Draft EIA/EMP Report

at

Minor Mineral Quarry Cluster(Masonry Stone) Block At

Khasra no.-2610 Min, Area-5.72Ha. Village-Khanmoh, Tehsil-Panthachowk, District-Srinagar, State-J&K.

Schedule,	J(a)i.
Category	Bl
Landi Plot Areal Revised Area	5.72Ha
Production Capacity	2,00,000MT/annum
ToR LetterNo.	JKEIAA/2021/410/8096-99,Dated 19.06,2023
LabUsed	Ultra Testing & Research Laboratory
Approved By	NABL.
Monitoring Period	Marc:htoMay2023(Summer Season)

Submitted by

Mr. Gh Ahmad Ahanger S/o Ab Rajak Ahanger (Partner:-ManjoorAhmad Bhat S/oMohd Subhan Bhat) Address-Village-Khanmoh, Tehsil-Panthachowck District-Srinagar, State-J&K.

Prepared by

GBUS ENVIRONMENTTM

ENGINEERINGSERVICES ExcellenceinEnvirOmmentalSastamebility

326-AB,3" Floor, Sallora Shopping Center, FaizahadRoad, Lucknow-226016 Contact:0522-4037540, 491-7398540583 Certificate No.NABETIEIA/1821/IA0034, Extension of Va Idiay Till September 29 E021



0191-2474553/0194-2490602 Government of India

Ministry of Environment, Forest & Climate Change

J&K ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

(at) DEPARTMENT OF ECOLOGY, ENVIRONMENT AND REMOTE SENSING

S.D.A. Colony, Bonden, Scienger (2001) (Nor-Col) / Parporenn Blaven, Transport Nager, Chairi, James (2006) (Nor-Apr) Ectal): (Scieng@grand.com, website www.perivesh.cic.m

Shri Ghulam Ahmad Ahangar, S/O Shri Abdul Razak Ahangar, (Partner Shri Manzoor Ahmad Bhat, S/O Shri Mohammad Subhan Bhat), R/O Village Khanmoh, Lasjan. Tehsil South Srinagar. District Srinagar

No.JKEIAA12021/4/0/8091-99

Dated 19 - 06 - 2023

Subject:- Grant of Terms of Reference in favour of Shri Ghulam Ahmad Ahangar, S/O Shri Abdul Razak Ahangar, (Partner Shri Manzoor Ahmad Bhat, S/O Shri Mohammad Subhan Bhat, R/O Village Khanmoh, TehsilPanthachowk, District Srinagar for proposed project Minor Mineral Quarry cluster MasonryStone Block at Khasra No.2610 Min, Area 5.72 Ha. Village Khanmoh, Tehsil Panthachowk, District Srinagar under proposal No.SIA/JK/MIN/57354/2020

Reference:-i) Minutes of the Meeting of JKEAC held on 28th/30th January, 2021 ii) Minutes of the Meeting of JKEIAA held on 18th February, 2021

In pursuance to the Hon'ble National Green Tribunal Order dated 4th/13th September, 2018 & subsequent office Memorandum dated 12th December, 2018 of Ministry, Forest & Climate Change, Government of India, I am directed to advise you to formulate the EIA, EMP & other documents as per check list through NABET Accredited Consultant as per Terms of Reference(TOR) enclosed herewith and get the public hearing conducted for proposed project Minor Mineral Quarry cluster Masonry Stone Block at Khasra No.2810 Min, Area 5.72 Ha. Village Khanmoh, Tehsil Pantha chowk, District Srinagar through J&K Pollution Control Committee. The EIA/EMP, public hearing report & other documents as per Check list are required to be uploaded on www.parivesh.nic.in for further processing at this end.

Further you are advised to inform the Consultant to enrich the EIA report consulting the local stake holder departments.

End:- As Above.

Copy to:-

1. Hon'ble Chairman, JKEIAA for favour of information please.

2. Chairman, J&K Pollution Control Board for favour of information and necessary action pl.

Secretary, JK Expert Appraisal Committee for favour of information

Yours faithfully,

Staff of the Mo

R

STANDARD TERMS OF REFERENCE

- Year-wise production details should be given, clearly stating the highest production achieved in any one year.
- A copy of the document in support of the fact that the Proponent is the rightful lessee of the mine should be given.
- 3) All documents including approved mine plan, EIA and Public Hearing should be compatible with one another in terms of the mine lease area, production levels, waste generation and its management, mining technology etc. and should be in the name of the lessee.
- 4) All corner coordinates of the mine lease area, superimposed on a High Resolution Imagery/ toposheet, topographic sheet, geomorphology and geology of the areas should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).
- 5) Information should be provided on high resolution satellite image on with geological map of the area, geomorphology of land-forms of the area, existing minerals and mining history of the area, important water bodies, streams and rivers and soil characteristics.
- 6) Details about the land proposed for mining activities should be given with information as to whether mining conforms to the land use policy of the State; land diversion for mining should have approval from State land use board or the concerned authority.
- 7) It should be clearly stated whether the proponent Company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be spelt out in the EIA Report with description of the prescribed operating process/procedures to bring into focus any infringement/deviation/violation of the environmental or forest norms/ conditions? The hierarchical system or administrative order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the Company and/or shareholders or stakeholders at large may also be detailed in the EIA Report.
- 8) Issues relating to Mine Safety, including subsidence study in case of underground mining and slope study in case of open cast mining, blasting study etc. should be detailed. The proposed safeguard measures in each case should also be provided.
- 9) The study area will comprise of 10 km zone around the mine lease from lease periphery and the data contained in the EIA such as waste generation etc. should be for the life of the mine / lease period.
- 10) Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
- 11) Details of the land for any Over Burden Dumps outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be given.

- 12) A Certificate from the Competent Authority in the State Forest Department should be provided, confirming the involvement of forest land, if any, in the project area. In the event of any contrary claim by the Project Proponent regarding the status of forests, the site may be inspected by the State Forest Department along with the Regional Office of the Ministry to ascertain the status of forests, based on which, the Certificate in this regard as mentioned above be issued. In all such cases, it would be desirable for representative of the State Forest Department to assist the Expert Appraisal Committee's.
- 13) Status of forestry clearance for the broken-up area and virgin forestland involved in the Project including deposition of net present value (NPV) and compensatory afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished.
- 14) Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated.
- 15) The vegetation in the RF / PF areas in the study area, with necessary details, should be given.
- 16) A study shall be got done to ascertain the impact of the Mining Project on wildlife of the study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly, detailed mitigative measures required, should be worked out with cost implications and submitted.
- 17) Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Ramsar site Tiger/ Elephant Reserves/(existing as well as proposed), if any, within 10 km of the mine lease should be clearly indicated, supported by a location map duly authenticated by Chief Wildlife Warden. Necessary clearance, as may be applicable to such projects due to proximity of the ecologically sensitive areas as mentioned above, should be obtained from the Standing COMMITTEE of National Board of Wildlife and copy furnished.
- 18) A detailed biological study of the study area [core zone and buffer zone (10 km radius of the periphery of the mine lease)] shall be carried out. Details of flora and fauna, endangered, endemic and RET Species duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. In case of any scheduled-I fauna found in the study area, the necessary plan alongwith budgetary provisions for their conservation should be prepared in consultation with State Forest and Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost.
- 19) Proximity to Areas declared as 'Critically Polluted' should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB or State Mining Department should be secured and furnished to the effect that the proposed mining activities could be considered.
- 20) R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need based sample survey, family-wise, should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line-departments of the State Government. It may be clearly brought out whether the village(s) located in



the mine lease area will be shifted or not. The issues relating to shifting of village(s) including their R&R and socio-economic aspects should be discussed in the Report.

- 21) One season (non-monsoon) [i.e. March-May (Summer Season); October-December (post monsoon season); December-February (winter season)] primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the mine lease in the pre-dominant downwind direction. The mineralogical composition of PM10, particularly for free silica, should be given.
- 22) Air quality modelling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of vehicles for transportation of mineral. The details of the model used and input parameters used for modelling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The wind roses showing pre-dominant wind direction may also be indicated on the map.
- 23) The water requirement for the Project, its availability and source should be furnished. A detailed water balance should also be provided. Fresh water requirement for the Project should be indicated.
- 24) Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.
- 25) Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided.
- 26) Impact of the Project on the water quality, both surface and groundwater, should be assessed and necessary safeguard measures, if any required, should be provided.
- 27) Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided. In case the working will intersect groundwater table, a detailed Hydro Geological Study should be undertaken and Report furnished. The Report inter-alia, shall include details of the aquifers present and impact of mining activities on these aquifers. Necessary permission from Central Ground Water Authority for working below ground water and for pumping of ground water should also be obtained and copy furnished.
- 28) Details of any stream, seasonal or otherwise, passing through the lease area and modification / diversion proposed, if any, and the impact of the same on the hydrology should be brought out.
- 29) Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL and bgl. A schematic diagram may also be provided for the same.
- 30) A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the Project. Phase-wise plan of plantation and compensatory afforestation should be charted clearly indicating the area to be covered under plantation and the species to be planted. The details of plantation already

done should be given. The plant species selected for green belt should have greater ecological value and should be of good utility value to the local population with emphasis on local and native species and the species which are tolerant to pollution.

- 31) Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck traffic as a result of the Project in the present road network (including those outside the Project area) should be worked out, indicating whether it is capable of handling the incremental load. Arrangement for improving the infrastructure, if contemplated (including action to be taken by other agencies such as State Government) should be covered. Project Proponent shall conduct Impact of Transportation study as per Indian Road Congress Guidelines.
- 32) Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report.
- 33) Conceptual post mining land use and Reclamation and Restoration of mined out areas (with plans and with adequate number of sections) should be given in the EIA report.
- 34) Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed.
- 35) Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.
- 36) Measures of socio-economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.
- 37) Detailed environmental management plan (EMP) to mitigate the environmental impacts which, should inter-alia include the impacts of change of land use, loss of agricultural and grazing land, if any, occupational health impacts besides other impacts specific to the proposed Project.
- 38) Public Hearing points raised and commitment of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project.
- 39) Details of litigation pending against the project, if any, with direction-/order passed by any Court of Law against the Project should be given.
- 40) The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.
- A Disaster management Plan shall be prepared and included in the EIA/EMP Report.
- 42) Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.
- 43) Besides the above, the below mentioned general points are also to be followed:

- a) Executive Summary of the EIA/EMP Report
- b) All documents to be properly referenced with index and continuous page numbering.
- c) Where data are presented in the Report especially in Tables, the period in which the data were collected and the sources should be indicated.
- d) Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc. using the MoEF & CC/NABL accredited laboratories. All the original analysis/testing reports should be available during appraisal of the Project.
- e) Where the documents provided are in a language other than English, an English translation should be provided.
- f) The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall also be filled and submitted.
- g) While preparing the EIA report, the instructions for the Proponents and instructions for the Consultants issued by MoEF&CC vide O.M. No. J-11013/41/2006-IA.II(I) dated 4th August, 2009, which are available on the website of this Ministry, should be followed.
- h) Changes, if any made in the basic scope and project parameters (as submitted in Form- I and the PFR for securing the TOR) should be brought to the attention of MoEF&CC with reasons for such changes and permission should be sought, as the TOR may also have to be altered. Post Public Hearing changes in structure and content of the draft EIA/EMP (other than modifications arising out of the P.H. process) will entail conducting the PH again with the revised documentation.
- i) As per the circular no. J-11011/618/2010-IA.II(I) dated 30.5.2012, certified report of the status of compliance of the conditions stipulated in the environment clearance for the existing operations of the project, should be obtained from the Regional Office of Ministry of Environment, Forest and Climate Change, as may be applicable.
- j) The EIA report should also include (i) surface plan of the area indicating contours of main topographic features, drainage and mining area measurements, (ii) geological maps and sections and (iii) sections of the mine pit and external dumps, if any, clearly showing the land features of the adjoining area.

SPECIFIC TERMS OF REFERENCE

- Impact of mining activity on adjacent agricultural land with particular reference to run off, soil
 crosion and top-soil loss due to change in topography.
- 2. Details of Gradient of area and 3-D view draped on the satellite image
- 3. Details of excavation schedule & sequential mining plan with a maximum mine depth
- Details of transportation of mined out materials with respect to axle load specified for the road as per the Indian Road congress for both the ways (loaded as well as unloaded trucks) load and its impact on the environment.
- 5. Impact on mining activity on the existing land use in the study area.
- NOCs from HoD/competent authority of Wildlife Protection Department and Disaster Management Department should be obtained and submitted while applying for EC.

- A digitalised surface plan showing coordinates, physical measurements, gradient and inter-cross sections at different intervals should be a mandatory part of mining plan
- 8. The Photography and videography of the mining site shall be part of the Terms of Reference.
- 9. The maps shall be submitted on a scale of 1: 3000 and 1: 1500 within 10 kms. Radius
- 10. The shortest extraction route leading to the main road but with minimum interference with human settlements should be identified and described in detail. This along with the map and its KML file be part of an exclusive chapter in the EMP
- 11. Dust suppression measures should be prescribed in the EIA/EMP.
- 12. Post project monitoring plan should be included in the study.
- Occupational health impacts should be assessed and plan for implementation of COVID-19 SOPs in the mining activity should be detailed.
- 14. The Consultant while presenting field data in the EIA report, should ensure that the site-specific date-wise datasheets duly attested by the local panchayat head with his name, signatures and stamp and attested by District Mineral Officer with seal and signature are included in the EIA report.
- 15. The impact of mining activity on the neighbouring villages need to be studied and extraction road need to be such that it has least crossing through village settlements.
- 16. The data displayed on air quality monitoring stations should be captured with digital camera displaying the date on the photograph so captured and same should be submitted in support of the date-wise data sheets. These digital photographs should be submitted in soft as well as appended with the EIA report.
- 17. Mining shall be proposed manually minimally supported by semi-mechanized methods.
- 18. Impact of stone quarrying on the human settlements in the vicinity should be assessed in detail.
- Impact on human health and bovine population in the vicinity should be assessed and mitigative plans proposed.
- The prescribed TORs would be valid for a period of four years for submission of the EIA/EMP reports, as per the S.O. No. 751(E) dated 17th of Feb., 2020.

Besides, the TORs are recommended without prejudice to the standing court orders, if any, w.r.t the concerned mining project or final outcome of writ petitions/LPAs pending disposal before any competent court of law w.r.t the concerned mining block.



Project: Minor Mineral Quarry Cluster (Idasonry Stone) Block Project Proponent: Mr. Gh Ahmad Ahanger & Manjoor Ahmad Bhat Khasra Na: 2610 Min, Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachowk

District: Srinagar, State: J & K.

Draft ELA Report

TOR Compliance

Point Wise Compliance of Terms of References (TOR) issued by JKEIAA.

S. No.	Standard TOR Points	Compliances	Citation
1.	Year-wise production details since 1994 should be given, clearly stating the highest production achieved in any one year prior to 1994. It may also be categorically informed whether there had been any increase in production after the EIA Notification 1994 came into force w.r.t. the highest production achieve prior to 1994.	This is a new mine having lease area 5.72 Ha. and the proposed production is strictly as per LOI and Approved Mining Plan having annual production 2,00,000MT/annum (Average Annual Production).	LOI is as enclosed as Annexure I & Approval Mining Plan is enclosed as Annexure V.
2.	A copy of document in support of the fact that the proponent is the rightful lessee of the mine should be given.	The documentary support for the rightful lessee of the mine is provided along with the LOL	Annexure-1
3.	All documents including approved mine plan, EIA and Public Hearing should be compatible with one another in terms of the mine lease area, production levels, waste generation, and its management, mining technology etc. and should be in the name of lessee.	The EIA/EMP report is compatible with the Approved Mine Plan in terms of the mine lease area, production levels, waste generation and its management and mining technology. The mine plan is approved by Department of Geology and Mining. J&K.	Approval Mining Plan is enclosed as Annexure V.
4.	All corner coordinates of the mine lease area, superimposed on a High Resolution Imagery/toposheet, topographic sheet. Geomorphology and geology of the area should be provided. Such an image of the proposed area should clearly show the land use and other ecological feature of the study area (core and buffer zone).		Chapter-2 & 3
5.	Information should be provided on high resolution satellite image on with geological map of the area, geomorphology of Land-forms of the area, existing minerals and mining history of the area, important water bodies, streams and rivers and soil characteristics.	Satellite imagery of 10 km radius buffer zone showing the general feature around the project site is attached in chapter 2	
6.	Details about the land proposed for the mining activities should be given with information as to whether mining conforms to the land use policy of the state; land diversion for mining should have approval from state Land use Boards or the concerned authority.	The individual quarries falling in area ancestral occupied and certified by the revenue authority are to be chibbed and declared as chister quarries for grant of quarry license under J&K. Mineral Concession Rule 1962. There is no land diversion, land is approved for mining activity from Department of Geology And	- 65

Project: Minor Mineral Quarry Cluster (Idasonry Stone) Block Project Proponent: Mr. Gh Ahmad Ahanger & Manjoor Ahmad Bhat Khasra Na: 2610 Min, Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachank

District: Srinagar, State: J & K.

	CONTROLINA NA GIR-NAMA MANA LAY	Mining, J&K	
7.	It should be clearly stated whether the proponent company had a well laid down environmental Policy approved by its Boards of Directors? If so, it may be spelt out in the EIA report with description of the prescribed operating process/procedures to bring into focus any infringement /deviation/violation of the environmental or forest norm/condition? The hierarchical system or administrative order of the company to deal with environmental issue and for ensuring compliance with the EC condition may also be given. The system of reporting of non-compliances/violations of Environmental norms to the Board of Directors of the company and /or shareholders or stakeholders at large may also be detailed in the EIA Report.	The standard operating procedures are maintained to deal with any deviation/violation of any type of environmental norms/conditions and their rectification for ensuring the compliance. The Policy contains the hierarchical system of the company to deal with the environmental issues and for ensuring the compliance with EC conditions. All the non-compliances/violations of environmental laws will deal with as per management system. The Lessee and its group will create a documented system of Environmental Management Cell. A proper reporting mechanism will be implemented.	
8.	Issues relating to mine Safety, including subsidence study in case of underground mining and slope study in case of open cast mining, blasting study etc., should be detailed. The proposed safeguard measures in each case should also be provided.	It is open cast mining. The various issues related to mine safety are: • Mining involves the generation of dust due to excavation, loading and transportation of mineral at site, dust is main pollutant which affects the health of workers and also deteriorates the environmental and climatic conditions which leads to generate the health problems. • Main hazards identified are as accident during drilling, blasting, mine collapse due to slope failure & accident due to vehicular movement. The proposed safeguards measures will be as follows: • The height of bench will be kept 6 with face slopes 45° to avoid unlikely impacts like mine collapse and mine failure. Drilling shall be carried out with 54mm diameter hammers. • The mine management will have list of mine rescue equipment available on site & proper communication system for quick communication with nearest hospitals where the complicated cases are to be sent. The mine management will have first aid facilities for use in emergency situation. All incidents/accidents would be registered and will	

Project: Minor Mineral Quarry Cluster (Masonry Stone) Block Project Proponent: Mr. Gh Ahmad Ahanger & Manjoor Ahmad Bhat Khasra No: 2610 Min, Area: 5.72 Ha, Village: Khanmah, Tehsil: Panthachank District: Srinagar, State: J & K.

		be given first aid and if required will be referred to nearest hospital at Primary health centre khonmoh.	
9.	The study area will comprise of 10 km zone around the mine lease from lease periphery and the data contained in the EIA such as waste generation etc. should be for the life of mine/lease period.	Study area comprises of 10 Km radius around the mine lease boundary. Map showing 10 Km radius of the Mining Lease area has been furnished in the EIA report, Chapter-2, Figure 2.3 There is no generation of Over burden/waste material All the mined out minerals will be directly send to the crushing plant for resizing of the stone as per the market demands.	Chapter-2
10.	Land use of the study area delineating forest area, agricultural land grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological feature should be indicated. Land use plan of the mine lease area should be prepared to encompass, preoperational and post operational phases and submitted. Impact, if any, of change of land use should be given.	Land use of the study area delineating forest area, agricultural land grazing land, water bodies, human settlements and other ecological feature etc. is incorporated in chapter 3. Land use map is attached as Figure 3.1: Land Use/Land Cover Map of the study	Chapter-3 Figure 3.1
11.	Details of the land for any Over Burden Dumps outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be given.	Not Applicable, as no any Over Burden is generated from the mine, all the quarried stones will be sending to crushing unit and consumers directly for the resizing of the mineral.	**
12.	A certificate from the Competent Authority in the State Forest Department should be provided, confirming the involvement of forest land, if any, in the project area. In the event of any contrary claim by the Project Proponent regarding the status of forests, the site may be inspected by the State Forest Department along with the Regional Office of the Ministry to ascertain the status of forest, based on which, the Certificate in this regard as mentioned above be issued. In all such cases, it would be desirable for representative of the State Forest Department to assist the Expert Appraisal Committees.	The Mining Lease area does not involve any forest land. Dachigam National Park lies in the buffer zone (10 km radius) of the project.	7
13.	Status of forestry clearance for the broken up area and virgin forest land involved in the Project including deposition of net present value (NPV) and compensatory afforestation (CA) should be indicated. A copy of the forestry clearance should be furnished.	Not applicable, as mining does not carried out in any forest land.	- an
14.	Implementation status of recognition of forest right under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of the	Not Applicable, as the individual quarries falling in areas ancestral occupied and certified by the revenue authority are to be clubbed and declared	

Project: Minor Mineral Quarry Cluster (Masonry Stone) Block Project Proponent: Mr. Gh Ahmad Ahanger & Manjoor Ahmad Bhat Khasra No: 2610 Min, Area: 5.72 Ha, Village: Khanmah, Tehsil: Panthachank District: Srinagar, State: J & K.

