PRE- FEASIBILITY REPORT

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NALLAH BED MINING PROJECT

Project Details:

Area	: 1.85 Ha
Location & Village	**:** Minor Mineral Block No. 20, Brazloo, T – Brazlo Bridge Upstream Vishu Nallah
Village	**:** Brazloo
Tehsil/District	**:** Kulgam
State/UT	**:** Jammu & Kashmir
Average Production Capacity	**:** 27,760 MT (Max) / Annum
Category of Project	**:** B1
Project Cost	**:** 3.14Crores
Mining Pan Approved Vide No.	**:**8/MPA/DGM/kul/214 Dated: 31.08.2020

Name of Project Proponent:

Name of PP/Applicant	Mr. Abdul Rashid Bhat S/o Sh. Abdul Ahad Bhat
Address	R/o Chatripora, District: Shopian, UT: Jammu and Kashmir
Email ID	Block20kulgam@gmail.com

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EXECUTIVE SUMMARY

1.0 Introduction

Nallah Bed Mining Project is situated at Minor Mineral Block No. 20, , T – Brazlo Bridge Upstream Vishu Nallah, Village: Brazloo, Tehsil & District: Kulgam, and State/UT- J & K over an area of 1.85 ha for 5 year Lease Period in the favor of Project Proponent Abdul Rashid Bhat. The proposed rate of average production is 27,760 MT (Max) / Annum of Sand, *Bajri* & Boulder. The estimated project cost is Rs.3.14 Crores.

This mining project falls under Category "B1" Project or activity 1(a) as per EIA Notifications 15th Jan, 2016 (2018) and it is subsequent amendment.

1.1 Salient features of the project.

<table>
<tr><td>Project Name</td><td>Nallah Bed Mining</td></tr>
<tr><td>Location of mine</td><td>Village: Brazloo
Tehsil & District: Kulgam
U.T.: Jammu & Kashmir</td></tr>
<tr><td>Geo – Coordinates</td><td><table>
<tr><th>Pillar</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>A</td><td>33°38'29.48"N</td><td>75° 2'30.77"E</td></tr>
<tr><td>B</td><td>33°38'25.95"N</td><td>75° 2'35.63"E</td></tr>
<tr><td>C'</td><td>33°38'25.45"N</td><td>75° 2'34.26"E</td></tr>
<tr><td>D'</td><td>33°38'25.72"N</td><td>75° 2'32.28"E</td></tr>
<tr><td>E'</td><td>33°38'24.55"N</td><td>75° 2'30.40"E</td></tr>
<tr><td>F'</td><td>33°38'25.06"N</td><td>75° 2'26.36"E</td></tr>
<tr><td>G'</td><td>33°38'25.30"N</td><td>75° 2'25.96"E</td></tr>
</table></td></tr>
<tr><td>Toposheet number</td><td>43 O/2</td></tr>
<tr><td>Minerals of mine</td><td>Sand, Bajri & Boulder</td></tr>
<tr><td>Total Mineable reserves</td><td>83,280 MT</td></tr>
<tr><td>Proposed production of mine</td><td>27,760 MT (Max) / Annum</td></tr>
<tr><td>Method of mining</td><td>Manually and minimally supported by opencast semi mechanized method</td></tr>
<tr><td>No of working days</td><td>210 days</td></tr>
<tr><td>Water demand</td><td>Total water requirement is about 4.835 KLD= 1.215 KLD (Drinking & Domestic Uses) + 1.62 KLD (Plantation) + 2.0 KLD (Dust Suppression).</td></tr>
<tr><td>Sources of water</td><td>PHED Supply</td></tr>
<tr><td>Man power</td><td>27</td></tr>
<tr><td>Nearest railway station</td><td>Sadura railway station, approx. 9.51 km in ENE direction</td></tr>
</table>

Nearest airport	Seikh Ul Alam International Airport, Srinagar, approx. 47.34 in NW direction.
Seismic zone	Zone V

2. INTRODUCTION OF THE PROJECT/ BACKGROUND INFORMATION

2.1 Identification of Project and Project Proponent

Nallah Bed Mining Project is situated at Minor Mineral Block No. 20, T – Brazlo Bridge Upstream Vishu Nallah, Village: Brazloo, Tehsil & District: Kulgam, and State/UT- J & K over an area of 1.85 ha for 5 year Lease Period in the favor of Project Proponent Abdul Rashid Bhat. The proposed rate of average production is 27,760 MT (Max) / Annum of Sand, *Bajri* & Boulder. The estimated project cost is Rs. 3.14 Crores.

