MINING PLAN AND PROGRESSIVE MINE CLOSURE PLAN
FOR
MINOR MINERAL BLOCK NO-37, KATHAR KHAD, AKHNOOR DISTRICT JAMMU
AREA OF BLOCK- 6.29 HECTARES, PERIOD OF LEASE-5 YEARS, TARGETED PRODUCTION 52300T/ANNUM

Govt. of J&K
Deptt. of Geology & Mining
APPROVED
WITH CONDITIONS
vide letter No. DGM/438/AOMP/7531-33
Dated 30-1-2018
F.A. KHAN
Director

SUBMITTED TO
DIRECTOR GEOLOGY & MINING, J&K
2018

APPLICANT
BALBIR SINGH S/O SH JAGAR SINGH
R/O 25-C, GANDHI NAGAR, JAMMU

PREPARED BY
JITENDER PARIMOO
REGISTRATION NO 02/DGM/RQP/2016
H.NO 197, LANE NO-08, SHAKTI NAGAR,
JAMMU, J&K

Government of Jammu and Kashmir
Department of Geology and Mining, Jammu

No. DGM/F-435/AOMP/ 7531-33

E.mail:- dgmjak@gmail.com

Dated: 30 .01.2018

Sh. Balbir Singh
S/o Sh. Jagar Singh
R/o 25-C, Gandhi Nagar, Jammu.

Subject:- Approval of Mining Plan with Mine Closure Plan in respect of Minor Mineral Block No-37 (6.29 Hectares) in District, Jammu of J&K State.

Dear Sir,

In exercise of powers conferred by Clause(b) of Sub-Section(2) of Section 5 of Mines and Minerals (Development & Regulation) Act, 1957 and rules made thereunder read with Govt. Order No. 10- Ind of 2012 dated 16.01.2012, I hereby APPROVE Mining Plan with Progressive Mine Closure Plan in respect of Minor Mineral Block No-37, **Khathar Khad** (6.29 Hectares) located at Village Kathar Tehsil, Akhnoor District, Jammu.

This approval is subject to the following conditions:-

01)- That Mining Plan with Progressive Mine Closure Plan does not in any way imply the approval of Govt; in terms of any other provisions of the Mines & Minerals(Development & Regulation) Act 1957 and Rules made thereunder or any other laws including Forest(Conservation) Act 1980, Environment Protection Act 1986, Jammu and Kashmir Water Resources (Regulation and Management) Act 2010 , J&K State Fisheries Act, 1960 and the rules made thereunder.

02)-That the Mining Plan with Progressive Mine Closure Plan is approved without prejudice to:-

a)- Any other laws applicable to the mine/area from time to time whether made by the Central or State Govt; or any other Competent Authority.

b)- Any order or direction from any Court of Competent Jurisdiction.

03)- If at any stage, it is observed that the information furnished, data incorporated in the document are incorrect or misrepresent facts, the approval of the document shall be revoked with immediate effect.

(F.A.Khan)
Authorized Officer
Director
Geology & Mining
J&K Govt; Jammu.
30-01-2018

Enclosure: - 01 Copy of approved MP with PMCP

Copy for kind information to :-

1. The Deputy Commissioner, Jammu.
2. Sh. Jitender Parimoo (ROP) H.No.197. Lane No-08. Shakti Nagar. Jammu.

MINING PLAN AND PROGRESSIVE MINE CLOSURE PLAN
FOR
MINOR MINERAL BLOCK NO-37, KATHAR KHAD, AKHNOOR DISTRICT JAMMU

(BLOCK AREA: 6.29 HECTARES)

APPLICANT

BALBIR SINGH S/O SH JAGAR SINGH R/O 25-C, GANDHI NAGAR, JAMMU

PREPARED BY

JITENDER PARIMOO, 02/DGM/RQP/2016
H.NO 197, LANE NO-08, SHAKTI NAGAR,
JAMMU, J&K

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Govt. of J&K
Deptt. of Geology & Mining
APPROVED
WITH CONDITIONS
vide letter No. DGM/E435/AOMP/7531-38
Dated 30-1-2018
P.A. KHAN
Director

INTRODUCTION

The applicant being the highest bidder was issued with Letter of Intent (LOI) by DGM office vides letter No. 620/MCC/DGM/Block-37/Jmu/17/5895-99 Dated: 16-12-2017under rule 55(9) of Prevention of the Jammu and Kashmir Minor Mineral Concession Storage, Transportation of Minerals and illegal Mining Rules, 2016. The applicant is actively engaged in the mining business and has remained the contractor of Geology and Mining Department for the last so many years. The applicant can make proper financial investments for systematic and scientific development of Minor Mineral Block (MMB) including land rejuvenation and progressive reclamation programmes and other measures necessary to protect quality of environment and human health.

A. It is presumed that the MMB under Mining Plan stands surveyed by the Department of Geology and Mining prior to Auctioning process and the restrictions cited under Rule 4 sub rule (1) of the JK Minor Mineral Rules, 2016 has been adhered to, which forms the basis for calculation of minor mineral reserves in the flood plain of the river bed.