	Forest Rights) Act, 2006 should be indicated.	as cluster quarries for grant of quarry license under J&K Mineral Concession Rule 1962.	
15.	The vegetation in the RF/PF areas in the study area, with necessary details, should be given.	The RF/PF found in the study area is Demarcated Forest, 2.0 Km toward East direction.	Chapter-2
16.	A study shall be got done to ascertain the impact of the mining Project on wildlife of the Study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly, detailed mitigative measure required, should be worked out with cost implications and submitted.	There will be no impact is envisaged of the Mining Project on the wildlife of the study area. (Dachigam National Park, 2.3 Km, North (aerial distance) and Demarcated Forest, 2.0 Km E) All the safety measures will be taken and detailed study regarding the flora and fauna has been done and reported in the EIA report.	Chapter -4
17.	Location of National Parks, Sanctuaries, Biosphere Reserve, Wildlife Corridors, Ramsar site Tiger/Elephant Reserve/ (existing as well as proposed), if any, within 10 km of the mine lease should be clearly indicated, supported by the location map duly authenticated by Chief Wildlife Warden. Necessary clearance, as may be applicable to such projects due to proximity of the ecological sensitive areas as mentioned above, should be obtained from the standing Committee of National Board of Wildlife and copy furnished.	Dachigam National Park, 2.3 Km, North (aerial distance) of the project site.	
18.	A detailed biological study of the area {core zone and buffer zone (10 km radius of the periphery of the mine lease)} shall be carried out. Details of flora and fauna, endangered, endemic and RET Species duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the schedule of the fauna present. In case of any scheduled-I fauna found in the study area, the necessary plan along with budgetary provision for their conservation should be prepared in consultation with State Forest and Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost.	On the basis of field survey carried out for detailed biological study of flora and fauna, separately for core and buffer zone, with their respective schedule is furnished in Chapter 3 and it is duly authenticated by the support of secondary data.	Chapter -3
19.	Proximity to Areas declared as "Critically Polluted" or the Project areas likely to come under the "Aravali Range", (attracting court restrictions for mining operations), should also be indicated and where so required, clearance certification from the prescribed Authorities, such as the SPCB or State Mining Department should be secured and furnished to the effect that the proposed mining activities could be	Not Applicable.	

Project: Minor Minoral Quarry Cluster (Masonry Stone) Block Project Proponent: Mr. Gh Ahmad Ahanger & Manjoor Ahmad Bhat Khasra No: 2610 Min, Area: 5.72 Ha, Village: Khanmah, Tehsil: Panthachonk District: Srinagar, State: J & K.

	considered.		
20.	R&R Plan/Compensation details for the Project Affected People (PAP) should be furnished, while preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs/STs and other weaker section of the society in the study area, a need based sample survey, family-wise should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the village(s) located in the mine lease area will be shifted or not. The issue relating to shifting of village(s) including their R&R and socio-economic aspect should be discussed in the report.	Not Applicable, as the individual quarries falling in areas ancestral occupied and certified by the revenue authority are to be clubbed and declared as cluster quarries for grant of quarry license under J&K Mineral Concession Rule 1962.	
21.	One season (non-monsoon) (i.e. March-May(Summer Season); October-December(post monsoon season); December-February (winter season)) primary baseline data on ambient air quality as per CPCB notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also be collected. The location of the monitoring station should be as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the mine lease in the pre-dominant downwind direction. The mineralogical composition of PM ₁₀ , particularly for free silica, should be given.	 Primary baseline data for Ambient Air Quality (PM10, PM2.5, SO2 and NOx), Water Quality, Noise level, Soil has been conducted during March to May 2023 (Summer Season) and Survey of flora and fauna is also conducted in the same season. The site-specific meteorological data and location of proposed monitoring stations are detailed in Chapter- 3. 	Chapter-3
22.	Air quality modelling should be carried out for the prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of vehicle for transportation of mineral. The details of the model used and input parameters used for the modelling should be provided. The air quality contour may be shown on a location map clearly indicating the location if the site, location of the sensitive receptors, if any, and the habitation. The wind roses showing pre-dominant wind direction may also be indicated on the map.	 Air quality modelling has been prepared for prediction of impact of the project. Windrose diagram, showing the prominent wind direction is provided in the EIA Chapter- 3. 	Chapter-3

Project: Minor Mineral Quarry Cluster (Masonry Stone) Block Project Proponent: Mr. Gh Ahmad Ahanger & Manjoor Ahmad Bhat Khasra No: 2610 Min, Area: 5.72 Ha, Village: Khanmah, Tehsil: Panthachank District: Srinagar, State: J & K.

4 4 1	The water requirement for the project, its availability and source should be furnished. A detailed water balance should also be provided. Fresh water requirement for the project should be indicated.	on hired basis from local nearby village. Water requirement calculation is below:				Chapter-2
				Detail	Avg. Demand /Day	
		Portable Tankers	Drinking @15lpcd/wo rker	34 workers x 15 lpcd = 510 Lit/day	0.510 KLD	
			Land reclamation / plantation @5 Lit/Tree (@ 100 trees/Ha)	570 Trees x 51/day - 2850 Lit/day	2.85 KLD	
			Mine Operation	* *** *****	1.0 KLD	
			Dust suppression @1 Lit/Sq.m	Haul Road Area = (810 m Length x 7m Width = 5670 m x 1 lit/Sq.m = 5670 Lit/day	5.67 KLD	
		Total 10.03KLD				
24.	Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the project should be provided.	water fro	icable, There on m ground som by villages thre	rces, Water w	thdrawal of	277.5
25.	Description of water conservation measures proposed to be adopted in the project should be given. Details of Rain water harvesting proposed in the project, if any, should be provided.	Not appli dry processing as Artificial proposed Stone Mi act as re- conceptu- Due to the Measures	cable as the mi- ess, therefore vi- ctivity rainwater la for this project. In ning Project. In nin water harval stage, e absence of stages is not possible	ning of mason water is not r sarvesting is t because it is a this Mining, esting pit at metures and de to apply.	also not a Masonry Pits will be the end of numps RWH	
26.	The Impact of the project on the water quality, both surface and ground water should be assessed and necessary safeguard measure, if any required, should be provided.	Possible measures • Water activity	environmental are provided in table is not in y; therefore m d Water will be	impact and the EIA Repo intersected due o anticipated	ort. e to mining Impact on	

Project: Minor Mineral Quarry Cluster (Masonry Stone) Block Project Proponent: Mr. Gh Ahmad Ahanger & Manjoor Ahmad Bhat Khasra No: 2610 Min, Area: 5.72 Ha, Village: Khanmah, Tehsil: Panthachank District: Srinagar, State: J & K.

		zone of the project	oody lies within 500 m core site therefore no anticipated Water will be envisaged due	
27.	Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided. In case the working will intersect ground water table. A detailed hydrogeological study should be undertaken and report furnished. The report interalia shall include details of the aquifers present and impact of mining activities on these aquifers. Necessary permission from CGWA for working below ground water and for pumping of ground water should also be obtained and copy furnished.	mining plan by the Geology and Mining average depth of mini-	according to the approved be Director, Department of g. J&K. The ultimate pit ing will be restricted upto the no intersection of ground	
28.	Details of any stream, seasonal or otherwise, passing through the lease area and modification/ diversion proposed if any, and the impact of the same on the hydrology should be brought out.	There is no stream modification/ diversion proposed in the lease area. No water body is passing through the lease area.		-
29.	Information on site elevation, working depth, groundwater table etc. should be provided both in AMSL and bgl. A schematic diagram may also be provided for the same.	Site Elevation	Highest RL – 1875mRL Lowest RL –1737 mRL	Annexure-
		Working Depth	8-12 m(average depth)	
		Ground water level	1.50 – 2.50 mbgl	
		provided in the mine	eological section have been plan and approved by the y and Mining Department,	
30.	A time bound progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the Project. Phase-wise plan of plantation and compensatory afforestation should be charted clearly indicating the area to be covered under plantation and the species to be planted. The details of plantation already done should be given. The plant species selected for green belt should have greater ecological value and should be of good utility value to the local population.	along the road side a	lone as per Programme i.e. and near civic amenities in al Bodies as it is not feasible ine lease area.	Chapter-10

Project: Minor Mineral Quarry Cluster (Idasonry Stone) Block Project Proponent: Mr. Gh Ahmad Ahanger & Manjoor Ahmad Bhat Khasra Na: 2610 Min, Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachowk

District: Srinagar, State: J & K.

	with emphasis on local and native species and species which are tolerant to pollution.		
31.	Impact on local transport infrastructure due to the project should be indicated. Projected increase in track traffic as a result of project in the present road network (including those outside the Project area) should be worked out, indicating whether it is capable of handling the incremental load. Arrangement for improving the infrastructure, if contemplated (including action to be taken by other agencies such as State Government) should be covered. Project Proponent shall conduct impact of transportation study as per Indian Road Congress Guidelines.	The proposed project will slightly increase the vehicular movement per day which increase the load on the local transport infrastructure. The mined materials will be transported outside the mine lease area by trucks and dumpers. As 666.66 MT per day Minor Mineral Quarry Cluster (Masonry Stone) will be mined. (Assuming Loading capacity: 10 tons/truck). Therefore, there will be an increase in 66 Units per day. The arrangements which can be done to improve the local transport infrastructure are: Local transportation route will be upgraded and maintained to bear the incremental load of the traffic. Speed limits will be maintained through providing signage and symbols. Overloading off the vehicles will not be allowed.	Chapter-4
32.	Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report.	Maximum mine workers will be deployed from nearby villages. Necessary infrastructure facilities will be provided to the Mine workers as per Mines Acts & Rules. 1. Rest Shelter, drinking water facilities, Mobile toilets, first aid facilities & regular medical check-up etc. 2. Personal protective equipment such as ear muffs/ ear plug, gloves, safety shoes, protective goggles and helmet etc. will be provided to the workers to ensure their safety.	Chapter-2
33.	Conceptual post mining land use and Reclamation and Restoration of mined out area (with plans and with adequate number of sections) should be given in the EIA report.	The conceptual post mining land use, reclamation and rehabilitation of the mined out area will not be prepared at this stage. At the end of the mining lease period, it is proposed to be converted into pond to recharge the ground water with a barrier and thick plantation along the walls of the mining lease area.	-
34.	Occupational health implication of the Project should be anticipated, and the proposed preventive measure spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific	As per the guidelines of the Mines Act, the Lease holders will take all necessary precautions. Details are provided in the EIA report.	Chapter-4

Project: Minor Minoral Quarry Cluster (Masonry Stone) Block Project Proponent: Mr. Gh Ahmad Ahanger & Manjoor Ahmad Bhat Khasra No: 2610 Min, Area: 5.72 Ha, Village: Khanmah, Tehsil: Panthachonk District: Srinagar, State: J & K.

	occupational health mitigation measure with required facilities proposed in the mining area may be detailed.		
35,	Public health implication of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measure should be detailed along with budgetary allocations.	There will be an increase in the concentration of PM10 and PM 2.5 due to the on-going mining activities in the nearby mining area. This will create health hazards like respiratory problems, skin infections, eye problems etc. Factors responsible for increase of PM10 and PM 2.5 • The increase value PM10 and PM 2.5 is due to air bome emission due to mining operation. • The increase value PM10 and PM 2.5 is also due to transportation of masonary stone on transportation route and loading points. Remedial measures for PM10 and PM 2.5 • Water will be used for the dust suppression to minimize fugitive dust emission due to mining operation on transportation routes and loading points. • Plantation of saplings along the road. Budgetary allocations are present in Chapter-8	
36.	Measure of socio-economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frame for implementation.	As there is no displacement or land acquisition. So there will be no direct impact on the local population. The impact will be mostly positive in terms of employment generation.	Chapter-8
37.	Detailed environmental management plan (EMP) to mitigate the environmental impact which should inter-alia include the impact of change of land use, loss of agricultural and grazing land, if any, occupational health impacts besides other impacts specific to the proposed Project.	Detailed of environment management plan discussed in the EIA report. There will be no impact related to land-use as the project is Minor Mineral Quarry Cluster (Masonry Stone) Block Mining. Other impacts specific to the project are discussed in the report.	Chapter-10
38.	Public hearing points raised and commitment of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project.	Details of Public hearing will be incorporated in the Final EIA report, Chapter 7.	•
39.	Details of litigation pending against the project,	There is no litigation pending against the project.	**
	if any, with direction/order passed by any court of Law against the Project should be given.		

Project: Minor Minoral Quarry Cluster (Masonry Stone) Block Project Proponent: Mr. Gh Ahmad Ahanger & Manjoor Ahmad Bhat Khasra No: 2610 Min, Area: 5.72 Ha, Village: Khanmah, Tehsil: Panthachonk District: Srinagar, State: J & K.

	cost) as well as the cost towards implementation of EMP should be clearly spelt out.	EMP cost is 28.11 Lakhs	
11.	A Disaster Management Plan shall be prepared	The break- up is given in the EIA Report. Details are mentioned in Chapter 7	Chapter-7
12.	and included in the EIA/EMP Reports. Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicated environmental, social, economic, employment potential, etc.	Details in provided in Chapter-8.	Chapter-8
43.	Besides the above, the below mentioned general points are also to be followed- a. Executive summary of the EIA/EMP Report. b. All documents to be properly referenced with index and continuous page	Noted & Complied. Executive summary of the EIA/EMP Report has been attached with the report. All documents are properly referenced with index and continuous page numbering.	
	c. Where data are presented in the Report especially in Tables, the period in which the data were collected and the source should be indicated.	Data and report are properly presented and sources are indicated.	
	d. Project Proponent shall enclose all the analysis/testing report of water, air, soil, noise etc. using the MoEF&CC/NABL accredited laboratories. All the original analysis/testing reports should be available during appraisal of the projects.	All the original analysis/testing reports should be available during appraisal of the projects approved by NABL Accredited labs.	
	 e. Where the documents provided are in a language other than English, an English translation should be provided. 	EIA Report is provided in English Language.	
	f. The questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall also be filled and submitted.	Enclosed	
	g. While preparing the EIA report, the instructions for the Proponents and instruction for the Consultant issued by MoEF&CC vide O.M.No.J- 1101498/41/2006-IA.II (I) dated 4th August, 2009, which are available on the website of this Ministry, should be followed.	During preparation of the ElA report, the instructions of MoEF&CC has been followed.	
	h. Changes, if any made in the basic scope	Complied	

Project: Minor Mineral Quarry Cluster (Idasonry Stone) Block Project Proponent: Mr. Gh Ahmad Ahanger & Manjoor Ahmad Bhat Khasra No: 2610 Min, Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachank

District: Srinagar, State: J & K.

			1.7
	and project parameters, (as submitted in Form-1 and the PFR for securing the TOR) should be brought to the attention of MoEF&CC with reasons for such change and permission should be sought, as the TOR may have also to be altered. Post Public hearing changes in structure and content of the draft EIA/EMP (other than modification arising out of the P.H. process) will entail conducting the PH again with the revised documentation. i. As per the circular no. J-11011/618/2010-IA.II(I) dated 30.5.2012, certified report of the status of the Compliance of the conditions stipulated in the environment clearance for the existing operation of the project, should be obtained from the Regional Office of Ministry of Environment, Forest and Climate Change, as may be applicable. j. The EIA report should also include: (i) Surface plan of the area indicating contours of main topographic features, drainage and mining area, (ii) geological map and sections and (iii) section of the mine pit and external dumps, if any, clearly showing the land features of the adjoining area.	Not Applicable Included In The Mining Plan	Annexure-5
S. No	Specific TOR Points	Compliances	Citation
1	Impact of mining activity on adjacent agricultural land with particular reference to run off, soil erosion and top-soil loss due to change in topography.	There is no agricultural land adjacent to the mine site but the precautions have been taken with particular reference to run off, soil erosion and top-soil loss due to change in topography. To minimize the surface run off garland drains are proposed with silting tank at the bottom are of the mine lease.	Chapter-4
2.	Details of Gradient of area and 3-D view draped on the satellite image	500m core zone radius detailed satellite imagery is attached within the EIA report	Chapter -2
3.	Details of excavation schedule & sequential mining plan with a maximum mine depth	Mining will be done by opencast semi- mechanized method. Approved mining plan has been attached as Annexure.	Annexure -
4.	Details of transportation of mined out materials with respect to axle load specified for the road as	Traffic study has been done as per the Indian Road congress & given in Chapter 4.	

Project: Minor Mineral Quarry Cluster (Idasonry Stone) Block Project Proponent: Mr. Gh Ahmad Ahanger & Manjoor Ahmad Bhat Khasra Na: 2610 Min, Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachank

District: Srinagar, State: J & K.

	per the Indian Road congress for both the ways (loaded as well as unloaded trucks) load and its impact on the environment.		
5.	Impact on mining activity on the existing land use in the study area.	The proposed mine is ancestral occupied area for the mining activity.	
6.	NOCs from HoD/competent authority of Wildlife Protection Department and Disaster Management Department should be obtained and submitted while applying for EC.	Noted	
7.	A digitalised surface plan showing coordinates, physical measurements, gradient and inter-cross sections at different intervals should be a mandatory part of mining plan	Digitalised surface plan is Attached in Approved mining plan as Annexure-V	Annexure 5
8.	The Photography and videography of the mining site shall be part of the Terms of Reference.	Noted and it will be presented at the time of Final EAC Meeting.	
9.	The maps shall be submitted on a scale of 1: 3000 and 1: 1500 within 10 kms. Radius	Incorporated in Chapter -2.	(-)
10.	The shortest extraction route leading to the main road but with minimum interference with human settlements should be identified and described in detail. This along with the map and its KML file be part of an exclusive chapter in the EMP.	Transportation Route and other related details are detailed in Chapter 2.	Chapter -2
11.	Dust suppression measures should be prescribed in the EIA/EMP.	Water sprinkling will be done on regular basis to transportation route. Beside this plantation will also be done along the transportation route.	Call.
12.	Post project monitoring plan should be included in the study.	Has been included in Chapter 6.	(4)
13.	Occupational health impacts should be assessed and plan for implementation of COVID-19 SOPs in the mining activity should be detailed.	Occupational health impacts and plan for implementation of COVID-19 SOPs in the mining activity are detailed in chapter 4.	Chapter 4 &
14.	The Consultant while presenting field data in the EIA report should ensure that the site- specific date-wise datasheets duly attested by the local panchayat head with his name, signatures and stamp and attested by District Mineral Officer with seal and signature are included in the EIA report.	Noted.	3.63
15.	The impact of mining activity on the neighbouring villages need to be studied and extraction road need to be such that it has least crossing through village settlements.	The Loading and unloading/transportation of the material will be far away from the nearby habitation and for this traffic study has been done as per the Indian Road congress. Has been given in Chapter 4	
16.	The data displayed on air quality monitoring stations should be captured with digital camera	Complied.	15%

Project: Minor Mineral Quarry Cluster (Masonry Stone) Block Project Proponent: Mr. Gh Ahmad Ahanger & Manjoor Ahmad Bhat Khasra No: 2610 Min, Area: 5.72 Ha, Village: Khanmah, Tehsil: Panthachank District: Srinagar, State: J & K.

	displaying the date on the photograph so captured and same should be submitted in support of the date-wise data sheets. These digital photographs should be submitted in soft as well as appended with the EIA report.		
17.	Mining shall be proposed manually minimally supported by semi-mechanized methods.	Mining will be carried out manually and minimally supported by semi-mechanized methods.	9-83
18.	Impact of stone quarrying on the human settlements in the vicinity should be assessed in detail.	There will be no impact related to land-use as the project is Minor mineral quarry mining. Other impacts specific to the project are discussed in the report.	
19.	Impact on human health and bovine population in the vicinity should be assessed and mitigative plans proposed.	Health, Safety and Environment Policy is described in Chapter 10	*
20.	The prescribed TORS would be valid for a period of four years for submission of the EIMEMP reports, as per the S.O. No 751(E) dated 17th of Feb., 2020.	Noted and agreed.	546

DRAFT EIA REPORT

of

Minor Mineral Quarry Cluster (Masonry Stone) Block At

Khasra no.- 2610 Min, Area- 5.72 Ha. Village- Khanmoh, Tehsil- Panthachowk, District- Srinagar, State- J&K.

Schedule,	1(a) t,
Category	B1
Land/Plot Area/Revised Area	5.72 Ha
Production Capacity	2,00,000 MT/ annum
ToR Letter No.	JKEIAA/2021/410/8096-99, Dated 19.06.2023
Lab Used	Ultra Testing & Research Laboratory
Approved By	NABL
Monitoring Period	March to May 2023(Summer Season)

Submitted by

Mr. Gh Ahmad Ahanger S/o Ab Rajak Ahanger (Partner:- Manjoor Ahmad Bhat S/o Mohd Subhan Bhat) Address-Village-Khanmoh, Tehsil- Panthachowk District- Srinagar, State- J&K.

Environment Consultant



326-AB, 3rd Floor, Sahara Shopping Center, Faizabad Road, Lucknow-226016 Contact: 0522-4037540, +91-7398540583 Certificate No. NABET/EIA/2124/RA0245, Valid Till August 24/2024

CHAPTER: 1

INTRODUCTION

S.NO	CONTENTS	PAGE NO
113500-	CHAPTER 1: INTRODUCTION	1/1-1/19
1.1	PURPOSE OF THE REPORT	
1.2	IDENTIFICATION OF PROJECT PROPONENT	
1.3	BRIEF DESCRIPTION OF PROJECT	
1.4	REGULATORY COMPLIANCES & APPLICABLE LAWS/REGULATIONS	
1.5	ENVIRONMENT CLEARANCE OR EIA PROCESS FOR THIS PROJECT	
1.6	SCOPE OF THE STUDY	
1.7	EIA FRAMEWORK	

Project: Minor Mineral Quarry Cluster (Masonry Stone) Block
Project Proponent: Mr. Gh Ahmad Ahmager & Manioor Ahmad Bhat

Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachowk District: Srinagar, State: J & K. Draft ELA Report

CHAPTER-1 INTRODUCTION

1.1 PURPOSE OF THE REPORT

The purpose of Environment Impact Assessment is to give the environment its due place in the decision making process by clearly evaluating the environmental consequences of the proposed activity before action is taken. Early identification and characterization of critical environmental impacts allows the public and the government to form a view about the environmental acceptability of a proposed developmental project and what conditions should apply to mitigate or reduce those risks and impacts.