2.2 Brief Information about the Project

The proposed project has been proposed for mining of 27,760 MT (Max) / Annum of Sand, *Bajri &* Boulder by manually and minimally supported by opencast semi mechanized method. The mine lease area is 1.85 Ha. Water requirement for the proposed project for drinking use, dust suppression and other use will be 4.835 KLD, which will be taken from nearby PHED sources.

2.3 Need for the Project and Its Importance to the Country or Region

The project involves collection of Nallah bed material. This is very essential to prevent widening of the Nallah bed due to the deposition of sediments which if not mined out will cause flooding, damage to the adjoining areas, destruction of life and property. This can only be prevented by maintaining the existing width and course of the Nallah. If Nallah bed minerals are not mined, the widening of Nallah bed will result in excessive erosion; causing further damage to flora, agricultural land and settlements situated in close proximity. In addition to this the production of minerals will benefit the State in the form of Royalty; the project will generate direct and indirect employment opportunities for the people in nearby villages. Also the mine management will initiate various socio-economic developments in nearby village from time to time to improve the socio- economic status in the area.

2.4 Demands-Supply Gap

Building huge infrastructure as being envisaged by Government of India particularly in

road and housing sector requires basic building raw materials. Thus, the demand for Sand, *Bajri* & Boulder is ever growing with the growth of the infrastructure sector in our country. The requirement for the mineral is always high in the nearby cities and towns. Therefore, there is always a good demand of the mineral in the domestic market.

2.5 Imports vs. Indigenous Production

The demand in the domestic market is high for Sand, *Bajri* & Boulder Mineral is available in abundant quantity in allotted area and can be extracted indigenously.

2.6 Export Possibility

There is no proposal to export the mineral as the minerals extracted cater the indigenous demand and the development is a never-ending process.

2.7 Domestic/ Export Markets

DOMESTIC MARKET

There is always an ever increasing demand of these minerals in the domestic market.

EXPORT MARKET

The proposed mining activity is for indigenous consumption only for real state, road making etc.

2.8 Employment Generation

The proposed mining activity will provide employment to about 27 workers. The workers will be hired mostly from the nearby villages.

3. PROJECT DESCRIPTION

3.1 Type of Project Including Interlinked and Interdependent Projects, If Any.

The mine is over an area of 1.85 Ha. The proposed production is 27,760 MT (Max) / Annum. This is an independent mining project and there are no interlinked projects involved.

The project falls under Category "B1" Project or activity 1(a) as per EIA Notifications and it is subsequent amendment.

3.2 Location

The mining lease area is located at Minor Mineral Block No. 20 Brazloo, T – Brazlo Bridge Upstream Vishu Nallah. Village: Brazloo, Tehsil & District: Kulgam, and U.T. –

Jammu & Kashmir. The mining lease area falls in Survey of India Topo sheet is 43 O/2.

Geographical co-ordinates are as follows:

Table No. 1.1: Latitude & Longitude of Lease Area

Pillar	Latitude	Longitude
A	33°38'29.48"N	75° 2'30.77"E
B	33°38'25.95"N	75° 2'35.63"E
C’	33°38'25.45"N	75° 2'34.26"E
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F’	33°38'25.06"N	75° 2'26.36"E
G’	33°38'25.30"N	75° 2'25.96"E