B. It is also presumed that rule 94 of the Jammu and Kashmir Minor Mineral Concession Storage, Transportation of Minerals and Prevention of illegal Mining Rules, 2016 have been perused before the preparation of the MMB which states that:

(1) System of working in minor minerals shall be performed as per Mines Act, 1952(35 of 1952) and Metalliferous Mines Regulations, 1961.

(2) In case of river bed mining:

(i) specific river stretches shall be identified and mineral concessions shall be granted stretch wise, so that the requisite safeguard measures are duly implemented and are effectively monitored by the respective Regulatory Authorities.

(ii) the depth of mining shall be restricted to 3 mts./Water level, whichever is lesser.

(iii) for carrying out Mining in proximity to any bridge and/or embankment, appropriate safety zone shall be worked out on case to

case basis, taking into account the structural parameters, locational aspects, flow rate etc and no mining shall be carried in the safety zone so worked out.

1.0 GENERAL

a) Name of Applicant	SH. BALBIR SINGH S/O SH. JAGAR SINGH R/O H.NO. 25-C GANDHI NAGAR JAMMU
b) Status of Applicant:	Minor Mineral Exploiter
c) Minerals which are occurring in the area and which the applicant intends to mine :	River Bed Material
d) Period for which mining lease is proposed to be granted	05 years
e) Name of RQP preparing the Mining Plan	Jitender Parimoo
f) Reference no. and date of Letter of Intent	620/MCC/DGM/Block-37/Jmu/17/5895-99 Dated:16-12-2017

2.0 LOCATION AND ACCESSIBILITY

Details of Area	The proposed block forms a stretch tributary located on right bank of Chenab river is in Akhnoor Tehsil. It has population of about 853 as per census 2011 with 157 houses.
Coordinates	A= 33^{0}1'49.85" , 74^{0}45'32.86" B=33^{0}1'29.87" , 74^{0}45'28.44" C=33^{0}1'29.78" , 74^{0}45'31.73" D=33^{0}48.89" , 74^{0}45'37.70"
District and State Village Taluka	Village Kathar, Tehsil Akhnoor District Jammu, J&K State
Lease Area	6.29 Hectares
Existence of Public Road/ Nearest Railway Station	Jammu-Akhnoor-Rajouri National Highway. About 30 km from Tehsil Akhnoor and Jammu Railway station located about 53 Km from the Minor Mineral Block
Infrastructure	**Medical Facility** Dispensary is located in village Kathar.
	Post Office Postal Office Pacca Danga Akhnoor.
	Electricity Village receives electricity.
	Police station Police post is located near the village and police station is located in Tehsil HQ.
	Education

	The Primary Schools and Middle Schools are located in the nearby villages

3.0 PHYSIOGRAPHY, DRAINAGE AND CLIMATE

The area forms part of the foothills of sub Himalaya merging with the plains in the south. There is a gradual rise in height from 378 m from flood plain in the south and rising hills of Upper Siwaliks beds of 500m in the north and northwest. The northernmost hill ranges represent the Sirban Limestone peaks 1700 m. The Chenab River forms the main drainage system in the area. The Kathar khad forms the left bank tributary of the Chenab which fed by the Kharandhara khad and Manoa Khad flowing west to east in the Chenab river. The Tawi and Chenab rivers have V-shaped valleys in their upper courses; suddenly get widened as these enter the plains.

The climate of the district is classified as sub-humid to sub-tropical type of climate. The summer season starts from April and lasts till June is followed by southwest The sub humid to sub-tropical district receives normal annual rainfall of 1246 mm. June is the hottest month of the year with mean daily temperature ranging between24.90C and 41.70C and reached up to 470C. January is the coldest month and temperature comes as low as 4.0ºC. Most of the rainfall is received through the southwest monsoon which lasts from the last week of June to end of September. During remaining period rainfall is sporadic and scanty. The humidity is lowest in May i.e. 26% and maximum in December and January is 89%. The rainfall is maximum in the months of July and August. Minimum rainfall occurs in November.

4. DETAILS OF EXISTING PITS, THEIR DIMENSIONS AND LOCATIONS:

Applied area forms the flood plain of Left Bank tributary of Chenab River. Presently there is no pit in the available in the area. The floods/ monsoons have peneplained the earlier worked river bed.

S.NO.	Particulars	Present Land use(in Hectares)
1.	Pit area	0.5
2.	Dump area	00
3.	Infrastructure	00
4.	Mineral storage	00
5.	Plantation	00
6.	Un worked	5.79
	Total	6.29

3.0 GEOLOGY & RESERVES

Generalized Regional Geological Sequence area *Stratigraphic succession of the Siwalik Super Group of rocks established by the earlier workers Pilgrim (1913) Pasco (1973), Karunakaran and Ranga Rao (1979) and Gupta (1981-82).*

North _____**ReasiThrust**_____

	Group	**Formation**	**Lithology**	**Age**
S I W A L I K	Quaternary	Boulder Bed	Alluvium and un-stratified pebbles and boulder	Sub Recent to Recent
	UPPER	Boulder Conglomerate	Conglomerate and boulders beds with intercalations or	Lower Pleistocene