The sole purpose of Environment Impact Assessment report is to assess impacts of project on the physical, natural & social (socio-economic) environment including the people. Probable effects of the activities both negative & positive are identified and assessed for facilitating decision making.

Environment Clearance is statutory requirement for all the "B1" category mining projects for which EIA/EMP has to be prepared and submitted to State Expert Appraisal Committee (SEAC) for granting environment clearance.

EIA is also necessary to develop the said mines for sustainable growth with respects to Mineral exploitation, social status and conserving the environment aspects of surroundings.

An Environmental Impact Assessment report is prepared to comply with the Terms of Reference (TOR) received under EIA notification of the MoEF dated 14-9-2006, as amended on 1st Dec 2009 and the EIA Guideline Manual for Mining of Minerals of MoEF&CC, Govt, of India, for seeking environmental clearance of Minor Mineral Quarry Cluster (Masoury Stone) Block at Khasra no.- 2610 Min, Area- 5.72 Ha. Village-Khanmoh, Tehsil-Panthachowk, District-Srinagar, State- J&K and the sum total Lease Area which is ≥5 ha. Therefore, as per MoEF&CC, Gol O.M. No. L-11011/175/2018-IA-II (M) Dated: 12/12/2018 if a cluster or an individual lease exceeds 5 Ha, the EIA/EMP be made applicable in the process of grant of prior Environmental Clearance.

1.2 IDENTIFICATION OF PROJECT & PROJECT PROPONENT

The project is being proposed by Mr. Gh Ahmad Ahanger. The EIA-EMP report prepared as per the TOR granted vide letter No. JKEIAA/2021/410/8096-99, Dated 19.06.2023 under the EIA Notification. In order to assess the impact on environment due to proposed mine, it is necessary to ascertain present status of environment prevailing at the project site, identification and assessment of impacts on the environment by the proposed operation.

1.2.1 Name & address of Project Proponent

Mr. Gh Ahmad Ahanger S/o Ab Rajak Ahanger

(Partner:- Manjoor Ahmad Bhat S/o Mohd Subhan Bhat)

Address- Village-Khanmoh, Tehsil- Panthachowk

District- Srinagar, State- J&K.

Project: Minor Mineral Quarry Cluster (Idasonry Stone) Block Project Proponent: Mr. Gh Ahmad Ahmger & Manjoor Ahmad Bhat Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachowk

District: Srinagar, State: J & K.

Draft ELA Report

1.3 BRIEF DESCRIPTION OF THE PROJECT

Table 1.1: Project Description

On-line Proposal No.	SIA/JK/MIN/57354/2020		
File No. allotted by SEIAA, JK	SEAC/JK/20/385		
Name of Proponent	Mr. Gh Ahmad Ahanger S/o Ab Razak Ahanger (Partner:- Manjoor Ahmad Bhat S/o Mohd Subhan Bhat		
Full correspondence address of proponent	Village-Khamnoh, Tehsil- Panthachowk District- Srinagar, State- J&K		
Name of Project	Minor Mineral Qu	uarry Cluster (Masonry	Stone) Block
Project location (Plot/Khasra/Gate No.)		Min, Area: 5.72 Ha, Vil owk, District: Srinagar,	
Name of Minor Mineral	Minor Mineral Qu	arry Cluster (Masoury	Stone) Block
Type of Land	State Government	Land	
Land utilization Pattern	The area is barren	land.	
Sanctioned Lease Area (in Ha)	5.72 Ha		
Schedule (as per EIA notification 2006)	1(a)i		
Category of Project	B(1)		
Proposed Production	2,00,000 MT/Am	ium (Average Annual Pr	roduction)
Method of Mining	Open Cast, Semi-	mechanized	7
	with Letter of Intent (LOI) by DGM office vide letter No. 373/MCC/DGM/CQK/16/3520-22 Dated: 22-08-2017 for the exploitation for 5 Years.		
Pillar Coordinates	Pillar	Latitude	Longitude
	RP	34°04'11.67"N	74°57'41.03"E
	A	34°04'13.26"N	74°57'44.07°E
	В	34°04'15.05"N	74°57'39.44"E
	C	34°04′13.29′′N	74°57'36.34"E
	D	34°04'14.19"N	74°57'33.35°E
	E	34°04'11.98"N	74°57'28.19"E
	35353		
	F	34°04'14.72"N	74°57'26.38"E
	F G	34°04'14.72"N 34°04'19.22"N	
		P. STROYER-DEBOTES	74°57'33.18"E
Toposheet No	G H 43 J/16	34°04'19.22"N	74°57'33.18"E
A STATE OF THE STA	G H	34°04'19.22"N	74°57'33.18"E
Toposheet No Total Geological Reserves Total Mineable Reserves	G H 43 J/16	34°04'19.22"N	74°57'26.38°E 74°57'33.18°E 74°57'42.61°E

Project: Minor Mineral Quarry Cluster (Idasonry Stone) Block Project Proponent: Mr. Gh Ahmad Ahmger & Manjoor Ahmad Bhat Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachowk

District: Srinagar, State: J & K.

Production of minc/day	666.66 T/da	y		
No. of Working days	300 Days			
Working hours/day	8 bours/day			
No. of Workers	34 Manpower			
No. of vehicles movement/day	67 Units (Assumed Loading Capacity: 10 Tonnes/Unit)			
Altitude of the Area	4/	Point : 1875 m Point : 1737 mF		
Depth of Mining	8-12 (averaş Gurce: Appun	ge Depth) ed Mwing Man/		
Ground Water Level	1.50 - 2.50 : Somes.htp:@cg	mbgl ubgov.in/District_Pro	file.IandCirrings	r.plf
Nearest metalled road from site	Metalled Ro	ad 0.35 km awa	y from the mi	pe site.
Water Requirement	Source	Purpose	Detail	Avg. Demand/ Day
	Portable Tankers	Drinking @15lpcd/wor ker	34 workers x 15 lpcd - 510 Lit/day	0.510 KLD
		Land reclamation / plantation @5 Lit/Tree (@ 100 trees/ Ha)	570 Trees x 5 1/day = 2850 Lit/day	2.85 KLD
		Mine Operation	•	1.0 KLD
		Dust suppression @1 Lit/Sq.m	Haul Road Area – (810 m Length x 7m Width - 5670 m) x 1 lit/Sq.m = 5670 Lit/day	5.67 KLD
	-	Total		10.03 KLD
Name of QCI Accredited Consultant with QCI No. and period of validity.	Certificate 1	Environment Er No. NABET/EL/ August 24/2024	ngineering S	ervices
Any litigation pending against the project or land in any court				
Total Proposed Project Cost	Rs. 106,53	Lakhs		

Project: Minor Mineral Quarry Cluster (Masonry Stone) Block Project Proponent: Mr. Gh Ahmad Ahanger & Maniour Ahmad Bhat

Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachowk District: Srinagar, State: J & K.

Proposed CER cost	Rs. 2.13 Lakhs (2% of the total Project Cost)
Proposed EMP cost	Rs. 28.11 Lakhs (Haulage Road repair, Dust Suppression, Plantation & Environmental Monitoring)
Length and breadth of Haul Road	Haul Road Length 810 m Length & Width 7 m
No. of Trees to be Planted	570 trees will be planted

Draft ELA Report

1.3.1 Project's importance to the country and the region

Minor Mineral Quarry Cluster (Masonry Stone) Block Mining is one of the essential components for building and infrastructural development projects. It has high Demand in the market due to increased domestic, industrial and other infrastructural activities.

Minor Mineral Quarry Cluster (Masonry Stone) Block is one of the most sought-out building materials for the construction purposes. Being hard in texture and its property of durability, it is used chiefly for construction of roads and building etc. It is generally used because it helps to prevent mortar shrinkage, This will also generate employment opportunity for local people and enhance their socio - economic level which ultimately will improve education, health & sanitation, transport and other development of the surroundings. Thus, keeping in mind this requirement, mining of bed material is necessary for durability and to beautify by carving as per the requirement of the consumer. The Mine is important for development of economic growth and the country.

1.4.1 STATUTORY PERMISSIONS AND CLEARANCE RECEIVED

- New Mine, District Magistrate has given consent vide letter. No. 373/MCC/DGM/CQK/16/3520-22. Dated: 22/08/2017 for the exploitation for 5 Years.
- Baseline Study has been conducted during March 2023 to 30 May 2023 (Summer Season).
- Mine plan approved by Department of Geology and Mining, J&K Government, Srinagar on Vide letter No.- DDGK/DGM/AAMP-Sgr/F-103/172-74, Dated: 08/09/2018.

1.4.2 PROJECT CHRONOLOGY TILL DATE:

- 1. Project Proponent has submitted requisite documents, namely Form-1 (as per the EIA Notification 2006, as amended till date) along with a Pre-feasibility Report and proposed Terms of References (ToR) for carrying out environmental studies to the State Environment Impact Assessment Authority (SEIAA) J&K on 18.02.2021.
- 2. Technical presentation before the SEAC, J&K to finalize the ToR for the EIA study was held on Agenda of 25th JKEAC Meeting Dated: 28:01.2021 and 30:01.2021.
- The SEIAA, J&K issued ToR vide Letter No. JKEIAA/2021/410/8096-99. Dated 19:06:2023

1.5 ENVIRONMENT CLEARANCE OR EIA PROCESS FOR THIS PROJECT

This mine lease will be granted for a period of 5 years which shall commence from the date of grant of Environment Clearance from the competent authority, which is mandated by the EIA Notification of 2006 and subsequent amendments issued by MoEF&CC.

Project Proponent seeking environmental clearance of Minor Mineral Quarry Cluster (Masonry Stone) Block at Khasra no.- 2610 Min, Area- 5.72 Ha. Village- Khanmoh, Tehsil- Panthachowk, DistrictProject: Minor Mineral Quarry Cluster (Idasonry Stone) Block Project Proponeut: Mr. Gh Ahmad Ahanger & Manjoor Ahmad Bhat

Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachowk District: Srinagar, State: J & K. Draft ELA Report

Stinagar, State- J&K and the sum total Lease Area including other mines which is ≥5 ha. Therefore, as per MoEF&CC, Gol O.M. No. L-11011/175/2018-IA-II (M) Dated: 12/12/2018 if a cluster or an individual lease exceeds 5 Ha, the EIA/EMP be made applicable in the process of grant of prior Environmental Clearance.

The Environmental Clearance process for the proposed project will comprise of three stages. These stages in sequential order are:-

- Scoping
- Public Consultation or Public Hearing
- Appraisal

The flow chart depicting the stages to obtain the prior Environmental Clearance for the project is as given below in Figure 1.1.

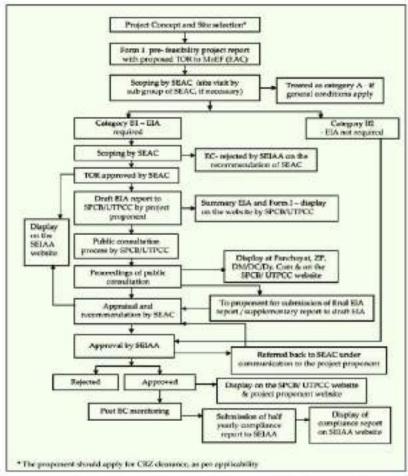


Figure 1.1: Flow Chart Showing the Process of Environment Clearance

Project: Minor Mineral Quarry Cluster (Masonry Stone) Block Project Proponent: Mr. Gh Ahmad Ahmger & Manjoor Ahmad Bhat

Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachowk District: Srinagar, State: J & K. Draft ELA Report

1.6 SCOPE OF THE STUDY

The scope of the study includes a detailed characterization of the environment in an area of 10 Km. radius of the Mine Lease Area for various environmental parameters like Air, Water, Noise, and Land, Biological and Socio-economic aspects.

1.7 EIA Framework

This EIA Report is prepared in accordance with has been divided into eleven chapters as briefed here under:

Chapter 1 - Introduction

The chapter provides description of project background, site and surroundings, objectives, scope and organization of the study and format of this report.

Chapter 2 - Project Description

The chapter reports the information on project and capacity; need for the project; location; size or magnitude of operation; technology and process description; maps showing project layout, component of projects etc.

Chapter 3: Description of Environment

It includes a comparison of alternatives to determine the best method of achieving the project objectives with minimum environmental impacts or indicates the most environmentally friendly and cost effective options, if any.

Chapter 4: Anticipated Environmental Impact and Mitigation Measures

This chapter deals with the methodology and observed findings of field studies undertaken with respect to ambient air, meteorology, water, soils, noise levels, ecology to define the various existing environmental status in the area of the project.

Chapter 5: Analysis of Alternatives (Technology & Site)

The chapter identifies and discussed the potential impacts of the proposed mining and allied activities, which could cause significant environmental concerns. This discussion will form the basis for environmental management activities.

Chapter 6: Environmental Monitoring Program

The chapter portrayed the hierarchy of the environment management cell, with its respective roles and environment policy to be implemented.

Chapter 7 - Additional Studies

It embrace outcomes of public consultation, risk assessment, social impact assessment, R&R action plan, biodiversity conservation plan, watershed management etc. Project: Minor Mineral Quarry Cluster (Idasonry Stone) Block Project Proponent: Mr. Gh Ahmad Ahmger & Manjoor Ahmad Bhat

Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachowk District: Srinagar, State: J & K. Draft ELA Report

Chapter 8 - Project Benefits

This chapter prescribes the benefits due to proposed project activity like improvements in the physical infrastructure, social infrastructure, employment potential etc.

Chapter: 9 Environmental Benefit Cost Analysis

This chapter prescribes the benefits cost analysis to proposed project

Chapter: 10 Environmental Management Plan

This chapter will include the description of administrative aspects of ensuring that the mitigation measures suggested are implemented and their effectiveness is monitored, after approval of the EIA.

Chapter- 11 Summary of EIA

All the chapters are precised in the summary of the EIA Report.

Chapter 12 - Disclosure of Consultant

The names of the consultants engaged in preparation of EIA and nature of consultancy rendered is given herewith.

CHAPTER: 2 PROJECT DESCRIPTIONS

S.No	CONTENTS	Page No.
СНАРТ	ER-2 PROJECT DESCRIPTIONS	2/1 - 2/14
2.0	GENERAL	
2.1	DESCRIPTION OF PROJECT	
2.2	NEED FOR THE PROJECT	
2.3	LOCATION DETAILS ALONG WITH MAPS	
2.4	GEOLOGY	
2.5	METHOD OF RESERVES	
2.6	MINING	
2.7	VEHICULAR TRAFFIC STUDY	
2.8	WATER REQUIREMENT	
2.9	MANPOWER REQUIRMENTS	

Project: Minor Mineral Quarry Cluster (Masonry Stone) Block Project Proponent: Mr. Gh Ahmod Ahanger & Manjoor Ahmod Bhat

Khasra No: 2610 Min., Area: 5.72 Ha, Village: Khammoh, Tehsil: Panthachowk

District: Srinagar, State: J & K.

Draft ELA Report

CHAPTER: 2

PROJECT DESCRIPTIONS

2.0 GENERAL

The Environmental Impact Assessment report has been prepared in terms of EIA notification of the MoEF&CC dated 14-9-2006, as amended on 1st Dec 2009 for seeking environmental clearance of Minor Mineral Quarry Cluster (Masonry Stone) Block Mining project (5.72 ha) and the sum total Lease Area including other mines which is ≥5 ha. Therefore, as per MoEF&CC, GoI O.M. No. L-11011/175/2018-IA-II (M) Dated: 12/12/2018 if a cluster or an individual lease exceeds 5 Ha, the EIA/EMP be made applicable in the process of grant of prior Environmental Clearance.

2.1 DESCRIPTION OF THE PROJECT

The project is proposed for mining unit of Minor Mineral Quarry Cluster (Masonry Stone) Block at Khasra no.- 2610 Min, Area- 5.72 Ha. Village- Khanmoh, Tehsil- Panthachowk, District- Srinagar, State- J&K by Mr. Gh Ahmad Ahanger & Manjoor Ahmad Bhat.

It is an opencast, semi-mechanized mining project & proposed to produce 2,00,000 MT/annum of Minor Mineral Quarry Cluster (Masonry Stone) Block

The Mining Project is falling under cluster having other mine lease area also. The sum total of lease area is ≥5 ha. Therefore as per MoEF&CC, GoI O.M. No. L-11011/175/2018-IA-II (M) Dated: 12/12/2018 if a cluster or an individual lease exceeds 5 Ha, the EIA/EMP be made applicable in the process of grant of prior Environmental Clearance.

2.2 NEED FOR THE PROJECT

Minor Mineral Quarry Cluster (Masonry Stone) is a basic building construction material for constructing houses, bridges and roads. Mining of Stone is necessary for durability and to beautify by carving as per the requirement of the consumer.

The demand for Minor Mineral Quarry Cluster (Masonry Stone) is ever growing with the growth of the infrastructure sector in our country. The requirement for the (Masonry Stone) is always high in the state itself and also in the nearby cities and towns. Therefore there is always a good demand of the Minor Mineral Quarry Cluster (Masonry Stone) in the domestic market. With start of the project, it will bridge the gap between demand & supply of the Minor Mineral Quarry Cluster (Masonry Stone).

2.3 LOCATION DETAILS ALONG WITH MAPS

The Proposed Project Site located at Khasra- 2610 Min, Area-5.72 Ha. Village- Khanmoh, Tehsil-Panthachowk, Distret- Srinagar, State- J&K, which is about 14.9 Km km NW away from Srinagar District & 1.70 Km m away from village:- Khanmoh, Masonry Stone Mining area is 807 km away from khanmo to Zinterag link road Rd. The location plan is shown below:

Table 2.1: GPS Co-ordinates of Site

Pillar	Latitude	Longitude
RP	34°04'11.67'N	74°57'41.03"E
A.	34°04"13.26"N	74°57'44.07°E

Draft ELA Report

Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khammoh, Tehsil: Panthachowk District: Srinagar, State: J & K.

34°04′15.05°N	74*57'39.44"E
34°04′13.29°N	74°57'36.34"E
34°04°14.19*N	74°57'33.35'E
34°04'11.98''N	74°57'28.19*E
34°04'14.72"N	74°57'26.38" E
34°04'19.22"N	74°57'33.18"E
34°04'18.21"N	74°57'42.61"E
	34°04′13.29°N 34°04′14.19°N 34°04′11.98°N 34°04′14.72°N 34°04′19.22°N

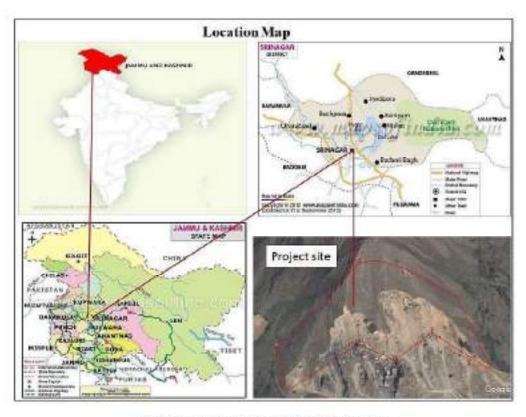


Figure 2.1: Location Map of the project site.

Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khamnoh, Tehsil: Panthachowk District: Srinagar, State: J & K.

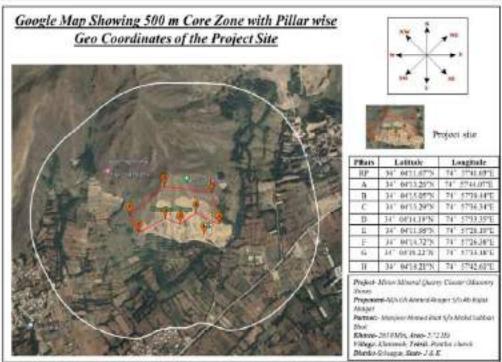


Figure 2.2: Google Map showing 500m radius of core Zone.

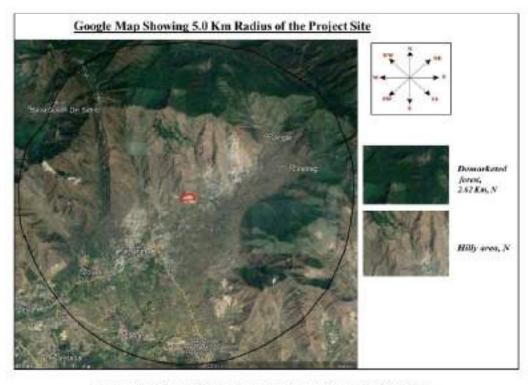


Figure 2.3: Google Map showing 5 km radius of Buffer Zone.

Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khammoh, Tehsil: Panthachowk District: Srinagar, State: J & K.

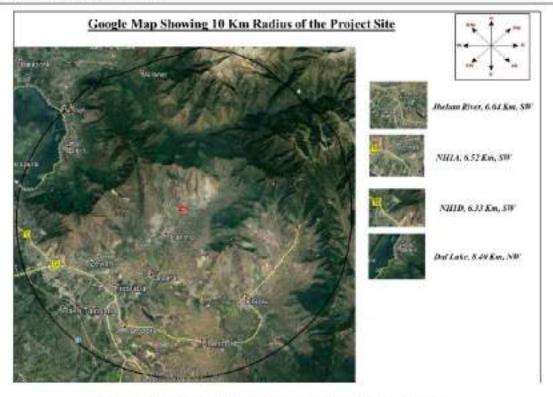


Figure 2.4: Google Map showing 10 km radius of Buffer Zone.