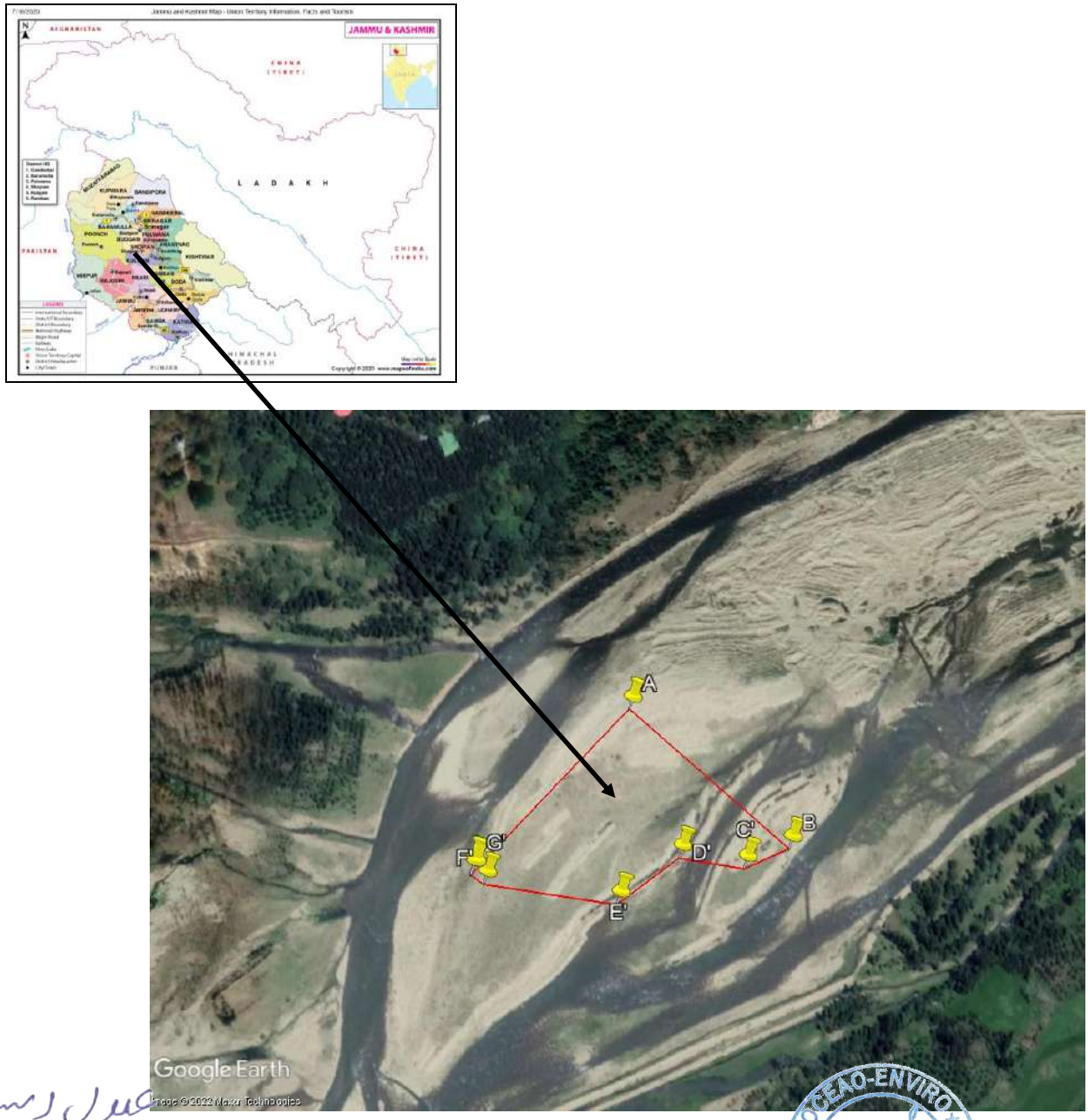

Fig 1: Location map of proposed project

3.3 Details of Alternate Sites

Mining is site specific project.

3.4 Size or magnitude of operation

Nallah Bed Mining Project is situated at Minor Mineral Block No: 20, T – Brazlo Bridge Upstream Vishu Nallah Village: Brazloo, Tehsil & District: Kulgam, and State/UT- J & K over an area of 1.85 ha for 5 year Lease Period in the favor of Project Proponent Abdul Rashid Bhat The proposed rate of average production is 27,760 MT (Max) of Sand, *Bajri* & Boulder. The estimated project cost is Rs. 3.14 Crores.