SUPER GROUP	SIWALIKS		orange to reddish clay, siltstone and sandstone	
		Pinjor	Grey earthy brown sandstone with pink, light brow clay bands, pebble cobble beds and conglomerate bands	Upper Pliocene
		Tatrot	Interbedded earthy brown to yellowish brown, maroon clay and siltstone bands brownish to light grey sandstone with pebble beds.	
	MIDDLE SIWALIKS	Dhok Pathan	Inter grey sandstone and variegated clays and pebble beds	Lower Pliocene
		Nagri	Pepper grey sandstone with thin clay bands	
	LOWER SIWALIKS	Chinji	Brown red and orange coloured clays and mudstone with grey to greenish grey sandstone	Upper Miocene
		Kamlial	Grey greenish grey and purplish sandstone reddish purplish, greyish clay and mudstone and lenticular bands of pseudo conglomerate	Middle Miocene

i) Physical characters of the River Bed Material

The sand grains of sandstone and pebble beds of the Siwaliks are mostly sub angular to sub rounded while the corer fractions (rudaceous constituents) are sub-rounded to round. The conglomerates are polymictic type and assorted, comprising quartzite, chert, dolomite, basalt (Panjal Volcanics), gneisses, granite, slate and vein quartz. Miner logically, the sandstone and matrix of conglomerate comprise quartz, feldspar (albite and microcline), also muscovite with a good deal of diagenetic clay minerals (illite, chlorite and montmorillonite). The heavy mineral associates include garnet, tourmaline, hornblende, zircon, sphene, rutile, magnetite, and ilmenite. Thus, the heavy minerals and rock elements of the conglomerate and sandstone point out their mixed provenance both from igneous and metamorphites. Interestingly, the Panjal Volcanics with the associated tuffs and schist bets of inner Himalaya containing greenstone element (metabasites), intruded by the granites, is the possible sources River bed material.

EXPLORATION

Mining of river bed is being done since long time therefore no specific method of exploration is required as the sand, deposited all along the bed and its paleochannels, which is very well exposed on the surface. The minerals excavated from the river bed will be replenished gradually during the monsoon season every year. And the area pertaining to paleochannels of the river will be leveled & restored back. Adequate quantity of Sand in reserves is available for meeting consumer demand.

Geological Sections: In order to know the trend of deposition of the bed material two sections viz 1-1'& 2-2' across the river bed were drawn on the recorded RL of the bed. (Refer Plate No 3). The sectional area cannot be practically determined due to non existence of apparent bedding plane in the river profile thus section drawn does not support the calculation of reserves.

ii) Method of Estimation of Reserves

Proved Reserves

Ground survey for feasibility of the Minor Mineral Blocks has been conducted by the Department of Geology and Mining which formed the basis for Auctioning of Minor Mineral Blocks. The potentiality of blocks have been presumed by perusing the sub rule 2(iv) of Rule 54 of the Jammu and Kashmir Minor Mineral Concession Storage, Transportation of Minerals and illegal Mining Rules, 2016 duly supported by the field survey conducted. It is presumed that the following restrictions cited in the Jammu and Kashmir Minor Mineral Concession Storage, Transportation of Minerals and illegal Mining Rules, 2016 have followed before the preparation of Minor Mineral Blocks by the Department. Thus all the reserves in the block have been considered of proved category except those are blocked in the Buffer Zone in the plan area.

(1) No minor mineral concession shall be granted in respect of any land within a distance of

(i) 50 meters from the outer periphery of the defined limits of a national highway, Railway line, state highway, major district roads (MDR) and other district roads (ODRs) where excavation does not require use of explosives;

(ii) 100 meters from the outer periphery of the defined limits of a national highway, Railway line, state highway, major district roads (MDR) and other district road (ODRs) where excavation require use of explosives;

(iii) 50 meters from any other public roads; and

(iv) 20 meters upstream as well as downstream of water works, head works or hydraulic works and 10 meter from any embankment' or 'flood embankment' as defined under the J&K Water Resources (Regulation and Management) Act, 2010.

(2) No minor mineral concession shall be granted in respect of any such minor mineral or in respect of any specific or general area which the Government may notify.

(3) No Mining activity/operation shall be carried out in any river bed below the depth of 3 meters or the water level, whichever is lesser.

The mineral reserves have been calculated volumetrically with strike influence of mineralization in the area of block by multiplying the following parameters:

i) Thickness of bed up to the depth of 3 meters from the river bed surface RL.
ii) The bulk density of river bed material is considered 2.0

Details of UNFC classification

UNFC is a three digit code based system, the economic viability axis representing the first digit, the feasibility axis the second digit and the geological axis the third digit. Each digit provided.

Codes 1, 2 and 3 in decreasing order. The highest category of resources under UNFC system has code (111) and for lowest category the code is (334).

Code (111): This code is provided for the economically mineable part of the measured mineral resources (proved category reserves).

Code (121): This code is provided for the economically mineable part of the indicated mineral resources (probable category reserves).

Code (211): The part of the measured mineral resources (proved category), which as per feasibility study has not found economically mineable. The reserves blocked in 7.5 meters buffer zone and the distances indicated as above in the restrictions from permanent structure.

Code (222): The part of the indicated mineral resources (probable category), which as per feasibility study has not found economically mineable. The reserves blocked in 7.5 meters buffer zone the distances indicated as above in the restrictions from permanent structure.