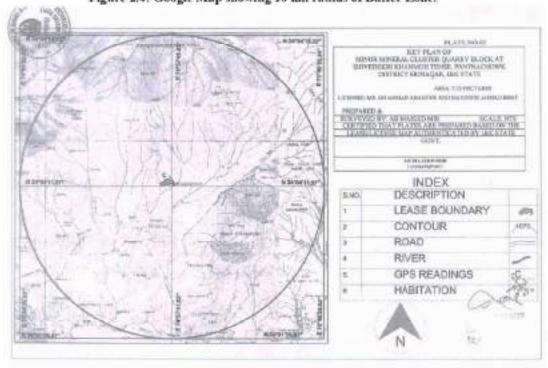


Figure 2.5: Key Plan(Topo map)

Khasra No: 2610 Min., Area: 5.72 Ha, Village: Khammoh, Tehsil: Panthachowk District: Srinagar, State: J & K.

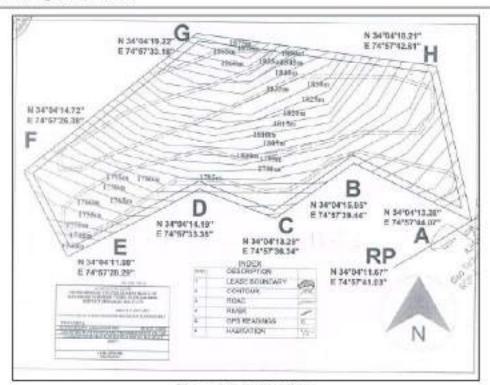


Figure 2.6: Surface Plan

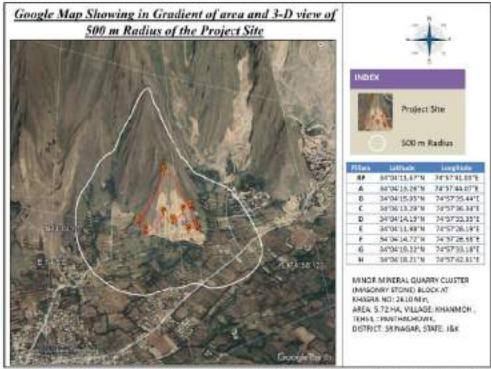


Figure 2.7: Google Map Showing in Gradient of area and 3-D view of 500 m Radius of the Project Site

Khasra No: 2610 Min., Area: 5.72 Ha, Village: Khamnoh, Tehsil: Panthochowk District: Srinagar, State: J & K. Draft ELA Report

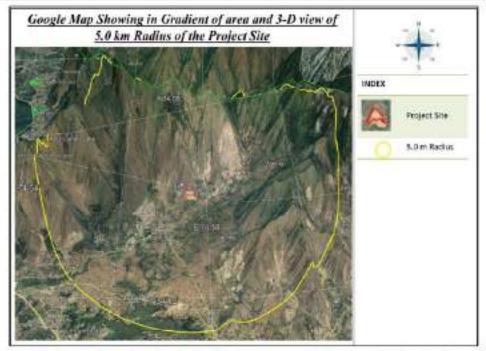


Figure 2.8: Google Map Showing in Gradient of area and 3-D view of 5.0 km Radius of the Project Site



Figure 2.8: Google Map Showing Dachigam National Park of 10.0km Radius of the Project Site

Draft ELA Report

Khasra No: 2610 Min., Area: 5.72 Ha, Village: Khannoh, Tehsil: Panthachawk District: Srinagar, State: J & K

> Table 2.2: Environmental Sensitivity (Aerial distance of 10 km w.r.t. Google Earth)

S.N.	(Aerial distance of 10 km Particulars	Details		
1.	Nearest Village	Village	Distance and Direction	
		Khammoh	1.70 Km, SW	
		Sangar	2.97 km, NE	
		Zowu	3.40 Km, SW	
		Bathan	5.22Km, E	
		Khrew	6.30Km, SE	
		Zinetrag	3.15 Km, E	
		Wuyan	4.72 Km, S	
		Zawarah	4.34 Km, SW	
2.	Nearest city/ town	Nearest Tow • Khan • Wuya	ha chowk, 7.30Km, WSW n / City: moh,1.70 Km, SW en, 4.72 Km, S w, 6.30Km, SE	
3.	Nearest Railway Station	None, within 10 km radius area of mine si		
4.	Nearest National /State Highway	NH 1A, 6.52 Km, SW		
5.	State/International Boundary	None, within 10 km radius area of mine sit		
5.	Nearest Airport	None, within 10 km radius area of mine si		
6.	Archaeological Important Place	None, within	10 km radius area of mine site	
7.	Ecological Sensitive Areas (National Park, Wildlife Sanctuary, Biosphere Reserve etc.)	Dachigam Na	tional Park, 2.30 Km North	
8.	Reserved/Protected Forest within 10 km radius	Demarcated	Forest, 2.0 Km E	
9.	Nearest River / water body	River: Jhelum River, 6.64 Km, SW Water body: Lokut Dal, 8.43km, NW, Dal Lake, 8.80km, NW, sardal Lake, 6.10km, S		
10.	Nearest Hospital	Khanmoh, 1.:	55 Km,SW	
11.	Nearest Education Center	Government High School at Khanmoh, 0.80Km, SW		
12.	Nearest Post Office	Wuyan at Kh	anmoh, 4.30 Km,S	
13	Nearest Worship Place	Masjid E Hamza at Khanmoh, 0.70 Km,SW		
14.	Seismic Zone	Seismic Zone-V (Very Severe Intensity Zone)		
15.	Nearest Bridge within 500m core Zone	None, within 500m core Zone.		

Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khammoh, Tehsil: Panthachowk

District: Srinagar, State: J & K.

Draft ELA Report

2.4 GEOLOGY

General Geology:

The Geology of the area has been studied in detail by pioneering workers like Middlemiss, wadia etc. a geological succession of Rock formation is given in the table below:

Table: Regional geology of the Area

S. No	Formation	Lithology	Age
1	Alluvial, Scree, Talus deposits	Recent alluvium, in the low-lying areas adjoining the Jhelum river and its tributaries consist of finely compacted detrital sediments such as loam, clay, silt and sand with occasional gravel.	Recent
2	Karewas	Lacustrine deposits of alternate bands of loose sand, clays & silt	Pleistocene to Recent
3	Triassic a. Upper b. Middle c. Lower	Limestone (high grade) with minor shale & siliceous limestone bands. Calcareous & argillaceous material. Shale with siliceous Limestone	Triassic
4	Panjal Traps	Basaltic Lava	Upper Carboniferous
5	Nishatbagh Beds	The Formation comprises a 220m thick sequence of tuffaceous shale/slate with plant fossils in the basal part, 60m thick shale and sandstone in the upper part.	Lower Permian age
6	Agglomeratic slate	The Agglomeratic slate consists of pyroclastic slates, conglomerates and Agglomeratic/ pyroclastic products and forms the lower part of the Panjal Volcanic series.	Permian

Use of Mineral:

The ROM will be fed to the consumers and to the crushers outside the quarry cluster area where it will be crushed to desired sizes. Different grades of output from the crusher will be primarily used in the construction of road and also the material will be sold in the market for various civil works in and around Srinagar District.

Source: Approved Moning Plans

Soil:

The soils of the Kashmir Valley are broadly divided into two types viz, Hapludalfs & Ochraqualfs and the same is true for the Srinagar district also. These soils are described below:-

i) Hapludalfs

These soils are found on Karewa tops & uplands with a slope variation of 1-3%, These are very deep soils, well drained with moderate permeability. These soils are severely eroded resulted in the formation of gullies and ravines.

These are medium to fine textural soils and the surface texture varies from clay loam to silty clay loam. The colour of the soils varies from Yellowish Brown to dark Brown. These soils are mostly used for cultivation of Wheat, Maize & pulses.

Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachowk

District: Srinagar, State: J & K.

Draft ELA Report

ii) Ochraqualfs

These soils are found in plain to mid upland topography. These soils are moderately fine textured with clay loam as the predominant surface texture. The extent of erosion on such soils is much less. These are dark brown to dark yellowish Brown in colour. These soils are mostly used because of their low permeability for the cultivation of Paddy, Mustard & at places Wheat

(Source:-https://egwb.gov.iw/District_Profile/kindK/sviunger.pdf)

2.5 RESERVES

i. Mining Method, Recovery Factor, Mining Losses, and Processing Loss etc:

Road Metal and Building Stone will be quarried by open cast other than fully mechanized method with drilling. The recovery factor is considered as 95% with 5% intercalated waste. There will not be any quarrying losses except handling loss, which will be recovered during next loading.

ii. Cut-off Grade, Ultimate Pit Depth proposed:

There is no cut- off grade as the ROM will be put to use for road metal and building stone as aggregates. The ultimate Pit average depth is 12 mts.

iii. Mineral/ Ore Blocked Due to Benches, Barriers, Pillars, Road, railway, River, Nala, Reservoir, Electric Line and Other Statutory Barriers etc.:

The mineral will be blocked in 7.0 m safety barrier zone, roads and benches which is computed separately and tabulated below in the succeeding sections.

iv. Total mineral Reserves:

The reserves are estimated basing on filed traverses and the information gathered during the field visit of the area and cross section drawn. The area of the influence and the cross sections on either side of the cross sections A-A, were taken at 120 m, B-B, were taken at 85 m, C-C, were taken at 86 m, & D-D, were taken at 13 lm. Based on the field traverses, the estimated reserves considered as Proved reserves, Four cross-section A-A, B-B, C-C, & D-D, is considered for computation of reserves. The depleted reserves have been accounted by cross section and reserves are computed.

Table a: Reserves Estimation:

Section	Category	Sectional area (M²)	Volume (M³)	Specific gravity	Geological Reserves (MT)	Mineable Reserves @ 95% (MT)	Waste @ 5% (MT)
AA'	Proved	1038	124560	2.5	311400	295830	15570
BB'		3771	320535	2.5	801337.5	761270.6	40066.88
CC1		2850	245100	2.5	612750	582112.5	30637.5
DD'		1500	196500	2.5	491250	466687.5	24562.5
	Total				22,16,738	2105901	1,10,836.9

Table b: Reserves Blocked in 7.00 m Buffer Zone

Section	Category	Sectional area (M ²)	Volum (M³)	Specific gravity	Geological Reserves (MT)	Mineable Reserves @ 95% (MT	Waste @ 5% (MT)
AA'	Proved	24	2880	2.5	7200	6840	360
BB'		24	2010	2.5	5100	4845	255
CC.		24	2064	2.5	5160	4902	258
DD'		24	3144	2.5	7860	7467	393

Khasra No: 2610 Min., Area: 5.72 Ha, Village: Khamnoh, Tehsil: Panthochowk District: Srinagar, State: J & K. Draft ELA Report

Total	25,320	24,054	1.266	
Total	25.320	44,034	1.200	- 1

- (A) Total Mineable Reserves 2105901 tons
- (B) Reserves blocked in 7 m buffer zone = 24054 tons

Net Mineable Reserves A- B

- 2105901 24054 2081847 tons
- v. Mineable reserves and life of the quarry:

Initially the total quantity of mineable reserves is considered as (economic) marketable reserves. In this way a total mineable reserves available in this Quarry license = 20, 43,510 MT.

The average production is proposed to obtain per annum= 2, 00,000 MT and as such the life of mine is almost ten years.

2.6 MINING

2.6.1 Propose Method of mining:

Mining will be carried out by open cast semi mechanized bench method. It is proposed to produce 2.00.000 tonnes per year. Considering 300 working days daily production comes to 666.6 tons/ day of Masonry Stone mining.

- 2.6.2 Open cast Mining:- The mode of working will be semi mechanized with the help of JCB, Hywa, Excavator, Dumper Tripper etc. sorting sizing and dressing will be done by labours by hands tools like hammers, chisels, gaity fabda.
- 2.6.3 Mining Machineries: For production of 2,00,000 Tons per year, its transport etc. the following machineries are likely to be deployed.

2.6.4 Briefly Describe the existing as well as proposed method for excavation with all design parameters indicating plate nos of plans/ sections

The applied area belongs to hilly terrain with RL ranges from 1737 m to 1875m above msl. Most of the area is covered by the limestone deposits at higher levels with less over burden. The mining activity is proposed to be carried out by open cast bench forming method with the help of drilling, and using excavator. The ROM will be loaded into trippers of 7 tons capacity by using excavator/loader or even manually. The loaded ROM will be transported to the crushing plant or directly to the consumers. The ROM will crushed in the crusher plant to different sizes of 60mm, 40mm, 20mm, 12mm, 6mm, and carried out by benches of 8.0 m height from higher levels to lower levels. It is proposed to raise about 10,00,000 tons ROM during the five years plan.

2.6.5 Year- Wise Tentative Excavation in Metric Tonnes Indicating development, ROM, PIT Wise:

It is proposed to raise the insitu ROM of 2,00,000 tons on an average per year from this quarry. The limestone/shale (R) deposit is exposed as a hillock, so no separate development is required in the beginning of the mining activity to get the target production from this quarry. The quarry working will be carried out by open cast method with the help of drilling from the top of the hill. The ROM will be loaded into trippers of 7 tons capacity by excavator/ loader or even manually. The loaded Rom will be transported to the crushing unit or the consumers. The ROM will be crushed at the crushing unit to various sizes and sorted to 60mm, 40mm, 20mm, 12mm, 6mm, and sand and supplied to different

Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khammoh, Tehsil: Panthachowk

District: Srinagar, State: J & K.

Draft ELA Report

construction works, road works and railway ballast. The tentative excavation proposed to be carried out for the five years plan is estimated at 10,00,000 tons o road Metal and building Stone will be mined out by open cast mechanized method by forming benches of 6.0 m each and 7.0 m buffer zone. The year-wise details are presented below in table.

(Source: approved mining plan)

YEAR WISE PROPOSED PRODUCTION OF FIVE YEARS

Year	Ber	nch	Av.	Av.	Volu	Width	Specific	Geological	Mineable	waste@5
	From	То	lengt h (m)	Hei ght (m)	me (M³)	(m)	Gravity	Reserves	@ 95 % (MI)	% (MT)
2018- 19	1875	1840	198	12	50	118800	2.5	297000	282150	14850
2019- 20	1840	1815	170	12	36	73440	2.5	183600	174420	9180
2020-	1815	1790	215	12	45	116100	2.5	290250	275737.5	14512.5
2021- 22	1790	1760	231	12	24	66528	2.5	166320	158004	8316
2022-	1760	1737	160	12	23	44160	2,5	110400	104880	5520
Total								1047570	995191.5	52378.5

Layout of Mine Working, Pits, Roads etc:

The quarrying operation is going on, previous working one pit is observed in the cluster quarry area. At the mine of quarrying operation the overburden will be used for existing haulage roads and strengthened for better navigation. Dump will be positioned at southern portion of the cluster quarry area. The Licensee intends to extract Road Metal and Building Stone production to the tune of 10,00,000 Mts of Road Metal and Building stone of saleable mineral during this Plan. During this Plan period, it is proposed to exploit the road metal from the total area of 49200M² to an average depth of 8-12 m over the lease area maximum RL 1875 m to RL 1737 m as depicted.

2.6.6 Drilling: 54mm diameter hammer drilling will be employed. Holes will be drilled vertically to a depth of 3.35 for a bench height of 3.0 m with a spacing and burden of 3.0 m and 2.5 m respectively.

2.6.7 Planning Concept

Mining lease area will be worked in five segments for ease of operation. However as the digging depth will be restricted to 6 m only material will be available below. This will be further replenished during rainy season. Block will be worked systematically as the width is limited as compared to length of the lease area. As the lease period is only 5 years.

2.6.8 Rehabilitation and resettlement (R & R) Plan

It is entirely a government traverse land, sanctioned the Mine Lease to the project proponent. No human settlements are existing in the ML area. The proposed project does not involve any rehabilitation and resettlement.

- There is no human settlement within the mine lease area.
- No human settlement will be disturbed due to the mining activity. Hence, no Rehabilitation and Resettlement issues are present.

Khasra No: 2610 Min., Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthochowk

District: Srinagar, State: J & K.

Draft ELA Report

2.6.9 Waste Disposal:

a) Solid waste Management:

There is no overburden or soil cover. All the quantity of ROM produced will be used as raw material source for aggregate. So there will be no waste handling. No toxic and hazardous elements are present in the inter-burden material.

b) Municipal Waste:

All the labors engaged in activity will be from nearby villages. Thus the municipal waste generated is negligible. Mobile toilet will be provided if required.

c) Hazardous Waste Management:

Not Applicable

2.6.11 Transportation

Transport: The transport of ROM etc. to stock yards within mines will be by Dumpers. There will be no dumps for future maintenance as there is no waste and all the material is saleable.

2.6.12 Haul Road Construction Plan & Connectivity

The Proposed Project Site located at Khasra- 2610 Min, Area-5.72 Ha. Village- Khanmoh, Tehsil-Panthachowk, Distrct- Srinagar, State- J&K, which is about 14.9 Km km NW away from Srinagar District & 1.70 Km m away from village:- Khanmoh, Masonry Stone Mining area is 807 km away from khanmoh to Zinterag link road Rd.

Total Motorable Distance is 810 m from Project Site to Khanmoh to Zinterag Link Road



Figure 2.7: Detailed Map of Haulage Road.

Table 2.7: Budget distribution for construction of proposed Haul Road

S. No.	Description	Unit	Quantity	Rate	Amount
1.	Haulage Road Repair & Maintenance	Nos.	7 m width x 810	100/sqm	5,67,000

Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khammoh, Tehsil: Panthachowk

District: Srinagar, State: J & K.

Draft ELA Report

(Amual)	m length	
	TOTAL	5,67,000

2.6.13 Topography

Srinagar district is located in the center of Kashmir valley. Etymologically, "Srinagar" is composed of two Sanskrit words, namely, Sri – meaning abundance and wealth, and Nagar – which means a city. It is the most pivotal center of economy of the Kashmir Valley and the city of Srinagar has remained a center of tourist attraction for centuries. It is situated on the bank of Jhelum River. District Baranulla occupies the Northern and Western boundary whereas Badgam district forms the Western and South – Western limits. In the south, Srinagar district is bounded by Pulwama district. The district lies between 34° 01'00" to 34° 29'10" North latitudes and 740 33'30" to 750 30'00" East longitudes.

Srinagar city is located about 300 km from Jammu and National Highway NH-IA connects Srinagar with Jammu. All the major carrier operate regular daily flights to Srinagar from Delhi, Mumbai and Jammu.

(Source: http://egwb.gov.tv.District_Profile/JK/Stringgar.pdf)

The Topography of the area is rugged mountainous with peaks rising to 2710 m above msl and lowest point is 1737m above msl. The topography of the area is barren stony without any overburden and is there is no vegetation in the area. The area is devoid of any regular water sources.

The general slope of the area is from southwest and south east. The rain water flows as per natural slope to river Jhelum about 12 km from the proposed area. The surrounding area have two springs, with low discharge and are only source of water for the villagers.

Area fall in Survey of India top sheet No. 43J/16 and lies between Latitudes 34°04'11.98"N to 34°04'19.22"N & Longitudes 74°57'26.38"E to 74°57'44.07"E located at NE of village- Khanmoh, Tehsil- Panthachowk, Khasra No. 2610 Min District- Srinagar, J.K. The mining site is 807 m away from the Link Road and National highway (NH-1A) is located at 6.52 km, SW direction. Railway station Srinagar is 11.45 km SW from the project site.

Table 2.8: Details of Site Elevation

Mining Bench Level	Highest Bench Level: 1875 m Lowest Bench Level: 1737 m
Average Working Depth in meters	8-12 m

(i) Township

Since this mining is intermittent and labour employed would be mostly from adjoining areas, no colony is proposed.

(ii) Power, Water Supply and other Infrastructure requirement Power

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

(iii) Infrastructure:

The site services like rest room shelter, first aid box and drinking water facilities will be provided to Workers at the mine site.

Khasra No: 2610 Min., Area: 5.72 Ha, Village: Khammoh, Tehsil: Panthachowk

District: Srinagar, State: J & K.

Draft ELA Report

2.7 VEHICULAR TRAFFIC STUDY

Traffic study measurements were performed at Metalled Road and NH-1A Highway to assess impact.

On local transport infrastructure due to this mining project.

The Proposed Project Site located at Khasra- 2610 Min, Area-5.72 Ha. Village- Khanmoh, Tehsil-Panthachowck, Distret- Srinagar, State- J&K, which is about 14.9 Km km NW away from Srinagar District & 1.70 Km m away from village:- Khanmoh, Masonry Stone Mining area is 807 km away from khanmo to Zinterag link road Rd.

Details of the traffic study have been incorporated in Chapter 4 section 4.10.

2.8 WATER REQUIREMENT

The water requirement for various activities will be as calculated below:

Table 2.9: Water requirement

Source	Purpose	Detail	Avg. Demand/ Day
Portable Tanker	Drinking @15lpcd/worker	34 workers x 15 lpcd = 510 lpcd	0.51 KLD
	Land reclamation / plantation @5 Lit/Tree (@ 100 trees/ Ha)	570 Trees x 5 l/day = 2850 Lit/day	2.85 KLD
	Mine Operation		1.0 KLD
	Dust suppression @1 Lit/Sq.m	Haul Road Area = (810 m Length x 7m Width = 5670 m ²) x 1 lit/Sq.m = 5670 I it/day	5.67 KLD
	Total		10.03 KLD

2.9 MANPOWER REQUIREMENTS

The proposed mining activity will provide employment to about 34 workers. The workers will be hired mostly from the nearby villages.