3.5 PROJECT DESCRIPTION WITH PROCESS DETAILS

The project is for Nallah Bed material with an area of 1.85 hectare which represents the flood plain of Nallah Vishu and is a Govt. land as per Govt. revenue records. The proposed mining will be carried out by manually and minimally supported by opencast semi mechanized method without resorting to drilling and blasting. The mining shall be restrained upto depth of 1 meter above the water regimes without disturbing the gradient and course of the Nallah. The Nallah bed material so excavated shall be transported by trucks through approach roads which finally merge with tar roads for final destinations. All the adequate precautions as per provision of Mines Act 1952 will be accounted. Safety zones with respect to bridge, hydraulic points and or/embankment as prescribed by the Department of Geology and Mining should be strictly adhered to. The excavated area will be replenished to its original topography in the routine weathering cycle of the Nallah. As such no reclamation plan is envisaged except plantation on the barren Nallah banks.

3.6 Raw Material Required Along With Estimated Quantity, Likely Source, Marketing Area of Final Product/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 Sand, *Bajri* & Boulder in its existing form and transported to the end users/ market.

3.7 Resource Optimization/ Recycling and Reuse

Minerals are generally depleting asset once mined; but minerals like Sand, *Bajri* & Boulder will be replenished naturally. Thus, a scientific approach will be taken up for extraction of mineral with systematic method.

3.8 Availability of Water Its Source, Energy/ Power Requirement and Source

3.8.1 Water Requirement

Water required is 4.835 KLD. It is proposed to obtain water for drinking from nearby source.

Activity	Water requirement (KLD)
Dust suppression	**2**
Domestic/Drinking	**1.215**
Plantation	**1.62**
Total	**4.835**

3.8.2 POWER

Mining Operation will be done by manually and minimally supported by opencast semi mechanized method. The NBM excavated will be removed by light weight excavators and directly loaded in tipper from the place of excavation to the material processing units or construction. The Mining operation will be done only from sun rise to sun set. So there is no power requirement for the mining activity.

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

3.9.1 Solid Waste Generation & its Disposal

No solid waste shall be generated in the current mining project. Hence, disposal of waste is not envisaged.

3.9.2 Liquid Effluent

Not applicable

4. SITE ANALYSIS

4.1 Connectivity

- Kulgam District Hospital road at 0.6 Km in East direction.

4.2 LANDFORM, LANDUSE AND LAND OWNERSHIP

LANDFORM

The area is almost flat with a moderate slope**.**

4.3 TOPOGRAPHY:

The River mine project lies on the north eastern side of the District and is covered in Survey of India Degree sheet no 43 O/2. The physiography of the area is represented by the gently sloppy land characterized with Upper Karewa and Alluvial plains. General slope of the area is towards north east. The highest contour in the lease area is 1697 mRl and the lowest contour is 1690 mRL. Vishu nallah, the main left bank tributary of River Jhelum with dendritic pattern is the main drainage of the area. The nallah originates from the high altitude Glacial lake i.e., Kausarnag in the Pir Panjal Range and represents one of the main source of water for drinking and irrigation facilities. The total catchment area of Nallah Vishu in the district is about 888 Sq. kms with a total flow length of 72 kms. The Nallah Vishu mainly flows in the mountains region and has short course of flow within the district which does not allow it to sort the material transported by it. Nallah Vishu due to its huge basin area and discharge weathers the host catchment Lithology, transports and deposits the sediments as river bed material and represents the main source of minor minerals of the district in the form of mixture of boulders, bajri and sand.

(Source: Approved Mining Plan).

4.4 EXISTING LAND USE PATTERN AND SHORTEST DISTANCES FROM FORESTS, WATER BODIES, ECO-SENSITIVE AREAS, ETC.

The area applied over an area of 1.85 ha for Nallah Bed material is located on flood plain of Nallah Vishu. No forest and agricultural land is involved in the mining Lease area. There is no National Park/ Wild Life Sanctuary/Eco sensitive Zone/CRZ within 10 KM radius of the Mining Lease area. No big water reservoir exists within 10.0 km of lease area.

4.5 Existing Infrastructure

No existing infrastructure within lease area.