Code (333): Tonnage, Grade and mineral contents can be estimated with low level of confidence and resources are also inferred from geological.

Geological Reserves

Area of Minor Mineral Block (in Hectares)	Area of Minor Mineral Block(in Sq/m)	Area of Buffer Zone in Minor Mineral Block (in Sq/m)	Total Reserves(MT)= Area × Depth × Bulk Density(UNFC Code 111) A	Reserves Blocked in Buffer Zone(UNFC Code 211) B	Net Reserves(MT) in the Block A– B(UNFC Code 111)
6.29	62900	10600	3,13,800	63,600	2,50,200

Reserves for Production Target

The reserves for meeting the envisaged target of annual production from the block have been estimated up to the depth of 0.5 meters only from the surface contours by surface area method which can be safely recovered taking into consideration the thickness, established width and strike influences of mineralized formation in the block which can be replenished after every monsoon by maintaining the natural gradient of the river bed without disturbing the river morphology.

Area of Block after deduction of Buffer zone=52300sq/m

Thickness of the block=0.5 meter

Bulk Density=2.0

Reserves=52300 Metric tons/Per Annum

6.0 Mining

a) Proposed Method of Mining

Mining will be carried out by open cast bench method. It is proposed to produce 91100 MT/Annum. Considering 270 working days daily production comes to 337 tons/ day of river bed material, for this, following consideration taken for the proposed mine layout to be carried out systematically & scientifically:

1. Mining activity will be carried out by open cast Semi-mechanized method.
2. Lightweight excavators will be used for digging & loading of mineral in Tippers.
3. No OB/ waste material will be produced.
4. No drilling/ blasting are required as the material is loose in nature.
5. Proper benching of 0.5 m height will be maintained.
6. Roads will be properly made and sprayed by water for suppression of dust.
7. Roads in the lease area for the movement of loaded trippers/ trucks will not have slopes more than 1 in 20.
8. Extraction activities will start in the blocks from the upstream side to downstream side. This will not obstruct the movement of water, if any, during monsoon period in the river course.
9. Approach roads from the various blocks as already described earlier will be merging with permanent tar roads on both sides of the river for transportation of the mineral to final destinations.

DESCRIPTION FOR THE MINING LAYOUT: -

Considering 270 working days in a year;

Production per day = 193 T/day

Proposed bench height = 0.5m

Bulk Density of Mineral = 2.0

Volume to be broken per day = Production per day/Bulk Density of mineral

=193/2

=96.5 m^3

Area to be broken per day = Volume/Bench Height

= 69.5/0.5

=193 sq/m

Proposed Year wise development for five Years: -

Applied area forms flood plain of Chenab River & remains submerged under river water nearly for 90 days in a year. As a result the working period in a year is reduced to about 270days. It is envisaged that excavated pit in a year will be restored to its original topography in the preceding year due to deposition of suspension by water action of consecutive flood during monsoon periods. The harvesting of the river borne material deposited in the block proposed to be made on rotation basis from the surface RL up to the depth of 0.5 m (Refer Plate4). To serve this purpose the Block has been divided two sub blocks i.e. Block A & Block B. The Block A will be harvested w.e.f. February 15 to June 30 during the each year of mining operation and the Block B will be harvested w.e.f. October, 1 to 14 February. During the break periods i.e. July, August and September months every year for the 5 consecutive years the sub blocks in the river bed accordingly shall be recouped with respect to river borne material thereby rejuvenating to its original profile and topography. The river bed material is exposed and does not have any over burden so no development work will be required for the mining of river bed. Extraction of river bed material will be done by semi- mechanized means and transportation will be by hired tippers. It is proposed to produce about 52300 MTPA.

YEARWISE PRODUCTION OF FIVE YEARS

Year	Production Rate(Tones)	Required Production%
1st	52,300	100
2nd	52,300	100
3rd	52,300	150
4th	52,300	100
5th	52,300	100

Conceptual Mining Plan [Plate No 6]

The reserves of River Bed Material estimated on surface geological plan are to the tune of 0.53 million tones. The deposit in the river bed will never perish as it will be regularly replenished during monsoon floods by the action of river water.

a) Pit limit at the end of lease period

Dimensions of the pits are expected to be as

Maximum length=624 m

Maximum width=125m

Maximum height= 0.5 m

b) Sites of disposal of waste rock and top soil at the end of lease period

No top soil or waste will be generated in the mining as such no disposal of waste is needed.

b) Backfilling

Backfilling of the pit will not be required since the material in the pits will get restored to its natural topography by the action of the river.

c) Salient features of mode of working

d) Backfilling

Backfilling of the pit will not be required since the material in the pits will get restored to its natural topography by the action of the river.

e) Salient features of mode of working

f) Brief description of layout of mine working, layout of faces and sites for disposal of overburden/waste.

g) Extend of mechanization: Mining will be done by spades. Drilling and blasting will not be required.

h) haulage

The river bed material will be transported through trolleys and tippers from the mine site.

7.0-BLASTING

The material in the river is unconsolidated thus no blasting is required.