Following are the infrastructural facilities which will be provided to the workers:

- 1. Rest Shelter, drinking water facilities, Mobile bio toilets, & first- aid facilities, etc.
- Personal protective equipment such as ear muffs, gloves, helmets, shoes, goggles, Safety belt etc. will be provided to the workers to ensure their safety.
- 3. Hanging of loose boulders will be removed from mining faces.
- The mining area will be properly fenced to avoid any inadvertent entry into mining pits.
- 5. Working hours will be displaced at conspicuous places.

Table 2.10: Manpower Requirements

S. No.	Particulars	Nos. Required
1.	Highly skilled- Mines manager (part time)	1
2.	JCB Backhoe Operator	2
3.	Mine Supervisor	1
4.	Skilled& Semi- skilled- Bore Compressor Operators	2

Khasra No: 2610 Min., Area: 5.72 Ha, Village: Khannoh, Tehsil: Panthachawk District: Srinagar, State: J & K Draft ELA Report

	Total	34
0.	Tripper Drivers	10
9.	Security Guard	2
8.	Pick-up Drivers	2
7.	Skilled labours	10
6.	JCB Backhoe Assistants	2
5.	Bore Compressor Assistants	2

CHAPTER 3

DESCRIPTION OF ENVIRONMENT

S. No.	Contents	Page No.
3.0	INTRODUCTION	3/1/3 -32
3.1	LAND ENVIRONMENT	
3.2	AIR ENVIRONMENT	
3.3	WATER ENVIRONMENT	
3.4	SOIL ENVIRONMENT	
3.5	NOISE ENVIRONMENT	
3.6	BIOLOGICAL ENVIRONMENT	
3.7	SOCIAL ENVIRONMENT	

Khasra No: 2610 Min, Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachowk District: Srinagar, State: J & K. Draft EIA Report

3.0 INTRODUCTION

This Chapter contains the description of baseline studies of the area within 10 Km radius surrounding the Minor Mineral Quarry Cluster (Masoury Stone) Block at Khasra no. 2610 Min, Area 5.72 Ha. Village Khanmoh, Tehsil- Panthachowck, District- Srinagar, State- J&K by Mr. Gh Ahmad Ahanger & Manjoor Ahmad Bhat. The study was undertaken for prevailing environment in respect of land, air, water (both ground and surface), soil, noise, biological (both flora and fauna). The data collected has been used to understand the existing environment scenario around the proposed mining project against which the potential impacts of the proposed project can be assessed.

The EIA study is being done for the Mine Lease (core zone) and area within 10 Km distance from mine lease boundary (buffer zone), both of which together comprise the study area. The following data, through field survey and other sources, has been collected by Globus Environment Engineering Services, for preparing the EIA/EMP for the proposed mining area with related facilities.

- · Baseline data related to physical environment viz. Air. Water, Soil and Noise.
- Meteorological data.
- Land use pattern within core zone and buffer zone (10 Km distance around the core zone) based on Survey of India secondary data and satellite image.
- Identification of water bodies, hills, roads etc. within 10 Km radius of the mine lease area.
- Eco-sensitive places, sanctuaries, biosphere reserves within 10 Km radius.
- Detail of fauna and flora within a radial distance of 10 Km from the project site.
- Environment protection and mitigation measures of the project.

Methodology

Appropriate methodologies are followed in developing the EIA-EMP report. The methodology adopted for the study is outlined below:

- Conducting reconnaissance of the study area
- Selecting sampling locations for conducting various environment baseline studies

The sampling locations were selected on the basis of the following:

- Predominant wind directions recorded by the Indian Meteorological Department (IMD)
- Existing topography
- Drainage pattern and location of existing surface water bodies like lakes, rivers and streams
- Location of villages/towns/ sensitive areas, and areas, which represent baseline conditions

The field observations were made to:

- Assess the positive and negative impacts due to the proposed project
- Suggest appropriate mitigation measures for negating the adverse environmental impacts, if any, and
- Suggest post-project monitoring.

Khasra No: 2610 Min, Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachawk District: Srinagar, State: J & K. Draft EIA Report

3.1 LAND ENVIRONMENT

Area statistics of land use pattern has been generated within 10 Km radius of mine lease area (Core zone and Buffer zone) as given in. Object of this study is to provide a baseline status of the study area covering 10 Km radius around the proposed Mine site so that temporal changes due to the mining activities on the surroundings can be assessed.

3.1.1 Land Use/ Land Cover of the study area

The present Land use/Land cover map for the proposed project activity is prepared by latest satellite image. This report thus will enable assessing the impact on land use pattern in the study area due to the proposed project activity.

3.1.2 Data Used

Current vintage data of satellite data downloaded from Bhuvan has been used for preparation of Land use.

Land cover thematic map of study area. The downloaded satellite data is already geo referenced and terrain corrected. A total number of four bands have been stacked and resampled at 10 m resolution.

Google earth was used as reference for the preparation of base layer data like road, rail network, rivers and canals.

Technical Details

 Satellite Image + LULC, 50K, UTTAR PRADESH, NRSC, ISRO, Thematic Services, Bluvan

 Satellite Data Source - LULC Vector data of 2005-06, Multi-temporal satellite data of 2011-12 from Resourcesat-2 LISS III

3.1.3 Methodology

Land use/Land cover map preparation, base map creation; Layer Stacking of satellite image has been processed using Bhuvan -Thematic Services. The methodology used for present LU/LC study area is given below:-

Landuse of a region reflects the manipulation of land cover for sustenance and economic development, which may directly or indirectly influence the local environment. FAO defines landuse as arrangements, activities and inputs people undertake in a certain land cover type to produce, change or maintain it. The economic prosperity of a region is dictated by the available natural resources in that area such as agriculture, water resources and forest including mining activities. But these resources are mainly controlled by the terrain parameters such as geology, landforms, slope, drainage pattern and above all climate. All these parameters influence the landuse condition of a terrain individually as well as in various levels of combination. In short, landuse of a region is the macroscopic expression of microscopic elements which may have local or regional impact on the environment over a period of time and sometimes even after these activities have ceased.

Any sort of imbalance in such microscopic elements may have dire impact on the environment, which could be perceived by undertaking periodical study of landuse. Thus, landuse study has gained rapid attention due to its impact legacies on major ecological and environmental parameters and attained prominence in environmental impact studies. It is also known that landuse is dynamic in nature controlled Khasra No: 2610 Min, Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachowk District: Srinagar, State: J & K.

Draft EIA Report

intrinsic terrain factors and climate. Hence, it requires a systematic knowledge on changes in landuse pattern of a region of interest (ROI) requiring updated landuse information.

Landuse information provides the nature of activities undertaken in an area, geographical location and extent of such activities, time period or duration of these activities and eventually the method of implementation of landuse activities. The information could significantly attribute the nature of human interface, mechanization involved over a period of time which in turn, would imply on the degree of impact on the adjacent area. Such information is vital in any economical or developmental activities since they could assist in assessing the impact due to such landuse activities. This requires a periodical monitoring of landuse and land cover pattern and such an arduous task could be carried out using multitemporal remote sensing satellite data.

Landuse information using satellite data is more powerful since it could provide a synoptic view of the landuse pattern from regional to local perspective that could be periodically updated to observe landuse changes over a period of time.

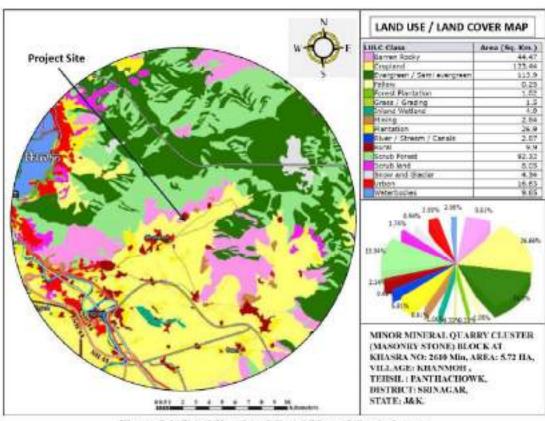


Figure 3.1: Land Use/ Land Cover Map of the study area

Khasra No: 2610 Min, Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachowk District: Srinagar, State: J & K. Draft EIA Report

Table 3.1: Land Use/Land Cover of the Study Area

LULC Class	Area (Sq. Km.)	% Area	
Barren Rocky	44.47	9.61	
Cropland	123.44	26.66	
Evergreen / Semi evergreen	113.9	24.60	
Fallow	0.25	0.05	
Forest Plantation	1.02	0.22	
Grass / Grazing	1.5	0.32	
Inland Wetland	4.9	1.06	
Mining	2.84	0.61	
Plantation	26.9	5.81	
River / Stream / Canals	2.87	0.62	
Rural	9.9	2.14	
Scrub Forest	92.32	19.94	
Scrub land	8.05	1.74	
Snow and Glacier	4.34	0.94	
Urban	16.63	3.59	
Waterbodies	9.65	2.08	
Total	462.98	100	

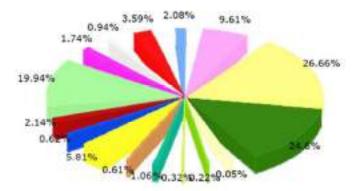


Figure 3.2: Graphical Representation of Land Use/Land Cover of the Study Area

3.1.4 Cropping Pattern

Cropping pattern means the production of area under different crops at a point of time. The crop statistics published by the government are used to denote the cropping patterns. Cropping pattern is however, dynamic concept as it changes in space and time. As stated at the outset, cropping structure of a region is the direct outcome of the physical, socio-cultural and historical factors. Characterized with mountainous and undulating terrain and micro-level variations in temperature, precipitation and soils, the state of Jammu and Kashmir has a high degree of variation in its cropping patterns, crop combination and crop

Khasra No: 2610 Min, Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthochowk District: Srinagar, State: J & K. Draft EIA Report

diversification. In general, the Jamum plain has a high concentration of wheat, rice, maize, pulses, fodder and oilseeds, while the Valley of Kashmir is well known for its paddy, maize, orchards (apples, almond, walnut, peach, cherry, etc.) and saffron cultivation. In Ladakh, barley, wheat, maize, vegetables, barseem and fodder are the main crops. The area of the total cropped area in Stinagar district have been given in Table.

Table: Area under High Yielding Variety Programme Area "000" Hectares

Year	Paddy	Maize	Wbeat	Oil Seeds	Pulses	Fodder	Vegetables	Other Species	Total
2001-02	13.00	4.60	0.02	5.125	1.70	5.80	1.80		32.045
2002-03	12.500	4.60	00.02	2.910	1.70	5.80	2.70	17.530	47,760
2003-04	13.00	4.60	2.605	2.910	1.70	5.005	2.70	16.420	48.940
2004-05	13.00	4.60	0:02	3.00	1.70	5.00	2.70	2.180	32.200
2005-06	13.00	4.60	0.02	3.00	3.00	7.7	4.8	+	36.12
2006-07	13.00	4.60	0.03	3.00	1.70	6.200	2.8	0.13	31.46
2007-08	3.393	0.45	0.01	0.319	Nil	1.40	4.98	1.485	12:037
2008-09	3:400	1.966	Nil	1.500	0.250	1:40	5.1	Nil	13.616
2009-10	2.633	0.572	Nil	1.500	0.074	0.055	1.565	0.144	.6.543
2010-11	2,633	0.572	Nil	1.500	0.074	0.38	1.565	0.220	6.944
2011-12	2.633	0.572		1.500	0.281	0.94	2.84	0.06	8.826
2012-13	2.633	0.572	363	1:500	0.074	0.38	1.57	0.302	5.531
2013-14	2.633	0.572	Nil	1.500	0.281	0.94	2.89	0.31	9.126
Net	97,458	32.876	2.725	29,264	12.534	41	38.01	38,781	291.148

Source: Chief Agricultural Officer, Srinagar

(Source: http://doards.wak.edu.in/Files/6d8he055-fc07-4710-8b8a-48477e0b960a/Journal/c32826a0-4276-45f6-ace5-5 cae4dcc9c58.pdf)

3.1.5 Topography

Srinagar district is located in the center of Kashmir valley. Etymologically, 'Srinagar' is composed of two Sanskrit words, namely, Sri – meaning abundance and wealth, and Nagar – which means a city. It is the most pivotal center of economy of the Kashmir Valley and the city of Srinagar has remained a center of tourist attraction for centuries. It is situated on the bank of Jhelum River. District Baramulla occupies the Northern and Western boundary whereas Badgam district forms the Western and South – Western limits. In the south, Srinagar district is bounded by Pulwama district. The district lies between 340 01'00" to 340 29'10" North latitudes and 740 33'30" to 750 30'00" East longitudes. (Plate-I).

Srinagar city is located about 300 km from Jammu and National Highway NH-IA connects Srinagar with Jammu. All the major carrier operate regular daily flights to Srinagar from Delhi, Mumbai and Jammu. Some http://cgsdx.gov.in/District_Profile/Wishingur.pdf

The Topography of the area is rugged mountainous with peaks rising to 2710 m above msl and lowest point is 1737m above msl. The topography of the area is barren stony without any overburden and is there is no vegetation in the area. The area is devoid of any regular water sources.

The general slope of the area is from southwest and south east. The rain water flows as per natural slope to river Jhelum about 12 km from the proposed area. The surrounding area have two springs, with low discharge and are only source of water for the villagers.

Area fall in Survey of India top sheet No. 43J/16 and lies between Latitudes 34°04'11.98"N to 34°04'19.22"N & Longitudes 74°57'26.38"E to 74°57'44.07"E located at NE of village- Khanmoh, Tehsil-Panthachowk, Khasra No. 2610 Min District- Srinagar, J.K. The mining site is 807 m away from

the Link Road and National highway (NH-1A) is located at 6.52 km, SW direction. Railway station Srinagar is 11.45 km SW from the project site.

3.2 Drainage System.

The total drainage area of Indus Basin is 11,78,440 km² out of which an area of 4,53,250 km² falls in high Humalayan mountains and the remaining 7.25.190 km² falls in the plains of the drainage area in plains. A total of 3,21,290 km² area of Indus basin falls in India whereas only 1,31,960 km² area falls in Pakistan.



Figure 3.3; Drainage Map of the study area.

Floods: Low-lying areas of the Kashmir Valley, especially Sonawari, Awantipora, Srinagar, alongwith parts of Janunu are prone to floods. Upper catchinents of all the tributaries of the Jhelum, Indus, Chenab and Tawi rivers are prone to flash floods. An enormous amount of water flows into the valley and the only outlet for the water from the valley is the narrow gorge at Barannilla. Floods generally occur in the sammer when heavy rain is followed by a bright sun, which melts the snows. If an embankment is breached or topped, a district which is dry a few hours back becomes a lake after a few hours. On the intervening night of August 5 - 6, 2010, Leh witnessed a devastative cloudburst followed by flashfloods.

3.3. Seismicity Zonation of Area

The lease area falls under Seismic Zone- V (very Severe Intensity Zone), which indicates very high possibility of earthquake. The state of Jammu & Kashmir is the western most extension of the Himalayan mountain range in India. Here it comprises of the Pir Panjal, Zaskar, Karakoram and Ladakh ranges. The Main Boundary Thrust (MBT) underlies the Pir Panjal Range and is known as the Panjal Thrust in the region. The Zaskar ranges which are part of the Great Himalayan range are underlain by the Zaskar Thrust. The Kashmir Valley lies between the Pir Panjal and the Zaskar thrusts, making it very vulnerable to earthquakes. Other northern parts of Jammu & Kashmir are heavily faulted. Along the Zaskar and the Ladakh ranges runs a NW-SE trending strike-slip fault, the longest in the Jammu & Kashmir area. Apart from the routine small tremors moderate to large earthquakes hit nearly all parts of the state. Other major damages are caused by earthquakeas the J & K lies on seismic zone IV in the seismic zone map of India.

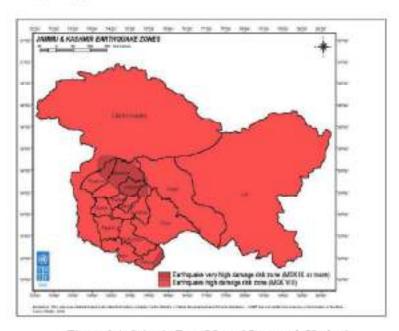


Figure 3.4: Seismic Zone Map of Jammu & Kashmir.

3.3.1: Climate and Rainfall

Srinagar district falls under the Temperate to Mediterranean type of climate and is characterized by mild summers and challing winters. Due to latitudinal variation from 1,600 meters to 5,000 meters above mean sea level there is a wide variation in climatic conditions in different parts of the district experiencing a typical temperate climate in high altitude which experience snowfall and severe cold in the winter and tropical climate at low altitude. The winter commences from early November and lasts till end of March. Most of the precipitation received during this period is in the form of snow & the temperature, at times falls as low as -13°C. In December-January the minimum temperature is generally below freezing point. The period from March to June constitutes warm summers with temperature rising upto 33°C.

Precipitation takes place in the form of rainfall as well as snow with occasional hailstorms. The average rainfall in the district is about 680 mm. About 60 to 70% of the precipitation is received in the form of snow during December to February. March to April are the months of heavy rainfall. May to September are relatively dry months.

(Source: https://cgwb.gov.m/District_Profile/JandK/srinagar.pdf)

Khasra No: 2610 Min, Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthochowk District: Srinagar, State: J & K. Draft EIA Report

3.3.2 Geology

The main geological formation in the district are Karewas & Paleozoic Sedimentaries and Volcanics. These formations are overlain by a thin mantle of Recent alluvium. The Karewas are overlying the folded Zeewan formation & Panjal volcanics. In the northern extremity of the valley portion Karewa formations rests over the Cambrio-Silurians.

3.4 AIR ENVIRONMENT

Ambient air quality monitoring stations were selected primarily on the basis of surface influence, demographic influence and meteorological influence. 24 hourly monitoring was carried out for PM₁₀, SO₂, NO₂, & PM_{2,5} twice a week at each station. This study was done during pre-monsoon season for a period of 3 months (March – May 2023).

The ambient air quality with respect to the study zone of 10 km radius around the mine site forms the baseline information. The various sources of air pollution in the region are dust rising from unmetalled roads, domestic fuel burning, vehicular traffic, agricultural activities, other industries, etc.

The prime objective of baseline air quality monitoring is to assess existing air quality of the area. This will also be useful in assessing the conformity to standards of the ambient air quality as per standards during the mine operations.

The baseline status of the ambient air quality has been assessed through scientifically designed ambient air quality network.

3.4.2 Meteorological Data

Meteorology is a sub-discipline of the atmospheric sciences, a term that covers all studies of the atmosphere. A sub-discipline is a specialized field of study within a broader subject or discipline. Climatology and aeronomy are also sub-disciplines of the atmospheric sciences. Climatology focuses on how atmospheric changes define and alter the world's climates. Aeronomy is the study of the upper parts of the atmosphere, where unique chemical and physical processes occur. Meteorology focuses on the lower parts of the atmosphere, primarily the troposphere, where most weather takes place.

Table 3.2 Site-Specific Meteorological Data (6:00 AM to 6:00 P.M.)

Month	Wind Sp	eed (mph)	Temperat	ure (*C)	Rainfall (mm)	Relative Humidity (%)		
	Max.	Min.	Highest	Lowest	2	Highest	Lowest	
March	6	2	27	5	0.00	95	22	
April	9	2	27	4	0.00	100	20	
May	11	2	29	3	0.0	96	20	

3.4.3 Wind Rose Diagram

Wind rose is the diagrammatic representation of wind speed and frequency in a specified direction with its arms representing sixteen directions. Each arm gives a clear frequency distribution of wind speed in a particular direction for a given period of time. Wind-rose have been plotted with the aid of software WR PLOT and following results have been obtained. Wind speed and wind direction data is useful in identifying the influence of meteorology on the air quality of the area. Based on the collected meteorological data, relative percentage frequencies of different wind directions are calculated and plotted as wind roses of Sixteen directions viz., N, NNE, NE, ENE, E, ESE, SE, SSE, S, SSW, SW, WSW, W, WNW, NW and NNW directions for twelve hours and twenty four hour duration respectively. The observed wind pattern during the study period is described below and is plotted for the study period. The predominant over all wind patterns for the study period is from South West to North East direction.

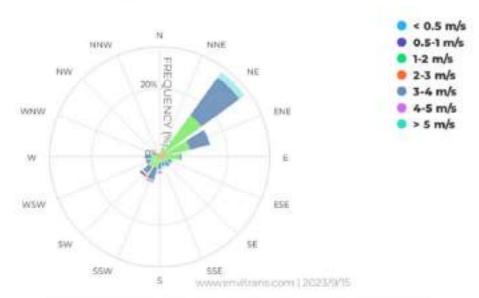


Figure 3.5: Wind Rose Diagram (Dominant Wind is Blowing from NE)

3.4.4 AMBIENT AIR MONITORING

Ambient air quality monitoring stations were selected primarily on the basis of surface influence, demographic influence and meteorological influence. 24 hourly monitoring was carried out twice a week at each station for major air pollutants viz PM₁₀, SO₂, NO₂, & PM_{2.5} identified for ambient air quality monitoring (AAQM). This study was done during pre-monsoon season for a period of 3 months (March-May 2023). This will also be useful in assessing the conformity to standards of the ambient air quality as per standards during the mine operations.

The various sources of air pollution in the region are dust rising from unmetalled roads, domestic fuel burning, vehicular traffic, agricultural activities, other industries, etc.