4.6 Soil Classification

No significant top soil is observed in mining site. The project is located on the flood plain Nallah Vishu. However, the soil found in the vicinity of study area includes alluvial soil and Upper Karewa consisting of Muck, clay, marl, conglomerate and loess sediments.

4.7 Social Infrastructure

The following rural activities are being proposed to be done in the region under Rural Development Programme.

- Rural Health service
- Educational Development Programme
- Self-employment, resource development
- Agricultural development & environmental protection

5.0 PLANNING BRIEF

5.1 Planning Concept

Mining will be done as per the guidelines of Jammu & Kashmir Minor Mineral Concession, Storage Transportation of Minerals and Illegal Mining Rules, 2016 and MOEF & CC Gazette Notification dated 15th Jan, 2016 and its amendments thereof.

5.2 Population projection

The project will employ most of the workers from nearby villages except for supervisory staff. Thus, there will no increase in population due to the project. However, few people from other area may migrate in this area for employment directly and indirectly for business opportunities.

5.3 Land use planning (Break up along with green belt, etc.)

Mining will be done in a single bench of 1 metre along the profile of the Nallah. The area so excavated will get filled up due to sediment inflow during post melting season. Plantation will also be carried along the Nallah banks. This will strengthen the Nallah banks and control dust emission from the mine lease area.

5.4 Assessment of Infrastructure Demand (Physical & Social)

Infrastructure like evacuation road, site services will only be required.

5.5 Amenities/Facilities

The following facilities/amenities will be extended by the mine management:

- Direct and indirect Employment, most of which most will be from nearby villages.
- Arrangements for safe and healthy working conditions
- Provision of Drinking water.
- First-Aid facilities and Health check-up camps for the workers.
- Conducting medical camps for workers and nearby villagers at regular interval.

6. Proposed Infrastructure

6.1 Industrial Area (Processing Area)

No infrastructure is proposed.

6.2 Residential Area (Non Processing Area)

As local workers from nearby areas will be engaged for the mining activity, no residential area/ housing are proposed.

6.3 Green Belt

Plantation shall be developed on the barren patches of Nallah banks with proper care and maintenance.

6.4 Social Infrastructure

- Road facility (existing roads will be maintained regularly)
- Employment opportunity
- Medical camps
- Social awareness camps,
- Donations to schools
- Secondary employment opportunities

6.5 Connectivity

- Kulgam District Hospital road at 0.6 Km in East direction.

6.6 Drinking Water Management

Water for drinking is required to be 0.54 KLD. It is proposed to obtain water from nearby sources.

6.7 Sewerage System

No sewerage system is proposed. However, for sanitation purpose portable toilets will be made available.

6.8 Industrial Waste Management

Not applicable

6.9 Solid Waste management

No solid waste generation is expected from the mining operations.

6.10 Power Requirement & Supply/Source

The operation will be done only during the day light; hence there is no power requirement for the project at site.

7 REHABILITATION AND RESETTLEMENT (R&R) PLAN

Not Applicable as no person or family will be up rooted, needing any resettlement of rehabilitation.

8 PROJECT SCHEDULE & COST ESTIMATES

8.1 Likely Date of Start of Construction and Likely Date of Completion

No construction activities are proposed. The mining activity will commence only after receiving environmental clearance and other statutory clearance.

8.2 Estimated Project Cost Along With Analysis In Terms of Economic Viability of the Project

Initial cost of the project has been estimated as 3.14 Crores.

9.0 ANALYSIS OF PROPOSAL (FINAL RECOMMENDATIONS)

The proposed mining activity shall have minimum environmental impacts with utmost concern for preservation of geomorphological and hydrological character of the Nallah. The proposed mine will bring economical benefits to the state by the way of Royalty for mineral and to the local people by way of direct and secondary employment opportunities. The mining activities as proposed are the backbone of all construction and infrastructure projects as the raw material for construction is available only from such mining. The Nallah bed material is in high demand at the local market for real estate industry.

The project will bring about socio-economic improvement of the area and will prove beneficial to the area. Hence, it is recommended that that this project may kindly be considered for Environmental Clearance at an earliest.

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