8.0- MINIE DRAINAGE

Mining of river bed material has been planned above the water level zone. The applied area is in the river flood plan thus no mine drainage is required.

9.0-STACKING OF MINERAL REJECTS AND DISPOSAL OF WASTES

Mining of river bed material will not generate any waste thus disposal of waste will not be required.

10.0- USE OF MINERAL

The river bed material will be used for construction industry. Blending of the mineral will not be required.

11.0 -OTHERS

a) Site Services (Plate)

Site services will include

b) Office &Store

ii) First Aid room Drinking water facility

iii) Labor rest shelter

c) Employment Potential

The number of persons to be employed is given below	1
i) Mining Foreman	1
ii) Office Assistant/Dispatch Supervisor	1
iii) Environment Supervisor	1
iv) Office Boy	1
v) Skilled worker/mechanic	2
vi) Piece rated workers	8
Total	**14**

vii) About 270 working days will be available in a year. Proposed production is being 52300 tons per year which implies about193 tons per day.

12.0 MINERAL PROCESSING

Beneficiation of Ore

Beneficiation of ore will not be required.

13.0 ENVIRONMENT MANAGEMENT PLAN

A) Base- Line Information

The area applied for River Bed material is located on flood plain of Chenab River.

S.NO.	Particulars	Present Land use(in Hectares)
1.	Pit area	0.5
2.	Dump area	00
3.	Infrastructure	00
4.	Mineral storage	00
5.	Plantation	00
6.	Un worked	5.79
	Total	6.29

II) Water Regime

The applied area is a flood plain made by the Chenab River. Topography is flat ground. Mining of River bed material has been planned on the surface. No mining will be executed below ground water level thus no threat to the water regime of the regime.

III) Flora and Fauna

No flora exits in the area applied. Since the partly under lease will be submerged during the monsoons. The fauna exiting in the river water is naturally withdrawn along the receding waters during the times when discharge in the river bed is less.

IV) Quality of air, water and noise level

Ambient Air

The area is an isolated place and there is no vehicular traffic in the mining site. However, there is heavy vehicular traffic about 3km road- the National Highway. It is expected that there will be less vehicular traffic around the mine site thus negligible quantity of noxious gas will be produced.

Water Quality

The extraction of river bed material will not any produce suspension because the mining is planned on the surface where no clayey material is involved.

Noise Level

Noise level is very low since the area is located in an isolated place.

V) Climate

Area falls in sub tropical zone having hot summers and cold winters. The area receives rain fall in the months of July, August and September. The maximum temperature during summers is about45 degree centigrade and during winters it is about 10 degrees

vi) Human Settlements

In the buffer zone area of applied the village Kathar is the major locality. The population of the village is around

Cropping Pattern

Wheat and paddy are grown in the area.

Demography

The nearby town located is Sub District Headquarters in Akhnoor is thickly populated.

Electricity

The areas located nearby the site are fully electrified.

Post office

Post office is also located in the Akhnoor.

Hospitals

Hospital is located at a distance of 5 km from the mining site in the Tehsil Headquarters.

Occupation

The occupation in the village area is mainly agriculture. But in the nearby located Tehsil Headquarters the general standard of people is considerably good.

vii) Public Buildings, Places of Worship and Monuments

There is no any public building, place of worship is located in the area applied for mining lease.

viii) Location of Water sample

One sample was collected from the right bank of Chenab River from the south western extremity of the lease area.

ix) Water Act 1974

The area has not been notified under water (prevention and control of pollution) Act 1974.

B) Impact Assessment Statement

No impact assessment studies are required in the proposed area as per the MOEF guide lines viewing the dimensions of the plot.

i) Impact on Land Environment

Landscape

The applied area is located on the flood plain formed by the Chenab River. The mining activity will be restricted to the surface contours and mining. The temporarily excavated pits shall be restored to its original topography during the flooding caused in the next five years.

S.No	Landscape	Area in Hectares
1.	Quarry	5.23
2.	Infrastructure	0.00
3.	Dumps	0.00
4.	Buffer zone of 7.5 m	1.06
5.	Total	6.29

In next five years of mining degradation of land will be as below

S.No	Landscape	Area in Hectares
1.	Quarry	5.23
2.	Infrastructure	0.00
3.	Dumps	0.00
4.	Buffer zone of 7.5 m	1.06
5.	Total	6.29

The natural slope will be maintained by deposition by the river water.

ii) Aesthetic Environment

There will be no aesthetic environment. As natural slopes degraded shall be restored to its natural position.

iii) Agriculture

No agriculture activity can be performed. As the area applied lies in the flood plain.

iv) Forest

The area is devoid of forest being the flood plain.

v) Impact on Air Quality

The mining activity will be manual. Blasting shall not be required. The river bed material excavated will not involve dust. The air in the area will be fresh thus impact caused on air quality will be amount to negligible quantity.

vi) Impact on Water Quality

The mining activity has been proposed above the water table and no chance of percolating any fine material below ground water level is expected.

vii) Impact on Noise Level

No significant impact on noise level is envisaged. Since the semi mechanized mining is to be done.

viii) Impact on Socio-Economic Environment

In the 5km area of Buffer zone around the applied area no house is to be dislocated. Therefore mining will not involve any displacement of people. Thus no impact on Socio-Economic Environment is apprehended.

ix) Occupation Health Hazards and Safety

Since negligible amount of dust will be produced being the manual mine site. Therefore no occupational health hazards are expected.