The design of monitoring network in the air quality surveillance program has been Ambient air monitoring was carried out on monthly basis in the surrounding areas of the mine site to assess the ambient air quality at the source. To know the ambient air quality at a larger distance i.e. in the study area of 5 km radius, air quality survey has been conducted at 08 locations over a period of three months of March-May 2023. The ambient air quality monitoring stations were set up at the following locations. The prime objective of the baseline air monitoring was to evaluate the existing air quality of the area. This will also be useful for assessing the conformity to standards of the ambient air quality during the operation of

Khasra No: 2610 Min, Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachowk District: Srinagar, State: J & K. Draft EIA Report

the proposed mine. This section describes the selection of sampling locations, methodology adopted for sampling, analytical techniques and frequency of sampling.

3.4.5 Air Quality Survey

The baseline status of the air quality in the study area has been assessed through a scientifically designed ambient air quality monitoring network. The design of monitoring network in the air quality surveillance program has been based on the following considerations:

- a) Representation of Mine leases area.
- b) Representation of the down wind direction and up wind direction.
- c) Representation of residential areas.
- d) Representation of regional background levels.
- e) Meteorological conditions (predominant wind direction and wind speed).
- Topography of the study area.

Ambient Air Quality Monitoring (AAQM) stations were set up at Eight locations with due consideration to the above mentioned points. **Table No.** 3.3 gives the details of environmental setting around each monitoring station and their distances with reference to the proposed mine. Villages/locations have been selected in downwind direction as well as in the upwind direction for AAQ monitoring from the proposed activity site.

Table 3.3: Ambient Air Quality Monitoring Stations

Station Code	Name of the village	Distance & Direction
AQ-1	Core zone	0.49km, WSW
AQ-2	Sangar	3.0 Km, NE
AQ-3	Baba Gulam Din Sahib	5.35 Km, NW
AQ-4	Khanmoh	1.67 Km, SW
AQ-5	Bathan	5.30 Km, E
AQ-6	Mulanar	9.60 Km, NNW
AQ-7	Khrew	6.45 Km, SE
AQ-8	Badami Bagh Cantoment	9.05 Km, W

Khasra No: 2610 Min, Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachowk District: Srinagar, State: J & K. Draft EIA Report

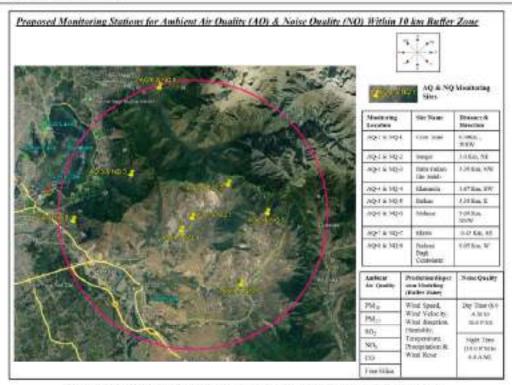


Figure 3.6: Google Map Showing Ambient Air Monitoring Locations

3.4.6 Method of Air Monitoring

Ambient air quality monitoring has been carried out with a frequency of two days per week at Seven locations covering one complete season except monsoon (CPCB guidelines). The ambient air quality parameters along with their frequency of sampling are given in Table- 3.4

Table 3.4:	Methods	adopted	for P	M_{10}	PM2.5	SO_2	and	NO_2

Parameters	Technique	Technical Protocol
PM25	Gravimetric method	CPCB Guideline Vol. I May* 201
PM ₁₀	Gravimetric method	IS 5182 (Part-XXIII)
Sulphur Dioxide	Improved West and Gacke	IS-5182 (Part-II)
Nitrogen Dioxide	Modified Jacob & Hochheiser	IS-5182 (Part-VI)

3.4.7 Ambient air quality Interpretations

The ambient air quality Interpretation is given in Table 3.5 for each location. Detailed Air Monitoring Lab report is attached as Annexure. The standards of Ambient Air Quality in India are available online at http://epch.nc.air/Sommol_dminor_dm_Quality_Standards.php

Khasra No: 2610 Min, Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachawk District: Srinagar, State: J & K. Draft EIA Report

Table 3.5: Ambient Air Quality Status

Site	Particulars	PM ₁₀ (μg/m ³)	PM _{2.5} (μg/m ³)	SO ₂ (µg/m³)	NOx (µg/m³)	CO (mg/m ³)
AQ-1	Minimum	62.15	32.34	8.12	15.37	<0.5
	Maximum	68.10	38.60	11.65	19.73	< 0.5
	Average	65.02	34.93	9.91	17.64	<0.5
	98th Percentile	67.84	37.98	11.62	19.73	< 0.5
AQ-2	Minimum	59.48	30.43	7.06	16.35	< 0.5
	Maximum	65,53	35.74	10.83	19.85	< 0.5
	Average	62.91	32.95	8.79	18.06	<0.5
	98th Percentile	65.50	35.63	10.79	19.82	< 0.5
AQ-3	Minimum	58.41	30.62	6.45	14.39	< 0.5
	Maximum	64.60	36,56	9.67	17.54	<0.5
	Average	61.09	32.99	7.79	15.82	< 0.5
	98th Percentile	64.57	36.36	9.56	17.53	< 0.5
AQ-4	Minimum	60.72	31.38	7.34	16.59	< 0.5
	Maximum	64.60	34.66	10.89	19.78	<0.5
	Average	62.98	33.07	9.11	18.09	< 0.5
	98th Percentile	64.55	34.55	10.88	19.77	<0.5
AQ-5	Minimum	61.56	31.62	8.58	18.25	< 0.5
	Maximum	65.84	35.75	11.93	22.81	<0.5
	Average	63.68	33.52	10.27	20.44	< 0.5
	98th Percentile	65.81	35.74	11.92	22.72	< 0.5
AQ-6	Minimum	60.53	30.64	6.65	16.43	< 0.5
	Maximum	66.56	36.65	10.87	20.71	< 0.5
	Average	64.14	34.13	8.69	18.49	< 0.5
	98th Percentile	66.45	36.59	10.84	20.70	<0.5
AQ-7	Minimum	61.90	32.23	8,44	17.14	<0.5
	Maximum	66.63	36.27	11.84	21.52	<0.5
	Average	64.00	34.01	10.13	19.67	< 0.5
	98th Percentile	66.24	36.11	11.79	21.50	<0.5
AQ-8	Minimum	62.30	31.91	7.90	16.82	< 0.5
	Maximum	67.76	37.61	12.53	20.90	< 0.5
	Average	64,79	34.75	10.18	18.65	<0.5
	98th Percentile	67.64	37.53	12.50	20.84	< 0.5
CPCB Standards:	100	100	60	80	80	4.0

3.4.8 Observations:

- PM₁₀- 58.41 (Min.) at AQ-3 to 68.1 μg/m3 (Max.) at AQ-1
- PM_{2.5}—30.43 (Min.) at AQ-2 to 38.6 μg/m3 (Max.) at AQ-1
- SO₂ = 6.45(Min.) at AQ-3 to 12.53 μg/m3 (Max.) at AQ-8
- ♦ NOx 14.39(Min.) at AQ-3 to 22.81 µg/m3 (Max.) at AQ-5

Khasra No: 2610 Min, Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachowk District: Srinagar, State: J & K. Draft EIA Report

◆ CO -<0.5 (Min.) to <0.5 µg/m3 (Max.)</p>

3.5 WATER ENVIRONMENT

The purpose of the study is to:

- · Assess the water quality characteristics for critical parameters;
- · Evaluate the impacts on agriculture productivity, habitat conditions, recreational resources and
- · aesthetics of the vicinity; and
- Predict the likely impacts on water quality due to the mining and other related activities.

3.5.1 Selection of Sampling Stations:

The sampling was done both for surface water and underground water. The samples were taken from the identified monitoring locations within the 5 Km radius of the study area. Six ground water sampling locations and One Surface water sampling locations were chosen as shown in the figure given below:

3.5.2 Methodology Adopted

Parameters for analysis of water quality were selected based on the utility of the particular source of water as per MoEF & CC guidance. Hence quality of ground water was compared with IS: 10500: 2012 for drinking purposes. Surface water quality was analyzed for parameters as mentioned in the 'Methods of Monitoring & Analysis published by CPCB (in CPCB guidelines)' and it was rated according to the CPCB Water Quality Criteria (Designated Best Use). Grab water samples were collected from sampling locations in a 5 liter plastic jerry can and 500 ml sterilized clean glass bottles for complete physicochemical and bacteriological tests respectively.

3.5.3 Ground Water

The sources of potable water are the hand pumps situated nearby villages in the study area. Samples were collected from the available water resources around the applied mine lease area. Eight monitoring location were selected for ground water sampling. The detail of Monitoring site and its station Code is given in the table below:

Table 3.6: Ground Water Sampling Locations.

Station Code	Name of the village	Distance & Direction
GW-1	Sangar	3.0 Km, NE
GW-2	Baba Gulam Din Sahib	5.35 Km, NW
GW-3	Bathan	5.30 Km, E
GW-4	Khanmoh	1.67 Km, SW
GW-5	Khrew	6.45 Km, SE
GW-6	Badami Bagh Cantoment	9.05 Km, W

Khasra No: 2610 Min, Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthochowk District: Srinagar, State: J & K.

Draft EIA Report



Figure 3.7: Monitoring Locations for Water and Soil and Surface Water Quality

Table 3.7: Results of Ground Water Quality

S.No	Parameter	Test Method	GW1	GW2	GW3	GW4	GW5	GW6	Units	Acceptable Limit	Permissible Limit in the Absence of Alternate Source
1	рН	IS:3025(Part-11):2022	7.41	7.24	7.34	7.42	7.42	7.51	*	6,5-8.5	
2	Colour	IS:3025(Part-04):2021	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	Hazen	5	15
3	Odour	IS-3025(Part-05):2018	Agreeab le	Agreea ble	Agreeab le	Agreeab le	Agreeabl e	Agreeab le	2	Agreeable	Agreeable
4	Taste	IS:3025(Part-07):2017	Agreeab le	Agrees ble	Agreeab le	Agreeab le	Agreeabl e	Agreeab le	÷	Agreeable	Agreeable
5	Turbidity	IS-3025(Part-10):1984	<0.5	< 0.5	<0.5	<0.5	<0.5	<0.5	NTU	1	5
6	Total Hardness (as CaCO ₁)	IS:3025(Part-21):2009	184	192	152	232	252	84	mg/l	200	600

Khasra No: 2610 Min, Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachowk District: Srinagar, State: J & K.

Draft EIA Report

7	Calcium(as Ca)	IS:3025(Part-40):1991	36.80	34.56	30.40	41.76	50.40	15.12	mg/l	75	200
8	Magnesium (na Mg)	IS:3025(Part-46):1994	22.36	25,66	18,47	31.01	30.62	11.23	mg/l	30	100
9	Chloride(as Cl)	IS:3025(Part-32):1988	21.53	31.31	19.57	23.48	25.44	19.57	mg/l	250	1000
10	Iron(as Fe)	IS:3025(Part-53):2003	0.088	<0.05	<0.05	0.07	<0.05	<0.05	mg/l	1	No Relaxation
11	Fluoride(as F)	APHA 4500 F(D) 23rd Ed.: 2017	0.39	0.22	0.34	0.28	0.33	<0.1	mg/l	1	1.5
12	Free Residual chlorine	IS:3025(Part-26):2021	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/l	0.2	1
13	Total Dissolved Solid	IS:3025(Pari-16):1984	291	278	245	326	380	133	mg/l	500	2000
14	Phenolic Compound (as	IS: 3025 (Part- 43):2022	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	mg/l	0.001max	0.002 Ma
15	Anionic Detergents (as MBAS)	APHA 5540 (B)/(C) 23rd Ed.: 2017	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/l	0.2	1.0
16	Sulphate (as SO ₄)	IS: 3025(Part-24):2022	7.46	11.03	5.97	13.31	7.46	3.67	mg/l	200	400
17	Nitrate (as NO ₃)	IS:3025(Part-34):1988	4.72	5.27	4.30	6.70	8.13	2.15	mg/l	45	No Relaxatio
18	Alkalinity (as CaCO3)	IS:3025(Part-23):1986	172	152	144	192	232	72	mg/l	200	600
19	Nickel (as Ni)	1S 3025 (Part-54):2003	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/l	0.02	No Relaxatio
20	Cadmium (as Cd)	IS-3025(Pmr-41):1992	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	mg/l	0.003	No Relaxatio
21	Lead (as Pb)	IS:3025(Part-47):1994	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/l	0.01	No Relaxatio
22	Total Chromium (asCr)	IS:3025(Part-52):2021	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg1	0.05	No Relaxatio
23	Copper (as Cu)	IS:3025(Part-42):2004	<0.01	< 0.01	<0.01	<0.01	<0.01	<0.01	mg/l	0.05	1.5
24	Total Ammonia	IS:3025(Part-34):1988	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	mg/l	0.5	No Relaxatio
25	Sulphide (as H2S)	IS:3025(Part-29):1986	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	mg/l	0.05	No Relaxatio

Khasra No: 2610 Min, Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachowk District: Srinagar, State: J & K. Draft EIA Report

26	Zinc (as Zn)	IS:3025(Part-49):1944	< 0.1	<0.1	<0.1	<0.1	< 0.1	<0.1	mg/l	5	15
27	Manganese (as Mn)	IS:3025(Part-59):2006	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/l	0.1	0.3
28	Boron (as B)	IS:3025(Part-57):2021	< 0.1	< 0.1	<0.1	<0.1	<0.1	<0.1	mg/l	0.5	1
29	Selenium (Se)	IS:3025(Part-56):2003	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/l	0.01	No Relaxation
30	Arsenic (as As)	IS:3025(Part-37):2022	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/l	0.01	No Relaxation

3.5.4. Observation

Analysis results of ground water in the study area reveal the following: -

- PH 7.24(Min.) at GW-2 to 7.51(Max.) at GW-6.
- ◆ Total Hardness 84 (Min.) mg/l at GW-6 to 252 mg/l (Max.) at GW-5.
- TDS 133 (Min) mg/l at GW -6 to 380 mg/l (Max) at GW -5,
- Sulphate 3.67 (Min.) mg/l at GW-6 to 13.31 mg/l (Max.) at GW-4.
- Chloride 19.57(Min.) at GW-6 to 31.31 mg/l (Max.) at GW-2

The ground water from all sources remains suitable for drinking purposes as all the constituents are within the limits prescribed by drinking water standards promulgated by Indian Standards IS: 10500-2012. Fluoride is found within the permissible limit. Most of the parameters of ground water are found within the permissible limits as per Drinking Water IS: 10500-2012.

3.5.5 SURFACE WATER

Three surface water samples were collected from the study area. The locations of surface Water samples are given in Table 3.8. The physio-chemical analysis of the these samples are given in the Table 3.9.

Table 3.8: Surface Water Sampling Locations

Sur	face Water Monitoring Locations	
SW-1	Upstream (Jhelum River) Pantha chowk	7.45 Km, SW
SW-2	Downstream (Thelum River) Near Zaffron Colony	6.65 Km, SW

Table 3.9: Results of Surface Water Quality

		Result	sult				
S.No	Parameter	Test Method	Unit	SW1	SW2		
1	pН	IS:3025(Part-11):2022		7.23	7.29		
2	Temperature	IS:3025(Part-09):1984	°c	22.3	22.6		
3	Turbidity	IS:3025(Part-10):1984	NTU	3.1	3.9		
4	Conductivity @25°C	IS:3025(Part-14):2013	µs/cm.	259.9	268.7		
5	Total Suspended Solid	IS:3025(Part-17):2022	mg/l	15	20		
6	Total Alkalinity (As CaCO ₃)	IS:3025(Part-23):1986	mg/l	64	72		

Khasra No: 2610 Min, Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachawk District: Srinagar, State: J & K.

Draft EIA Report

7	Biological Oxygen Demand (Max.)	IS:3025(Part-44):1993	mgT	2.3	3.0
8	Dissolved Oxygen (as O3) Min.	IS:3025(Part-38):1989	mg/l	8.1	7.8
9	Calcium(as Ca)	1S:3025(Part-40):1991	mg/l	17.60	30.40
10	Magnesium(as Mg)	APHA 3500-Mg-B 23rd Ed 2017	mg/l	11.66	6.80
11	Chloride(as Cl),Max	IS:3025(Part-32):1988	mg/l	19.57	25.44
12	Iron(as Fe),Max	IS:3025(Part-53):2003	mg/I	0.18	0.26
13	Fluoride(as F),Max	APHA 4500 F(D) 23rd Ed. 2017	mg/l	0.23	0.14
14	Total Dissolved Solid	IS:3025(Part-16):1984	mg/I	169	175
15	Total Hardness (as CaCO3)	IS:3025(Part-21):2009	mg/l	92.00	104.00
16	Sulphate (as SO4)Max	IS:3025(Part-24):2022	mg/l	27.54	13.19
17	Phosphate (as P)	IS:3025(Part-31):2022	mg/l	1.19	1.05
18	Sodium (as Na)	IS:3025(Part-45):1993	mg/l	13.70	12.72
19	Manganese (as Mn)	APHA 3500- Mn-B 23rd Ed 2017	mg/l	<0.1	<0.1
20	Total Chromiun (as Cr)	IS:3025(Part-52):2021	mg/l	< 0.05	< 0.05
21	Zinc (as Zn)	IS:3025(Part-49):1994	mg/l	< 0.1	< 0.1
22	Potassium (as K)	IS:3025(Part-45):1993	mg/l	3.42	3.18
23	Nitrate (as NO ₃),Max	APHA 4500-NO3-B 23rd Ed 2017	mg/l	4.90	5.27
24	Cadmium (as Cd)	IS-3025(Part-41):1992	mg/l	< 0.01	< 0.01
25	Lead (as Pb)	IS:3025(Part-47):1994	mg/l	<0.01	<0.01
26	Copper (as Cu)	IS:3025(Part-42):2004	mg'l	< 0.01	< 0.01
27	Chemical Oxygen Demand	IS-3025(Part-58): 2006	mg/l	16.00	20.00
28	Arsenic (as As)	4S:3025(Part-37):2022	mg/l	< 0.01	< 0.01

3.5.6 Observation:

The parameters results are as follows:

- pH value is 7.23 to 7.29
- TDS was observed as 169 mg/l to 175 mg/l
- Chlorides were found as 19.57 to 25.44 mg/l
- Sulphates were found as 13.19to 27.54 mg/l
- Total hardness was observed 92 to 104 mg/l.

3.6 SOIL ENVIRONMENT

Soil of the proposed site is influenced by the physiographic features of the area. There is dominance of sub-mountain soil and mountain soil as J & K is home of hills and mountains. Sand is dominated in the soil texture in all the locations. It is observed that sub-mountain soil is dominated in soil map of the area. Sub-mountain and mountain soils are the types of alluvial soils, which are loamy with little clay content and contain small quantity of lime with high magnesium content. There are three parallel belts widely

Khasra No: 2610 Min, Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachowk District: Srinagar, State: J & K. Draft EIA Report

apart from Forest and Hill soils, one stretching from Poonch to Kathua in Jammu province second North West of Jhelum valley in Kashmir province and the third belt stretching from south eastern part of Ladakh range. The soil survey and soil samples were carried out / collected to assess the soil characteristics of the study area. Soil samples were collected from 6 locations & analyzed as per CPCB norms.

3.6.1 Methodology

Soil samples were collected from different depths below the surface. The samples were homogenized and the quantity was reduced using the coning and quartering method to provide a representative sample for analysis. They were stored in air tight Polythene Bags and analyzed at the laboratory. The samples were Analyzed as per standard procedure/ method given in IS: 2720 (Revised Parts), and Soil Chemical Analysis by M. L. Jackson. Soil samples were collected from 8 locations as shown in Table 3.10 and analyzed as per CPCB norms.

Table 3.10: Soil Sampling Locations

Station Code	Name of the village	Distance & Direction
SQ-1	Sangar	3.0 Km, NE
SQ -2	Baba Gulam Din Sahib	5.35 Km, NW
SQ -3	Bathan	5.30 Km, E
SQ-4	Khanmoh	1.67 Km, SW
SQ -5	Khrew	6.45 Km, SE
SQ -6	Badami Bagh Cantoment	9.05 Km, W

Table 3.11: Results of Soil Quality

S.No	Parameter	Units	SQ-1	SQ-2	SQ-3	SQ-4	SQ-5	SQ-6	Test Method
1	Texture		Sandy Clay	Loam	Clay Loam	Sandy Clay Loam	Sandy Clay Loam	Sandy Clay	UTRL/LAB/SOIL/SOP/05
2	Sand	16	48.12	41.76	45.69	48.82	48.82	48.12	UTRL/LAB/SOIL/SOP/05
3	Clay	56.	36.49	23.80	33.98	32,58	32.58	36.49	UTRL/LAB/SOIL/SOP/05
4	Silt	16	15.39	34.44	20.33	18.60	18.60	15.39	UTRL/LAB/SOIL/SOP/05
5	pH(1:5 Suspension)	- 31	7.75	7.58	6.93	7.79	7.87	6.98	IS: 2720 (Part-26),1987
6	Electrical Conductivity	μmhos/em	785.3	416.2	415.3	695,4	675.4	767.5	IS: 14767:2000
7	Potassium	mg/kg	191.73	178.94	233.81	172.51	174,71	183.84	UTRL/LAB/SOIL/SOP/07
8	Sodium	mg/kg	278.50	296.84	286.92	285.99	289.62	267.04	UTRL/LAB/SOIL/SOP/06

Khasra No: 2610 Min, Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachowk District: Srinagar, State: J & K. Draft EIA Report

9	Calcium	mg/kg	4711.69	4142.92	4001.36	3757.00	3804.74	4517.79	UTRL/LAB/SOIL/SOP/08
10	Magnesium	mg/kg	545.57	475.19	729.73	614.89	622.71	523.12	UTRL/LAB/SOIL/SOP/08
11	Sodium Absorption Ratio		1.02	1.16	1.09	1.14	1.15	1.00	UTRL/LAB/SOIL/SOP/14
12	Water Holding Capacity	%	31.93	34.25	33.42	28.30	28.30	31.93	UTRL/LAB/SOIL/SOP/11
13	Total Kjeldahl Nitrogen	%	0.085	0.11	0.128	0.09	0.086	0.11	UTRL/LAB/SOIL/SOP/15
14	Phosphorous	mg/kg	52,37	74.26	65.39	41,76	41.76	52.37	UTRL/LAB/SOIL/SOP/09
15	Bulk Density	gm/cc	1.28	1.30	1.28	1.30	1.30	1.28	UTRL/LAB/SOIL/SOP/10
16	Organic Carbon	%	0.79	0.57	0.97	0.68	0.68	0.79	IS: 2720 (Part-22):1972
17	Organic Matter	76	1.41	1.02	1.73	1.22	1.22	1,41	IS: 2720 (Part-22):1972
18	Porosity	16	41.71	39.38	42.77	41.85	41.85	42.76	UTRL/LAB/SOIL/SOP/17

3.6.2 Observations:

- ◆ pH 6.93 to 7.87.
- ♦ Organic matter 1.02 to 1.73 %
- ◆ Total Kjeldahl Nitrogen 0.085 to 0.0.128%.
- Phosphorous 41.76 to 74.26 mg/kg.
- Potassium 172.51 to 233.81 mg/kg

3.7 NOISE ENVIRONNENT

The noise levels within the study area were recorded using Sound Level Meter and noise monitoring results were compared with the Ambient Noise Quality Standard notified under Environment Protection Act, 1986. The most common and universally accepted scale is the A weighted scale, which is measured as dB (A). This is more suitable for audible range of 20 to 20,000 Hz. The scale has been designed to weigh various components of noise according to the response of human ear. The environmental impact of noise can have several effects varying from Noise Induced Hearing Loss (NIHL) to annoyance depending on loudness of noise.

