUIREMENT AND SOURCE SHOULD BE GIVEN: Total water requirement in the mine will be about 3.0 KLD for drinking & domestic use, dust suppression and plantation. Required water will be collected from nearby villages from the project site.

Diesel is used as motive source of primary energy for truck. Diesel will be outsourced from nearby diesel pumps.

Activity	Calculation	Total water requirement (in KLD)
Drinking	16*45/1000	0.72
Dust Suppression	390 m* 5m* 0.5 lt * 2 /1000	1.95
Plantation	48*4L/1000	0.19
Total		**~3.0**

Drinking: @ 45 lpcd per labor
Dust Suppression: Total haulage road to be water sprinkled * road width *0.5 lt water*2times a day/1000
Plantation: Plants in one year*@ 4 L/per plant/1000

3.8 QUANTITY OF WASTES TO BE GENERATED (LIQUID AND SOLID) AND SCHEME FOR THEIR MANAGEMENT/DISPOSAL

3.8.1 Solid Waste Generation & its Disposal

There are no mineral rejects of any kind produced during mining. Only a small amount of municipal solid waste will be generated which will be managed by laborers' itself. Separate dustbins will be made available at the site for collection of waste.

3.8.2 Liquid Effluent

No liquid effluents will be generated at the mine site.

4. SITE ANALYSIS

4.1 CONNECTIVITY

The mine lease area is well connected with road and rail transport. The area is connected with village road adjacent to mine lease area and National Highway- 1A from the lease area. The nearest railway

station is Panjgom Railway Station about 10.81 km from the lease area in NE direction and Sheikh ul-Alam International Airport at distance of about 28.23 km from the lease area in NW direction.

4.2 LAND FORM, LAND USE AND LAND OWNERSHIP

The mine lease area is 4.63Ha of Government land. The details of the land are given in below Table 4.1:-

Table 4-1:- Details of Land use of the Mine Lease Area

Sl. No	Plot No. & Village	Area in hectare	Type of land	Ownership / Occupancy
1	Lassipora	4.63	River bed minor material	Government land

4.3 TOPOGRAPHY

Pulwama district is one of the six districts of Kashmir province. The district with its head quarters at Pulwama lies in the southern part of Kashmir valley and is located between 330 30'00" and 340 05'00" North latitude and between 740 05'00'' and 750 01'00'' East longitude and is covered by SOI Degree sheet no. 43 J, K, N, O. The district is bounded by Budgam district in the west, Srinagar district in the north and Anantnag district in the south and east. Lassipora is a village in Pulwama District of Jammu & Kashmir State, India. It is located 9.60 Km towards SSE from District headquarter Pulwama. Wheat and paddy are the main agricultural crops. The proposed lease area located in the downstream of Nallah Rambiara. The applied area mostly comprised of lacustrine formation of Karewas comprising of silt, clay and sand of Pliocene to Pliestocene age. The whole belt is stretched around KOYUL plateau for an area of more than 90sq. km. The Karewas at places are underlain by Panjal trap, Permian's Triassic's and Cambro-Silurian deposits. The instant lease area flls in the Middle Karewas composed mainly of silt, sand and clay beds, boulders of Shopain member.

Source: *Mining Plan*

4.4 EXISTING LAND USE PATTERN

The mine lease area is flat. There is no forest land or agriculture land in the mine lease area. The entire mining lease lies within the inactive channel of the bed of rivers; the existing land use pattern is dominated by flood affected lands.

4.5 EXISTING INFRASTRUCTURE

No infrastructure is available at mine site except rest shelter and toilet for the labors.

4.6 SOIL CLASSIFICATION

In this kind of mine site no specific soil is available in the mine site. The village Lassipora is flood – prone area so the concentration of Nitrogen, Phosphorus & Potassium has been found to be low in the soil. The project region is a flat land having heavy rain fall during rainy season.

4.7 CLIMATIC DATA FROM SECONDARY SOURCES

The climate of the district is Temperate cum Mediterranean type. In the higher reaches the temperature remains cold throughout the year. Average minimum and maximum temperature varies from –5°C to 32°C. The winter season starts from the middle of the November and severe winter conditions continues till the middle of February/March. The district receives an average annual precipitation of about 556.5 mm in the form of rain and snow for about 60 days.

Source: *http://cgwb.gov.in/District_Profile/JandK/pulwama.pdf*

4.8 Social Infrastructure Available

The site is well connected with Major District Roads and Other District Roads which leads to NH-1A at a distance about 12.35km in South direction from the mine lease area. All educational, banking, Recreational, Piligrim sites, Medical facilities and other infrastructure are available in Pulwama.

5. PLANNING BRIEF

5.1 PLANNING CONCEPT (TYPE OF INDUSTRIES, FACILITIES, TRANSPORTATION ETC) TOWN AND COUNTRY PLANNING/DEVELOPMENT AUTHORITY CLASSIFICATION

The project falls into the category of “Mining Industry”. The raw materials such as River bed material available in this area are granted for mining purpose. The required semi- skilled and unskilled laborers are locally available. For transportation of material/minerals tractor trolleys/tipper trucks/cart will be deployed.

5.2 POPULATION PROJECTIONS

The project will employ most of the workers from nearby villages. There will not be any increase in population due to the project.