C) Environment Management Plan defining Time Bound Action to be Taken in the Following Area

i) Temporary Storage and Utilization of Top Soil

Area under lease is on flood plain of the river and contains no top soil. Thus temporary storage of top soil will not be required.

ii) Programme for Afforestation

The area under lease is devoid of forest. Hence no afforestation will be required. However, in order to improve the environmental and ecological conditions in general plantation programme will be followed during first five years of mining.

iii) Plantation Programme

Plantation programme will be carried out side along the boundary limit of lease area on the left bank of river Chenab.

Year- wise plantation programme for first five years is given as under:

Year	Outside B.L.	Along Road	Along Drain	Around Dump	Total
1st	20	Nil	Nil	Nil	20
2nd	20	Nil	Nil	Nil	20
3rd	20	Nil	Nil	Nil	20
4th	20	Nil	Nil	Nil	20
5th	20	Nil	Nil	Nil	20
Total	100	Nil	Nil	Nil	100

iv) Stabilization and Vegetation of Dump for first five years

There will be no dumps thus stabilization by vegetation is not required.

v) Treatment and Disposal of Water from Mine

Since the mining has been planned above the water table therefore disposal of Water from the mine will not be required.

vi) Measures for minimizing adverse effect on water regime

The mining has been planned on the surface contours and above the water table zone thus no adverse effect is apprehended.

vii) Protective measures for ground vibrations/air blasts caused by blasting

Since blasting is not required thus no ground vibration will occur.

viii) Measures for protecting historic monuments and rehabilitation of human settlements disturbed due to mining

No historic monument is present in the lease area thus no need of protecting such monuments

No human settlements exist in the lease area thus no rehabilitation is required.

ix) Socio-Economic benefit arising out of mining

The people from surrounding areas will get jobs from the mine site.

14 .0 PROGRESSIVE MINE CLOSURE

1.0 Introduction

Name & Address : BALBIR SINGH S/O SH JAGAR SINGH
R/O H.NO. 25-C GANDHI NAGAR, JAMMU

District and State Village Taluka	Village Kathar, Tehsil Akhnoor District Jammu, J&K State
Lease Area	6.29 Hectares
Type of Land	Flood Plain formed by Kathar Khad, State Land

	Particulars	Present Land use(in Hectares)
1.	Pit area	0.5
2.	Dump area	00
3.	Infrastructure	00
4.	Mineral storage	00
5.	Plantation	00
6.	Un worked	5.79
	Total	6.29

Method of Mining

The area will be worked by open cast method. Benches of 0.5 M height will be worked out.

Mineral Processing

1.1 Reasons for Closure

The progressive mine closure plan is submitted under amended rule 23(B MCDR 1988. It is accordingly submitted read with CCOM vide circulars 14/2003 and 19/2003

1.2 Statutory Obligations

No statutory obligation has been applied by any agency, organization or individual.

1.3 Closure Plan Preparation

Name and address : BALBIR SINGH S/O SH JAGAR SINGH
R/O H.NO. 25-C GANDHI NAGAR, JAMMU

Name and address of qualified person And registration Number :
JITENDER PARIMOO
H.NO 197, LANE NO-08, SHAKTI NAGAR, JAMMU, J&K
REGISTRATION NO:
02/DGM/RQP/2016

Name of executing agency : **Lessee himself**

2.0 Mine Description

2.1 Geology

Generally the area falls in Sub Himalayan hills in and forms the flood plain of Chenab River which cut across through the general strike of the Siwalik range are characterized by low ridges and shallow valleys. Gradually the area becomes steeper and narrower in relief towards north and northeast

2.2 Geological Reserves

Area of Minor Mineral Block (in Hectares)	Area of Minor Mineral Block(in Sq/m)	Area of Buffer Zone in Minor Mineral Block (in Sq/m)	Total Reserves(MT)=Area × Depth × Bulk Density(UNFC Code 111) A	Reserves Blocked in Buffer Zone(UNFC Code 211) B	Net Reserves(MT) in the Block A– B(UNFC Code 111)
6.29	62900	10600	3,13,800	63,600	2,50,200

2.3 Mining Method

Mining will be performed by open cast method. Production will commence from first year. Annual rate of production for first five years is as under:

Five year Production

Year	Production (Tones)
1st	52,300
2nd	52,300
3rd	52,300
4th	52,300
5th	52,300

3.0 Review of Implementations of Mining Plan/Scheme including Five Years Progressive Closure Plan

During the first five years the required production will be achieved by working benches between 396 meter RL and 395.5 meter RL.

4.0 Closure Plan

4.1 Mined out Land

During first five years the production will be worked out from the benches 396 meter RL and 395.5 meter RL. The pits excavated will restore to the natural topography during the flood discharge of Chenab River and its dry and perennial tributaries.

4.2 Water Quality Management

There will be negligible impact on the quality of water as the fine material produced during mining activity in the area under lease will be washed away during flood times being a flood plain.