3.7.1 Methodology

The intensity of sound energy in the environment is measured in a logarithmic scale and is expressed in a decibel, dB (A) scale. In a sophisticated type of sound level meter, an additional circuit (filters) is provided, which modifies the received signal in such a way that it replicates the sound signal as received by the human ear and the magnitude of sound level in this scale is denoted as dB (A).

Khasra No: 2610 Min, Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachowk District: Srinagar, State: J & K. Draft EIA Report

Sound Pressure Levels (SPL) measurements were recorded at four locations. The readings were taken for every hour for 24-hrs. The day noise levels have been monitored during 6 am to 10 pm and night noise levels during 10 pm to 6 am at all the locations.

Measured noise level displayed as a function of time provides a useful scheme for describing the acoustical climate of a community. Noise levels recorded at each station are computed for equivalent noise levels. Equivalent noise level is a single number descriptor for describing time varying noise levels. The equivalent noise level is defined as mathematically.

10Log1/T∑ (10Lo/10)

Where L - sound pressure level a function of time dB (A)

T = Time interval of observations

Noise levels during the night time generally drop, therefore to compute Equivalent noise levels for the night time, noise levels are increased by 10 dB (A) as the night time high noise levels are judged more annoying compared to the day time.

Table 3.12: Noise Quality Monitoring Stations

S.No.	Station Code	Location (Village)	Distance & Direction
1	NQ-1	Core zone	0.49km, WSW
2	NQ -2	Sangar	3.0 Km, NE
3	NQ -3	Baba Gulam Din Sahib	5.35 Km, NW
4	NQ -4	Khanmoh	1.67 Km, SW
5	NQ-5	Bathan	5.30 Km, E
6	NQ-6	Mulanar	9.60 Km, NNW
7	NQ-7	Khrew	6.45 Km, SE
8	NQ-8	Badami Bagh Cantoment	9.05 Km, W

Table 3.13: Results of Ambient Noise Quality Monitoring

S.No.	PROJECT SITE	ZONE	LIMIT as per CPCB Guidelines Leq, dB(A)		Observed value Leq, dB(A)			
	arono -		DAY*	NIGHT*	DAY*	NIGHT*	Day/Night	
1	Core zone	Commercial Area	65.0	70.0	53.2	41.8	52.8	
2	Sangar	Residential Area	55.0	45.0	51.3	42.7	51.8	
3	Baba Gulam Din Sahib	Residential Area	55.0	45.0	50.6	42.2	51.2	
4	Khanmoh	Residential Area	55.0	45.0	50.7	41.3	50.9	
5	Bathan	Residential Area	55.0	45.0	51.4	41.2	51.3	
6	Mulanar	Residential Area	55.0	45.0	52.2	42.3	52.3	
7	Khrew	Residential Area	55.0	45.0	51.0	41.2	51.1	
8	Badami Bagh Cantoment	Residential Area	55.0	45.0	51.9	42.7	52.2	
*	Day time	Leg(6.00AM TO 10.00PM)						
	Night time	Leq(10.00PM TO 6.00AM)						

Khasra No: 2610 Min, Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachawk District: Srinagar, State: J.& K. Draft EIA Report

- 1. Day Time is from 6.00 AM to 10.00 PM.
- Night Time is reckoned between 10.00 PM to 6.00 AM
- Silence Zone is defined as an area up to 100m around premises of Hospitals, Educational Institutions and Courts. Use of vehicle horn, loudspeaker and bursting of crackers is banned in these zones.
- Note: Mixed categories of areas be declared as one of the four above mentioned categories by the competent Authority and the corresponding standards shall apply

Source: Central Pollution Control Board Norms

3.7.2 Results

- Noise level during day time 50.6 dB (A) (Min.) at AQ-4 to 53.2 dB (A) (Max.) at AQ-1
- ♦ Noise Levels during night time 41.2 dB (A) (Min.) at AQ-5,6 to 42.7 dB (A) (Max.) at AQ-2, 8.

There are several other sources in the 5 km radius of study area, which contributes to the local noise level of the area. Traffic activities as well as activities in nearby villages and agricultural fields add to the ambient poise level of the area.

3.8 BIOLOGICAL ENVIRONMENT

Introduction

The biodiversity we see today is the fruit of billions of years of evolution, shaped by natural processes. The vast array of interactions among the various components of biodiversity makes the planet habitable for all species, including humans. There is a growing recognition that, biological diversity is a global asset of tremendous value to present and future generations. At the same time, the threat to species and ecosystems has never been as great as it is today. Species extinction caused by human activities continues at an alarming rate. Protecting biodiversity is in our self-interest.

The biological study was under taken by Ecology & Biodiversity Expert, as a part of the EIA study report to understand the present status of ecosystem prevailing in the study area, to compare it with past condition with the help of available data, to predict changes in the biological environment as a result of present activities and to suggested measures for maintaining its health.

The state of J & K has been regarded as heaven on earth, and is also called the biomass of state of India. The biodiversity of the rich area of J&K happens to be one of the 26 hotspots in India with high endemicity. The whole Himalayan belt is one hotspot mega ventre having 8 critical areas which includes two regions from the state viz Ladakh and Kashmir. The environments, social and economic value of plants are very well known. On the other hand, the faunal component of biodiversity of the state is rich with interesting and unique forms both in the forest zone and above forest line. The variety of animal forms ranges from higher groups like vertebrates, including manimals, birds, reptiles, amphibians and lower groups like invertebrates including insects and even unicellular micro organisms.

A survey was conducted to study the flora around 5 km radius. Some of the information was gathered from the local habitants. All the collected data were classified to interpret the impact of pollution on the

Khasra No: 2610 Min, Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachawk District: Srinagar, State: J & K. Draft EIA Report

flora and fauna of that region. Survey of the mild plants as well as cultivated crop plants was made and all the available information was recorded. The primary data collected was compared with the Secondary data collected from Forest Department, Jammu & Kashmir and Forest Division in the District.

Physical Environment of the Study Area

The district is surrounded by Srinagar district, ganderbal and Anantnag in North and East, Budgam in the South-West and Pulwama in the South.

Objectives and Purpose of Study:

The basic objectives of the study are to evaluate the status of the flora and fauna of the core area and the buffer areas with specific reference to the rare or endangered or endemic or threatened (REET) species. The study is also designed to evaluate the adverse impacts of the proposed activity, if any and to suggest remedial / mitigation measures in accordance with the objectives as desired by the IAIA and the Ministry of Environment. Forests & Climate Change (MoEF&CC), Government of India (GoI).

Forest Division of District

The Main tree species are Bamboo, Chir, Khair and other broad leaved species. According to survey, the Forests are rich with 178 plant species, 10 species of wild animals, 71 bird species and a large No. of species of snakes and lizards.

Survey Methodology

Detailed survey was conducted to evaluate floral and faunal composition of the study area. Primary data on floral and faunal composition was recorded during site visit and secondary data was collected.

Field study period: The ecological survey has been conducted for one season. The details are given below:

Core zone: At the project site.

Buffer zone: Around the project site in 10 km radius.

Proposed Methodology for Terrestrial Ecology: The primary objective of survey was to describe the floral and faunal communities within the study area. The sampling plots for floral inventory were selected randomly in the suitable habitats (Anderson, 1867; Jain and Rao, 1983). The methodology adopted for faunal survey involve random survey, opportunistic observations, diurnal bird observation, active search for reptiles, faunal habitat assessment, active search for scats and foot prints, animal call, and review of previous studies. The aim was to set baselines in order to monitor and identify trends after the commissioning of the mining activity. Emphasis has been placed on presence of endemic species, threatened species if any present in the study area.

Proposed Methodology for Inland water sampling: The samples for qualitative and quantitative analysis of planktons were collected from the sub surface layer at knee depth. Water samples were filtered through plankton net of 20µ mesh size (APHA, 1971). The filtered samples were concentrated by using the centrifuge. By using Lackey's drops method and light microscope (Lackey, 1938), the quantitative

Khasra No: 2610 Min, Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachowk District: Srinagar, State: J & K. Draft EIA Report

analysis was carried out for phytoplankton and zooplankton. The standard flora and other literature were followed for the qualitative evaluation of Plankton (Welch 1948; Vollenweider, 1969; Edmondson, 1974).

Table 3.13: Proposed Mode of data collection & parameters considered during the survey

Aspect	Data	Mode Of Data Collection	Parameters Monitored
Terrestrial Ecology	Primary data collection	By field survey	Floral and Faunal diversity
	Secondary data collection	From authentic sources like Forests/Wild Life department of Jammu Kashmir, available published literatures like – Biodiversity and Environment Management and available publishes papers of scholars	Floral and Faunal diversity and study of vegetation, forest type, importance etc.
Aquatic Ecology	Primary data collection	By field survey	Floral and Faunal diversity
Ecology	Secondary data collection	From authentic sources like Forests/Wild Life department of Jammu Kashmir, available Published literatures like Biodiversity and Environment Management and available publishes papers of scholars.	Floral and Faunal diversity and study of vegetation, forest type, importance etc.

3.11.1 Floral Diversity of the Study area

The climatic, edaphic and biotic variations with their complex interrelationship and composition of species, which are adapted to these variations, have resulted in different vegetation cover, characteristic of each region (Ohasi, 1975). The tree species, herbs, shrubs, climbers and major crops, were documented during this base line study.

Trees: The dominant trees in the study area are Albizia lebbeck, Benth., Bauhinia variegata, Linn., Celtis tetrandra, Roxb., Salix alba, L. Total 27 species of trees belong to 27 families are enumerated from the study area.

Table 3.14: Trees in the study area

S.No.	Botanical Name	Family	Vernacular
1	Albizia lebbeck, Benth.	Mimosaceae	Siris
2	Albizia chinensis, (Osbeck) Merr.	Mimosaceae	Sanura, Ola,
3	Acacia mlotica, L.	Mimosaceae;	Kikar
4	Acacia catechu, Willd	Mimosaceae	Khair
5	Bauhinia variegata, Linn.	Caesalpinniaceae	Krael
6	Baukinia vahlii, Wight and Arn.	Caesalpiniaceae	Blungad

Khasra No: 2610 Min, Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachowk District: Srinagar, State: J & K. Draft EIA Report

7	Butea monosperma, (Lam.) Kuntze,	Papilionaceae	Palah
8	Celtis tetrandra, Roxb.	Urticaceae	Kharak
9	Cordia dichotoma, Forst.	Boraginaceae	Lasura
10	Dendrocalamus strictus, Nees.	Poaceae	Chuanthi
11	Dalbergia sissoo, Roxb.	Papilionaceae	Tahli
12	Erythrina subrosa, Roxb.	Papilionaceae	Thubb
13	Ehertia laevis,	Boraginaceae	Chamrod
14	Fieus hispida, Linn	Moraceae	Lana
15	Grevia serrulata, DC.	Tiliaceae	Dhamani
16	Leucaena leucocephala, (Lam.) de Wit.	Mimosaceae	Lasceni
17	Moringa oleifera, Lamk.	Moringaceae;	Suhanjana
18	Mitragyna parviflora, Korth.	Rubiaceae	Sangla
19	Pistacia chinensis	Anacardiaceae	Kakarsinghi
20	Pyrus pashia, Ham.	Rosaceae	Kainth
21	Quercus semecarpifolia, Smith.	Fagaceae	Khrew
22	Quercus dilatata, Lindl.	Fagaceae	Maru
23	Saltx alba, L.	Salicaceae	Badhaa
24	Sapindus mukorossi, Gaertn	Sapindaceae	Ritha
25	Terminalia bellirica, Roxb	Combretaceae	Bahera
26	Zizyphus mauritiana, Lamk.	Rhamnaceae	Ber
27	Zizyphus mummularia, W. et A., Prodr	Rhannaceae	Fuadi

Shrubs: Total 14 shrubs species belong to 14 families are enumerated from the study area. The shrubs observed in the study area are given in the table.

Table 3.15: Shrubs in the study area

S.No.	Botanical Name	Family	Vernacular	Common Name
1	Achyranthus aspera Linn.	Amaranth aceae	Puthkanda	Prickly chaff Flower
2	Barleria cristata Linn.	Acanthaceae	Kali Barenker	Philippine violet
3	Berberis lyceum Royle	Berberida ceae	Kaverlli	Barberry
4	Calotropis proceraR.Br.	Asclepid aceae	Desî akk.	Sodom apple
5	Camabis sativa Linn.	Cannabaceae	Bhan	Marijuana
6	Carrisa opaca Stapf.	Apocyanaceae	Garn	
7	Clematis buchananiana DC.	Ranunculaceae	Berkella	•
8	Colebrookea appositifolia Smith	Lamiaceae	Chitti Suali Duss	Indian Squirrel Tail
9	Cotoneaster microphyllous	Rosaceae	Rej.Brithal	Littleleaf
10	Dodonaea viscose Jacq.	Sapindaceae	Santha	Hopbush
11	Flacourtia indica Merr.	Salicaceae	Kakkoya	Indian Plum

Khasra No: 2610 Min, Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthochowk District: Srinagar, State: J & K.

Draft EIA Report

12	Lantana camara Prinsepia utilis Royale.		Verbenaceae	Panjfulli Jarri	Spanish Flag Himalayan
13			Rosaceae	Bhikal Bekkra	
14	Wooffordia	fruticosa	Lythraceae	Dhai	Fire flame bush

Source: http://www.openaccessscience.com

Medicinal Plants in the Study Area

Table 3.16: Medicinal Plants in the study area.

S.No Botanical Name		Local Name	Famili es	Plant Part	Medicinal Uses	
1,	Acacia catechu (Lim.) Wild.	Khair	Mimosa ceae	Stem	Source of kattha, which is astringent, digestive and useful in ailments of throat, mouth, gums, cough and diarrhoea.	
2.0	Acacia nilotica (Linn.) Del	Kikar	Mimosa ceae	Pods, bark, flowers, gum, leaves and roots.	Pods are effective in urinogenital disorders. Gum is used along with Calotropis process latex to cure asilima, stop bleeding and urinary & vaginal discharges. It is also useful in diabetes, cure skin diseases and bleeding piles. Flowers are used as tonic in diarrhoea and dysentery.	
3.	Achyranthes aspera Linn.	Parkand a	Amara nthacea e	Leaves and Seeds	The roasted seed powder mixed with honey is given thiring cough & throat irritations. Leaf juice is given to cure diarrhea.	
4.	Adhatada varica Nees,	Brenkar	Acanth aceae	Flower and Leaves	Flower ash with honey is given to cure whooping cough.	
5.	Aegle marmelos Corr.	Bel, Bill	Rutace ae	Leaf, Fruit and Root.	The unripe or half-ripe fruits improve appetite and digestion. The antibiotic activity of the leaf, fruit and root has been confirmed.	
					The tribal take an infusion of root bark in fever.	

Khasra No: 2610 Min, Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachowk District: Srinagar, State: J & K.

Draft EIA Report

6.	Asparagus racemosus Wild.	Sanspod	Liliacea e	Roots	The fresh juice of roots along with equal amount of Til oil is applied on the head to remove pain and improvement of milk in lactating mothers.
7-	Bauhinia variegata Linn.	Kaemblu	Berberi daceae	Root bark, Roots and Lower stems	Root bark, roots and lower stems are boiled in water, strained and evaporated till a semi- solid mass is obtained; this is called Rasaut, soluble in
8.	Bombax ceiba Linn.	Simbal	Bomba caceae	Root, Bark and Young fruits	1.Roots are used in the treatment of diarrhoea. 2.Bark is mucilaginous, which is used for healing wounds and to stop bleeding.
9	Butea monosperma (Lamak.) Tubert.	Pala, Palash	Fabace ae	Gum, Seeds and root bark	The gum is valuable for treatment of diarrhoea. Seeds are useful against ringworms, roundworms and tapeworms.
10	Cannabis sativa Linn	Bhang	Cannab inaceae	Leaves	The main use of hemp is for easing pain and inducing sleep. The tincture helps parturition and all painful urinary infections.
11	Cedrus deodara Loud	Deodar	Pinacea e	Stem	Decoction of the wood is used in the treatment of urinary disorder, piles, kidney stones and diabetes.
12	Cordia dichotoma G. Forst	Lusade	Boragin aceae	Fruits	The finits are used against cholera, dropsy and dysentery
13	Curcuma aromatica Salish.	Ban baldi	Zingibe raceae	Rhizome	The rhizome powder is very effective to stop bleeding from the wounds.
14	Dalbergia sissoo Roxh Ev DC.	Talli	Fabace ae	Leaves	The fresh juice of leaves mixed with honey dropped into the eyes for the improvement of

Khasra No: 2610 Min, Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachowk District: Srinagar, State: J & K.

Draft EIA Report

					eyesight
15	Datura metel Linn	Datura	Solanac eae	Leaf, twigs and fruits	The juice of the fruits is useful to check dandruff and falling of the hair.
16	Emblica officinalis Gaertu.	Amla	Euphor biaceae	Fruit	The fruits are very effective against jaundice. Dried fruits are good blood purifier. It is also used in vomiting and
17	Ficus benghalensis Linn	Bado	Morace ae	Latex	Its latex is used to expel out the thorn which are broken down inside the body.
18	Mallotus philippinensis Muell -Arg	Kanda	Euphor biaceae	Powder of the seeds	The powder of the fruits is highly beneficial for expelling out intestinal worms.
19	Mimosa pudica Linn	Chui-mui	Fabace ae	Leaves	Paste of leaves arrests bleeding and fasten the wound healing process.
20	Oracylum indicum (Linn.) Vent.	Tantu	Begnon iaceae	Stem bark, Leaf and Fruit	Leaf decoction is given in stomachache. Mature fruits are used in treating cough, piles and cardiac disorders.
21	Pimes roxburghtt Sor.	Chir-	Pinacea e	Resin	The oleo-resin is useful dressing for ulcers.
22	Punica granatum L.	Daduni	Punicac eae	Bark Roots, Seeds and Leaves	The fruit is very useful against the cough and jaundice. Leaves, seeds, roots and bark are effective in anthelmintic activity.
23	Terminalia chebula Roxb	Harad	Combre tacene	Fruit	The powder of the fruit is used as dentifrice for the strength of gums. The fruit is very effective against cough.

Khasra No: 2610 Min, Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachowk District: Srinagar, State: J & K. Draft EIA Report

24	Terminalia bellirica Roxb.	Bahera	Combre taceae	Fruits	The fruits are useful in digestion and diarrhoea. It is also useful in piles and leprosy, dropsy and fever.
25	Toona hexandra (Wall Ex. Roxb.)	Toont	Meltace ae	Leaves	Leaves are tonic, useful in chronic dysentery.
26	Vitex negundo Linn.	Bana	Verben aceae	Flowers and Leaves	The extract of the leaves is used to expel out worms in children. Fresh flowers extract cures diarrhoea

Agriculture/Crop Pattern:

Agriculture land use includes two distant concepts: first is the functional use of land to meet human needs (e.g. agricultural, recreational, and residential) and second is the form of ground cover (e.g. crops, trees, houses). Agriculture regions may be categorized on the basis of land use. District Kathua is also having three crop in combination with rice, wheat and barley as major crops. This part of Januara division for a part of Great Plains of India and have good climatic condition, irrigation facilities accompanied by rich alluvial soil. Agriculturally this is rich belt of the province.