5.3 LAND USE PLANNING (BREAKUP ALONG WITH GREEN BELT ETC.)

The land use of the mine lease area is the Nallah Rambiara which is the tributary of Jhelum River and there will be no change in land use after operation. The excavated material will be replenished every year during the monsoon season. Hence the ultimate land use of the mine lease area will not be change.

5.4 ASSESSMENT OF INFRASTRUCTURE DEMAND (PHYSICAL & SOCIAL)

The road facility is already available which shall be used and properly maintained. Preference will be given to local labor from nearby villages.

5.5 AMENITIES/ FACILITIES

Temporary rest shelters, portable toilets and First aid provision will be made available to the mine workers at the site

5.6 EMP(ENVIRONMENT MANAGEMENT PLAN)

The environmental management plan consists of the set of mitigation, management, monitoring and institutional measures to be taken during the implementation and operation of the project, to eliminate adverse environmental impacts or reduce them to acceptable levels. The present environmental management plan addresses the components of environment, which are likely to be affected by the different operations in the mine area.

Table 5.1- EMP Cost

Sl. No	Description	Capital Cost 1st year (Rs)	Recurring Cost (Rs) 2nd year	Recurring Cost (Rs) 3rd year	Recurring Cost (Rs) 4th Year	Recurring Cost (Rs) 5th Year
1	Pollution Control & Dust Suppression	Nil	9,00,000	9,00,000	9,00,000	9,00,000
2	Pollution Monitoring	--	7,00,000	7,00,000	7,00,000	7,00,000
3	Plantation and salary for one gardener (part time basis).	48,000	1,20,000	1,20,000	1,20,000	1,20,000

4	Haul road Maintenance Cost	1,95,000	1,62,000	1,62,000	1,62,000	1,62,000
5	Occupational health and safety cost	-	5,52,500	5,52,500	5,52,500	5,52,500
TOTAL (Lakhs)		**2,43,000**	**24,34,500**	**24,34,500**	**24,34,500**	**24,34,500**

6. PROPOSED INFRASTRUCTURE

As the project will be deploying local workers for the mining as well as the transportation of the minerals, therefore no infrastructure for their residential purposes is needed.

6.1 INDUSTRIAL AREA (PROCESSING AREA)

- No industrial area is proposed.

6.2 Residential area (Non Processing Area)

- The mine workers will be hired from nearby villages, so residential areas will not be made.

6.3 Green belt

Restoration work will be done nearby the mining site by plantation works. Plantation will be carried outside the northeastern boundary on the right of bank of Nallah Rambiara. 50 trees will be planted of local and fast growing species.

6.5 Connectivity

The mine lease area is well connected with road and rail transport. The area is connected with village road adjacent to mine lease area and National Highway- 1A from the lease area. The nearest railway station is Panjgom Railway Station about 10.81 km from the lease area in NE direction and Sheikh ul-Alam International Airport at distance of about 28.23 km from the lease area in NW direction.

6.6 Drinking Water Management

Water for drinking purpose will be sourced from nearby available sources.

6.7 Sewerage System

No Sewerage System is provided at the mine site.

6.8 Industrial Waste Management

Not applicable

6.9 Solid Waste management

No any solid waste other than municipal solid waste is expected to be generated at the mining site.

6.10 Power Requirement & Supply/ Source

All the activities will be carried out semi mechanically. The operation will be done only from sunrise to sun set hence there is no power requirement for the project at site.

7. REHABILITATION AND RESETTLEMENT (R&R) PLAN :

Not Applicable

8. PROJECT SCHEDULE & COST ESTIMATES.

The project will commence once Environmental Clearance and other necessary certificates are obtained from the respective departments. The total cost of project would be around Rs.379 lakhs. Break-up of the total project cost areas:-

S NO.	COST HEAD	COST (IN LAKHS)
1	Capital Investment (Bidding Amount)	**370**
2	Environment Clearance Processing Cost	**0.40**
3	**Consultancy Fees**	**4**
4	Infrastructure Cost	**5**
5	Public Hearing Fees	**3.5**
6	Labor And Machinery Cost	**104**
Total		**486.9**

Corporate Environnent Responsibility Cost :-

CER cost will be 2.0% of the total project cost. This amount will be used for social welfare.

CER COST is 48690000x 2.0% = Rs 9,73,800/-

S. No	Activities	Fund in lakhs/ year (Capital Cost in lakh)
1	Health check-up facility for Panchayat and villagers	3.0
2	Construction of separate toilets (4) for men & women at public place in village Lassipora	2.0
3	Distribution of books & Education kits to the poor children of village.	4.0
4	Distribution of Sanitizer, gloves and N95 Mask to the nearby village and panchayat.	0.73
TOTAL		9.73

9. ANALYSIS OF PROPOSAL

The project involves collection of River bed material from the Nallah Rambiara which is the tributary of Jhelum River. This is very essential in order to prevent widening of the riverbeds and to prevent flooding off and damage to the adjoining areas. This can only be achieved by maintaining the existing course of the river.

The river banks, on both sides are covered slightly by vegetation and human habitats. Widening of river banks results in excessive erosion; resulting in damage to flora, agricultural land and settlements which are situated at very close proximity. This project operation will provide livelihood to the poorest section of the society. It provides employment to the people residing in vicinity directly or indirectly by the project. The material extracted is in high demand in the local market. This is also to ensure scientific method of material extraction. In total project has positive and significant impact in development of socio-economic environment.