4.3 Air Quality Management

The dust particles produced during movement of vehicular traffic in the lease area shall be managed by sprinkling water. Plantation recommended along the river bank shall also control the dust pollution.

4.4 Waste management

No waste will be generated during mining operation thus management will be required.

4.5 Top Soil Management

There is no soil cover in the lease area being the flood plain.

4.6 Tailing Dam Management

No tailing dam will be required.

4.7 Infra structure

Infrastructure includes site office, Store, First Aid Room, and Labor Shelter. The entire infrastructure is situated on the banks of the Chenab River.

4.8 Disposal of Mining Machinery

The entire machinery will be sold to the interested customer.

4.9 Safety and Security

Watchmen will be engaged for watch and ward of the lease area

4.10 Disaster Management

The mining operation is planned in a flat topography and will not result in any disaster.

4.11 Care and maintenance during temporary discontinuance

The disengagement of staff, and watch and ward will not be made during temporary discontinuance. The better suited remedial measures will be taken.

5.0 Economic Repercussion of Closure of Mine and Man Power Retrenchment

5.1 The retrenchment of manpower will result in economic deprivation of the people engaged in the mining site. The people engaged from the nearby villages will return to their original occupations related to the agriculture.

5.2 No compensation will be required as the trenched employees will take their family occupation.

5.3 No satellite occupations will continue after mine is exhausted.

5.4 Two persons will be continued for maintenance of plantation after the final closure of mine.

5.5 Before the final closure the mining activity will give economic prosperity to the persons engaged. The education standards of the children of the persons involved in the mining activity will be raised.

6.6 Time Scheduling for Abandonment

Summary of Plantation Programme is as under:

Year	No. of Sapling
1st	15
2nd	15
3rd	15
4th	15
5th	15

7.0 ABANDONMENT COST

At present mining is not going to be stopped thus no abandonment can be assessed.

S.No.	Activity	Parameters	Rate	Cost
1	Toe Wall to Soil Dump	0.0 M	Rs 0.0M	0.00
2.	Toe Wall to Waste Dump	0.0 M	Rs 0.0M	0.00
3.	Retaining Wall	0.0 M	Rs 0.0M	0.00
4.	Check Dam	0.0 M	Rs 0.0M	0.00
5.	Garland Drainage	0.0 M	Rs 0.0M	0.00
6.	Smoothening of Road	0.0 M	Rs 0.0M	0.00
7.	Backfilling	0.0 M	Rs 0.0M	0.00
8.	Plantation	50 No	Rs 30/Plant	1500.00
	Total			1500.00

8.0 Financial Assurance

Table Indicating the Break-Up of Areas in the Mining Lease for Calculation of Financial Assurance

S.No	Head	Area put on use at the start of plan (In Ha)	Additional requirement during plan period (In Ha)	Total (In Ha)	Area considered as fully reclaimed & rehabilitated (In Ha)	Net area considered for calculation (In Ha)
1.	Area under mining	0.00	0.00	6.29	0.00	5.23
2.	Storage for top soil	0.00	0.00		0.00	0.00
3.	Overburden dump	0.00	0.00		0.00	0.00

4.	Mineral Storage	0.00	0.00		0.00	0.00
5.	Infrastructure(Workshop, Administrative Building etc	0.00	0.00		0.00	0.00
6.	Roads	0.00	0.00		0.00	0.00
7.	Railways	0.00	0.00		0.00	0.00
8.	Green Belt	0.00	0.00		0.00	0.00
9.	Tailing Pond	0.00	0.00		0.00	0.00
10.	Effluent Treatment Plant	0.00	0.00		0.00	0.00
11.	Mineral Separation Plant	0.00	0.00		0.00	0.00
12.	Township Area	0.00	0.00		0.00	0.00
13.	Others to specify	0.00	0.00	6.29	0.00	0.00
	Grand Total	A	B	C=(A+B)	D	E=(C-D)
		0.00	0.00	6.29	0.00	5.23

Total area expected to get in use in five years = 5.23 Hectares
Rate of Financial Assurance per Hectare = 25,000
Therefore financial assurance for the area under Rule 9 of the J&K Minor Mineral Concession Storage, Transportation and Prevention of Illegal Mining Rules, 2016 = 25000.00
Therefore financial assurance for the area =1,30,750.00

Government of Jammu and Kashmir
Department of Geology and Mining, Jammu

E.mail:- dgmjak@gmail.com

No. 620/MCC/DGM/Block-37/Jmu/17/5895-99
Dated:- 16.12.2017

Sh. Balbir Singh
S/o Sh. Jagar Singh
R/o H.No.25-C, Gandhi Nagar
District, Jammu.

Subject:- Auction of approved Minor Mineral Blocks in District, Jammu and Letter of Intent (LoI) thereof.

Whereas, Auction of approved Minor Mineral Blocks of District, Jammu was conducted by District Auction Committee under the Chairmanship of Dy. Commissioner, Jammu on 9 & 11th of September,2017.

Whereas, in the said auction you have emerged as highest bidder in respect of Minor Mineral Block No-37, Khathar Khad covering an area of **6.29** hectares in District, Jammu.

Whereas, Chairman District Auction Committee (Dy. Commissioner, Jammu) has approved the highest bid amount offered by you to the tune of **Rs. 1.90** lacs i.r.o the said Minor Mineral Block.

Whereas, under Rule 26(2) of the Jammu and Kashmir Minor Mineral Concession, Storage, Transportation of Minerals and Prevention of Illegal Mining Rules, 2016 Mining Plan and Environmental Clearance is mandatory for grant of Mining Lease .

Whereas, the highest bid amount for the said Minor Mineral Block offered by you has been provisionally accepted by the Chairman, District Auction Committee (Dy. Commissioner, Jammu).

Now, therefore in view of the above and as per Rule, **55(9)** of these rules, the Letter of Intent (LoI) is issued with the direction to submit Approved Mining Plan and Environmental Clearance besides, deposition of remaining 50% bid amount within a period of 06 months, enabling this office to grant mining lease in your favour for extraction of minor minerals from the above said block.

16.12.2017
Director
Geology & Mining
J&K Govt; Jammu.
16/12/17

Copy to:-

1. The Commissioner/Secretary to Govt.(I&C) Deptt. Civil Secretariat, Jammu for information.
2. The Dy. Commissioner, Jammu/Chairman District Auction Committee for information. This has reference to his office letter No.DCJ/PS/2017-18/407-411 dated 12.12.2017.
3. The Dy. Director (MS) Geology & Mining Deptt; Jammu for information. This has reference to his office letter No. MSJ/Auction/Jammu/2017-18/1177-78 dated 15.12.2017.
4. The District Mineral Officer, Geology & Mining Deptt; Jammu for information.

CONSENT LETTER FROM APPLICANT

I Balbir Singh S/o Sh. Jagar Singh R/o 25-C, Gandhi Nagar, Jammu hereby authorize Sh. Jitender Parimoo to prepare the Mining Plan including PMCP under sub rule 3 & 4 of Rule 6 of the Jammu & Kashmir Minor Mineral Concession, Storage, Transportation of Mineral and illegal Mining Rules, 2016 in respect of **Minor Mineral Block No- 37, Area 6.29 hectares, Kathar Khad, Akhnoor, District Jammu J&K State.**

I, request the Director Geology & Mining to make further correspondence regarding modification and to collect the approved copies of aforesaid Mining Plan with PMCP with the said recognized person on his following address;

Name of RQP: Sh. Jitender Parimoo
Registration No: 02/DGM/RQP/2016
Validity: 08-11-2026
Address of RQP: H.No 197, Lane No- 08, Shakti Nagar Jammu J&K

(Signature of the Applicant)

UNDERTAKING BY RQP

Government of Jammu and Kashmir
Department of Geology and Mining, Jammu

4th Floor J.L.Nehru Udhyog Bhawan Rail Head Complex, Panama Chowk,Jammu-180006
(Ph/Fax. 0191-2477903)
E.mail:- dgmjak@gmail.com

CERTIFICATE OF RECOGNISATION AS QUALIFIED PERSON

(under Rule 11 of the Jammu and Kashmir Minor Mineral Concession, Storage, Transportation of Minerals and Prevention of Illegal Mining Rules, 2016).

Mr. Jitender Parimoo, Son of Sh. Jawahar Lal Parimoo, Resident of H.No.197, lane No.08, Shakti Nagar, Jammu(J&K) having given satisfactory evidence of qualifications and experience is hereby granted recognition under Rule 11 of the Jammu and Kashmir Minor Mineral Concession, Storage, Transportation of Minerals and Prevention of Illegal Mining Rules, 2016 as a qualified person to prepare Mining Plans/Schemes.

His registration No. is **02/DGM/RQP/2016.**

This recognition is valid for a period of 10 years ending 08.11.2026.

No. 354/MCC/DGM/RQP/16/2992
Dated:- 09.11.2016

09/11/2016
DIRECTOR
Geology & Mining Deptt.
J&K Govt.
Jammu/Srinagar

Director
Geology & Mining
J&K Govt, Jammu.

09/11/2016

I, Jitender Parimoo hereby certify that;

1. The provisions contained in the Jammu & Kashmir Minor Mineral Concession, Storage, Transportation of Mineral and illegal Mining Rules, 2016 have been observed in the scheme including progressive Mine Closure Plan for material over an Area **6.29** hectares of **Minor Mineral Block No- 37, Kathar Khad, Akhnoor , District Jammu J&K State.**
   Where ever specific permission is required the Applicant/ Lessee will approach the concerned authorities for granting the permission.

2. It is also been certified that the provision of Mines Act, Rule and Regulation made their under have been observed in aforesaid Mining Plan including PMCP and wherever specific permissions are required the applicant/Lessee will approach accordingly.

3. It is further certified that the aforesaid Mining Plan including PMCP is prepared as per the copies of records and documents provided by the applicant / Lessee and information as per the discussions held with applicant/ Lessee/ his representative.

It is certified that the information furnished in the aforesaid Mining Plan including PMCP are true and correct to the best my Knowledge & belief

Jitender Parimoo
Registration No: 02/DGM/RQP/2016
Validity: 08-11-2026
Address of RQP: H.No 197, Lane No- 08
Shakti Nagar Jammu J&K