Jammu districts ranks first in production of wheat i.e. 48.67% area followed by rice, maize, bajara and pulses which occupies area of 28.87%, 9.9%, 5.91% and 4.06% of total cropped area of the district respectively. In Udampur district maize is first ranking crop followed by wheat with 47.37% and 33.26% of the total area in hectare respectively. In districts of Rajouri, Poonch and Doda wheat is the first ranking crop with total of 46.41%,54.92% and 61.81% area under production of maize crop respectively. The reason being climatic conditions and irregular terrain. Reason of rice cultivation being sub tropical type of climatic conditions and plain topography

Table 3.17: Variety of Crops Recommend for District

Crop name	Details
Paddy (Dhan)	Gobhi
Wheat (Gehon)	Oat
Maize (Makka)	Sudan Grass
Pearl Millet (Bajra/Bulrush Millet/Spiked Millet)	Onien
Sorghum (Jowar/Great Millet)	Cabbage
Black Gram (Urd Bean)	Cauliflower
Bengal Gram (Gram/Chick Pea/Kabuli/Chana)	Knol-Khol
Green Gram (Moong Bean/ Moong)	Bitter Gourd
Leutil (Masur)	Bottle Gourd
Peas (Field Peas/ Garden Peas/Matar)	Cucumber
Groundout (Pea Nut/Mung Phalli)	Indian Squash (Tinda/Round Melon)

Khasra No: 2610 Min, Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachowk District: Srinagar, State: J & K. Draft EIA Report

Indian Rapeseed And Mustard (Yellow Sarson)	Brinjal	
Raya (Indian Mustard)	Chillies	
Sesame (Gingelly/Til)	Bhendi	
Sunflower (Suryamukhi)	Tomato	
Berseem (Egyptian Clover)	Fenugreek	
Rajmash Bean	Spinach	
Pea (Vegetable)	Radish	
Coriander	Turnip (Saljam)	

(Source: http://www.gdekathua.compdffolder/curranpournal/agricultrelendusSingle.pdf)

3.11.2 Faunal Biodiversity of Study area

The fauna of Jammu and Kashmir is diverse due to its unique location and climatic condition. About 16% of the Indian manuals, birds, reptiles, amphibians and butterflies are presented in the state. Birds contribute much to the chordate diversity following by manuals, reptiles, fishes and amphibians. The state is home to about 75 species of manuals, besides several sub-species, belonging to 54 genera, 21 families and 8 orders. Camivores represent 32% of the total manualian fauna in the state. Of the 19 species of the ungulates reported from the state, 13 have been listed as globally threatened.

The avian diversity of the state varies seasonally and available data suggests the existence of as many as 358 species of birds belonging to 179 genera, 51 families under 16 orders. The state is home to 14 species of amphibians belonging to 6 genera, 5 families and 1 order, and 68 species of reptiles belonging to 43 genera, 12 families and 2 orders. The available data suggests that 44 species of fishes belonging to 14 genera under 5 families occur in the state. The available data also reveals that as many as 225 species of insects, besides several sub-species, belonging to 136 genera, 35 families and 4 orders occur in the state

Birds: Some of them even breed in the state, List of species given below:

S.No	Family	Scientific Name	
1	Podicipedidae	Little Grebe	
2	Ardeidae	Indian Pond Heron	
3	Accipitridae	Pariah Kite	
		Black winged Kite	
		Indian Shikra	
		Indian White Backed Vulture	
		Himalayan Griffon Vulture	
4	Charadriidae	Red wattled lapwing	
	1.50.000 000 000 000 000 000 000 000 000	Black Winged Stilt	
5	Scolopacidae	Common Sandpiper	
6	Galliformes	Grey Partridge	
7	Columbiforms	Little Brown Dove	
8	Psittaciformes	Large Indian Parakeet	
9	Strigidae	Great Horned Owl	
10	Coraciidae	Blue Jay	

Khasra No: 2610 Min, Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachowk District: Srinagar, State: J & K. Draft EIA Report

11	Alcedinidae	Small Blue Kingfisher
12	Meropidae	Indian small green beer eater
13	Capitonidae	Large Green Barbet
14	Picidae	Lesser Golden Backed Woodpecker
15	Lanidae	Rufous-backed shrike
16	Oriolidae	Indian Golden Oriole
17	Dicruridae	Black Drongo
18	Strumidae	Bank Myna
	200100022403111	Indian Myna
		Starling
19	Corvidae	House Crow
		Himalayan Jungle Crow
		Western spotter forktail
		Blue Throat
20	Motacillidae	India White Wagtail
21	Zosteropidae	Indian White Eye
22	Passeridae	Indian House Sparrow
23	Fringillidae	Himalayan Rock Bunting
24	Alaudidac	Crested Lark
25	Certhidae	Himalayan Tree Creeper
26	Bucerotidae	Common Grey Hornbill
27	Phasianidae	Pavo cristatus

Source: Biodinersity and Environment Management.

Buterflies: Butterflies oberserved in the study area during study period. List of Buterflies are given below.

Table: 3.18: List of Butterflies in the Study Area.

Scientific Name	Family	Common Name
Pieris brassicae	Pieridae	The Large Cabbage White butterfly
Pieris canidia	Sparrman	The Indian Cabbage White butterfly
Ceporia nerissa	Pieridae	The Common Gull butterfly
Colias fieldii	Pieridae	The Dark Clouded yellow butterfly
Colias phiolodice	Pieridae	The Common or Clouded Sulphur butterfly
Pontia daplidice	Pieridae	The Bath White butterfly
Anaphaeis aurota	Fabricius	The Pioneer White or African Caper White butterfly
Aporia leucodice	Eversmann	The Himalayan Blackvein butterfly.
Catopsilia pomana	Fabricius	Lemon Emigrant butterfly
Ixias Marianne	Cramer	The White orange tip butterfly
Ixias pyrene	Linnaeus	The Yellow Orange Tip butterfly.
Eurema hecabe	Linnaeus	The Large Grass Yellow or Common Grass Yellow butterfly

Khasra No: 2610 Min, Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachowk District: Srinagar, State: J & K. Draft EIA Report

Gonepteryx ramni	Linnaeus	The Common Brimstone butterfly	
Zizeeria karsandra	Lycaemidae	The dark grass blue	
Everres lactumus	Lycaenidae	The Indian Cupid	
Chilades pandava	Lycaenidae	The Plains Cupid	
Talicada nyseus	Lycaenidae	The red Pierrot	
Libythea lepita	Nymphalidae	The Common Beak	
Libythea myntha	Nymphalidae	Chib beak	
Danaus genutia	Nymphalidae	Striped Tiger	
Danaus chrysippus	Nymphalidae	Plain Tiger	

Table: 3.19: Fauna found in Study area

S.No	Name	Global IUCN Status	Indian Wildlife protection Act
1	Rhesus Monkey	LR-le	11
2	Asiatic Jackal	LR-lc	П
3	Indian Fox	LR-nt	п
5	Small Indian Civet	LR-nt	П
6	Common Grey Mongoose	LR-lc	IV
7	Spotted Deer	LR-lc	ш
8	Barking Deer	LR-lc	III
9	Wild Boar	LR-le	ш
10	Rufous-Tailed Hare	LR-lc	IV
11	Grey Musk Shrew	LR-lc	V
12	Five Stripped Squirrel	LR-lc	IV
13	Indian Crested Porcupine	LR-lc	IV
14	House Mouse	LR-lc	V
15	House Rat	LR-lc	V
16	Indian Mole Rat	I.R-lc	v

3.9 Socio-Economic Environment

An essential part of environmental study is socio-economic environment incorporating various facts related to socio-economic conditions in the area, which deals with the total environment. Socio economic study includes demographic structure of the area, provision of basic amenities viz., housing, education, health and medical services, occupation, water supply, sanitation, communication, transportation, prevailing diseases pattern as well as feature of aesthetic significance such as temples, historical monuments etc. at the baseline level. This would help in visualizing and predicting the possible impact depending upon the nature and magnitude of the project.

Socio-economic study of an area provides a good opportunity to assess the socioeconomic conditions of an area. This study will possibly make a change in living and social standards of the particular area

Khasra No: 2610 Min, Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachowk District: Srinagar, State: J & K. Draft EIA Report

benefitted due to the Project. The gross economic production of the area will be increased substantially due to the existence of this project. It can undoubtedly be said that this project will provide direct and indirect employment and improve the infrastructural facilities and standards of living of the area.

Objectives of the Study

The objectives of this socio-economic report consist of:

- To conduct socio-economic assessment study in Project Area.
- To know the current socio-economic situation in the region to cover the sub sectors of education, health, sanitation, and water and food security.
- To recommend practical strategic interventions in the sector.
- To help in providing better living standards.

Scope of Work

- To study the Socio-economic Environmental of area from the secondary sources.
- To conduct socio-economic survey for primary data collection and to know the current socio-economic situation in the region to cover the sub sectors of education, health, sanitation, and water and food security.
- Developing a questionnaire for survey.
- Prediction of project impact and mitigation measures,
- To recommend practical strategic interventions in the sector.

CHAPTER-4

ANTICIPATED ENVIRONMENTAL IMPACT AND MITIGATION MEASURES

S. No.	Contents	Page No.
ANTIC	TPATED ENVIRONMENTAL IMPACT AND MITIGATION MEASURES	4/1-4/11
4.0	GENERAL	
4.1	LAND ENVIRONMENT	
4.2	WATER ENVIRONMENT	
4.3	AIR ENVIRONMENT	
4.4	NOISE ENVIRONMENT	
4.5	BIOLOGICAL ENVIRONMENT	
4.6	SOCIAL ENVIRONMENT	

Khasra No: 2610 Min, Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachowk District: Sringgar, State: J & K. Draft EIA Report

CHAPTER-4

ANTICIPATED ENVIRONMENTAL IMPACT AND MITIGATION MEASURES

4.0 GENERAL

The environmental parameters likely to be affected by mining are related to many factors, i.e. physical, social, economic, agriculture and aesthetic. Opencast mining involves drilling, , loading and transport of minor mineral. The excavated stone will be transported via trucks/tippers. The operations may disturb environment of the area in various ways, such as removal of mass, change of landscape, flora and fauna of the area, surface drainage, and change in air, water and soil quality. While for the purpose of development and economic upliftment of people, there is need for establishment of mining industries, but these should be environment friendly. Therefore, it is essential to assess the impacts of mining on different environmental parameters, before starting the mining operations, so that abatement measures could be planned in advance for eco-friendly mining in the area. The likely impacts on different environmental parameters due to this mining project are discussed below. The environmental components that are likely to be influenced or modified by the continuation of project activities are:

- Land use
- Air Environment
- Noise Environment
- Water Environment
- Flora and fauna
- Socio-economic status of the area

4.1 IMPACTS ON LAND USE AND MITIGATION MEASURES

4.1.1 Source

The project area does not consist of any forest land. It does not consist of any habitations. Land use plan of the mining lease area during pre-operational, operational and post operational is incorporated in the Chapter 2.

Table 4.1: Impact Prediction & Mitigation Measures

Impact	Mitigation
The mine site will be converted into the pit due to the mining activity which may cause soil erosion, soil degradation etc. Reclamation of land affected by	It is proposed to plant native species. Plantation during 1st year with consultation of Forest department with some fruit bearing and having medicinal importance, along the hand roads or outer periphery within the mining area which enhances the binding property of the soil.
mining activities during and at	
the end of mining lease period. Mining in the lease area may change complete land use pattern including topography, elevation, sediment transportation capacity etc	It is proposed to improve the effected land wherever possible for better land use, so as to support forestry and creation of water reservoir etc. Accordingly, the land reclamation portion will be done by plantation along the roads surroundings the office building on the waste barren land and in the open pits when they reach their ultimate stage. The regular health checkup camp will be organized.

4.1.2 CONCLUSION

The entire excavated land will be ultimately mined out area will be converted into water reservoir which can be further use for pisciculture.

Khasra No: 2610 Min, Area: 5.72 Ha, Village: Khannoh, Tehsil: Panthachowk District: Sringgar, State: J & K. Draft EIA Report

4.2 WATER ENVIRONMENT

Table 4.2 Impact Prediction & Mitigation Measures for water Pollution

Impact	Mitigation Measures

4.3 AIR ENVIRONMENT

4.3.1 Source:

Air pollution from this project mainly occurs due to transportation of mineral after drilling. Vehicular exhaust from dumpers ferrying is another reason for air pollution. These exhausts contain PM10, PM2.5, CO, SO_X, NO_X and small quantities of un-burnt fuel apart from some heavy metals like lead, nickel and arsenic. Air pollution due to mineral transportation can be controlled to a great extent by regular sprinkling on roads by mobile water sprinklers. Dumpers employed for transportation require will be in good condition. Several such provisions have been made in the report to contain the air pollution within the stipulated standards.

4.3.2 Anticipated Impacts

Stone mining is carried out by opencast semi-mechanized method. The air borne particulate matter mainly generated by loading and transportation operations. Prediction of impacts on air environment has been carried out taking into consideration proposed production and net increase in emissions.

Transportation of mineral from mining benches to tipper platform, movement of trippers on the haul road is considered as line sources. Water tankers with sprinkling arrangement will be used for regular water sprinkling on the haul roads to ensure effective dust suppression. The tippers are well maintained so that exhaust smoke does not contribute abnormal values of noxious gases and un-burnt hydrocarbons in order to assess the impact due to Stone production 2,00,000 MT per annum.

4.3.2.1 Emissions Details

Loading and transportation of Minor Mineral Quarry Cluster (Masonry Stone) Block and wind erosion of the exposed area and movement of light vehicles will be the main polluting source in the proposed mining activities releasing Particulate Matter (PM₁₀) affecting ambient air of the area. Emission during Loading was calculated by the area sources. Transportation of the Stone by number of trucks operated per day on the haul road was calculated by the area source which was combination of line sources with each truck loaded with mineral and transported over the haul road of the mining area. The carrying capacity of truck will be 10 T of mineral. Details of emission during loading and transportation on the haul road, wind erosion of the exposed area and road maintenance were discussed and combined impact was predicted in the worst case scenario under worst meteorological condition given as follows:

a) Loading - US EPA, 2008, revision of emission factor for AP- 42 was used to calculate emission of particulate matter released into the atmosphere during loading. Average wind speed was 2.75 m/s as observed with site data as shown in wind rose and discussion of local meteorology of the area. Emission of PM₁₀ during stone loading was calculated and found to be 1.6 x 10-7g/s/m².

Khasra No: 2610 Min, Area: 5.72 Ha, Village: Khannoh, Tehsil: Panthachowk District: Sringgar, State: J & K. Draft EIA Report

b) Haul Road - US EPA, 2006, revision of emission factor for AP-42 was used to calculate emission of particulate matter released into the atmosphere during transportation of Masonry Stone and over burden by 7 trucks operated per hour on haul road. Emission of PM10 due to transportation of ores on haul road was 0.54 x 10-6 g/s/m² based on assumption that silt content spread on road surface was 6%, and efficiency of PM₁₀ emission control 90%. Truck will be fully covered with tarpaulin material and emission of PM₁₀ during on the haul road will be insignificant. Based on the above consideration that there was low emission of PM₁₀ during transportation, emission of PM₁₀ of the exposed area due to wind erosion and movement of light vehicles on the road were not considered and combined with mining activities. US EPA based Dispersion ISCST-3 model was used for prediction of impact with 1-h meteorological data of the study period for the assessment of GLC. Emission value in each case was discussed as above is given in Table given below.

Table 4.3: Emission Factors

Source type	Pollutants Emission (g/s/m²)
Mineral Loading	1.6 x 10-7
Haul Road	0.54 x 10-6

4.3.2.2 Meteorological Data

The meteorological data recorded at hourly interval during the month of March 2023 to May 2023 on wind speed 2.75 m/s, wind direction, dry & wet bulb temperature, humidity, cloud cover and rainfall was processed to extract hourly mean meteorological data as per the guidelines of CPCB/MoEF for prediction of impacts from the area source. Stability was computed by Turner's method and mixing height was obtained from publication of IMD "Atlas of Hourly Mixing Height in India, 2008.

Data recorded from authorized source/Govt. agency were used as meteorological input for Dispersion Model which was stored in the computer for further analysis and interpretation to study the local meteorology of the study area. It was observed that SW to NE was pre-dominant wind during summer with low wind speed was observed during study period at the site. Average wind speed was 2.75 m/s. Impact of the pollutants was anticipated in east sector under influence of westerly & north westerly winds. Ambient air quality locations were selected based on the long term wind rose pattern of the area. Ambient air quality sampling locations were finalized to study the baseline status around the proposed site and to study impact at various locations. 24-h maximum impact of PM₁₀ was envisaged in east direction at very short distance from the site due to moderate to low wind speed.

Pollutants were dispersed from the proposed source under influence of local meteorology and dispersed on the ground in downwind direction close (-100 m) to the source under influence of moderate to low wind speed. High temperature and low humidity were observed at site with high temperature in day hours and low during night.

4.3.3 Mitigation measures

The air pollution sources are loading of Minor Mineral Quarry Cluster (Masonry Stone) Block and road transport network of the trucks/dumpers. The dust suppression measures like the following will be resorted:

- Water sprinkling will be done on the roads regularly to reduce the dust generation.
- Dust mask will be provided to the workers engaged at dust generation points like excavations and loading points.
- Fortnightly scraping of road in order to keep the roads almost leveled. This will ensure smooth flow of vehicles and also prevent spillage.

Khasra No: 2610 Min, Area: 5.72 Ha, Village: Khaumoh, Tehsil: Panthachowk

District: Srinnger, State: J & K.

- Proper maintenance of vehicles to keep the gas emissions under check.
- Plantation of trees along the roads to help reduce the impact of dust.

4.4 NOISE ENVIRONMENT

4.4.1 Source:

4.4.2 Anticipated Impacts

- Mental disturbance, stress & impaired hearing.
- Decrease in speech reception & communication.
- Distraction and diminished concentration affecting job performance efficiency.

4.4.3 Mitigation Measures

- i. On-site
- Well maintained vehicle will be used which will reduced the noise level.
- Plantation: Plantation of trees along the road will be done to dampen the noise, if possible.
- Hearing Protection: ear plugs will be used as hearing protection if it needed.
- II. Off-site
- a) The vehicles will be maintained in good running condition so that noise will be reduced to minimum possible level.

Draft EIA Report

- b) Awareness will be imparted prior to mining operations that smoke silencers remain in a good conditions not to generate noise.
- c) In addition, truck drivers will be instructed to make minimum use of horns at the village area.
- d) Where ever space is made available by the authorities' plantation will be done and also post plantation care will be provided.

4.5 BIOLOGICAL ENVIRONMENT

Impact Prediction & Mitigation Measures: Biological Environment

Impact on terrestrial Flora

Dust deposition on leaf Pendulous observed on nearby local plant species which may results in decline the rate of photosynthesis and retards the plant growth.

Measures for Minimizing Impact on Flora

- Dust issue is mainly because of the unpaved road, cumulative fugitive dust emissions by various crushers and stone quarrying activities. To mitigate the impact regular water sprinkling will be carried out within the mine lease area as well as approach road.
- Stabilization of soil/waste dumps by grass cover will be done.

Impact on Wildlife

- There is no National Park, Wildlife Sanctuary and Biosphere Reserve within 10 km radius of the project site.
- No rare, endemic & endangered species are reported in the buffer zone. However, during the course of mining, the management will practice scientific method of mining with proper Environmental Management Plan including pollution control measures especially for air and noise, to avoid any adverse impact on the surrounding wildlife.
- Fencing around the mine lease area to restrict the entry of stray animals
- Green belt development will be carried out which will help in minimizing adverse impact on the flora found in the area.

Khasra No: 2610 Min, Area: 5.72 Ha, Village: Khaumoh, Tehsil: Panthachowk District: Srinagar, State: J & K. **Draft EIA Report**

Measures for Minimizing Impact on Fauna

Following measures will be adopted to minimize the impact of mining on faunal environment of the area.

• Measures will be taken to curb pollution due to mining activities on air, water, soil & noise environment. Plantation at places marked by gram sabha or DFO will help in creating habitats for small faunal species and to create better environment for various fauna. Creating and developing awareness for nature and wildlife in the adjoining villages.

Study of Impact on Aquatic Ecology

• Mining activities will not disturb the existing aquatic ecology as there is no effluent discharge proposed from the stone quarry.

Mitigation Measures

- Periodic maintenance of road for mineral transportation
- Regular sprinkling of water through mobile tanker on mineral transport road.
- Development of thick plantation around mine lease area
- Monitoring of dust fall on agriculture land located nearby the mining area

Green Belt Development

The basic approach towards the development of green belt /plantation is with a view to provide an aesthetic look, eliminating fugitive emissions and for controlling the impact of noise, etc. A Green Belt will be developed based on the following principles:

- Plants that grow fast will be preferred.
- Preference for high canopy covers plants with local varieties
- Perennial and evergreen plants will be preferred.
- Plants having a high Air Pollution Tolerance Index (APTI) will be preferred.
- The development of green belt is an important aspect for any project because
- It improves the ambient air quality by controlling Suspended Particulate Matter in air.
- It helps in noise attenuation for the surrounding area.
- It helps in attracting new birds and insects as their habitation.
- It maintains the ecological balance.
- It increases the aesthetic value of site

4.6 OCCUPATIONAL HEALTH AND SAFETY:

Identification of Work Related Health Hazards

Details of the principle environmental and occupational risks that are likely to be created are given in

WORK RELATED HEALTH HAZARDS

S. No.	Hazardous Activities	Type of Hazards	Severity of Injury
1	Drilling	Exposed to high level of Noise	Hearing impairment
		Exposed to dusty environment	Respiratory diseases

Khasra No: 2610 Min, Area: 5.72 Ha, Village: Khaumoh, Tehsil: Panthachowk

District: Srinnger, State: J & K.

2	Loading	Struck by rolling big boulders	Serious injury, and equipment damage
		Struck by fall of objects	Serious Physical injury
3	Transportation	Accidental runaway of vehicle	Serious injury, and
		Fall of vehicle from height while reversing	equipment damage
		Exposed to high level noise	Hearing impairment
		Fire in engine due to over heating	Serious Physical injury
4	Welding, gas	Emission of gases & fumes	Asphyxiation
	cutting	Release of radiation & light	Eye injury
		Fire	Bums
		Release of heat	Skin problem, Burns
5	Storage of oil, lubricant	Leaks and spills	Fire & vigorous chemical reaction
6	Battery maintenance bandling	Acid spillage	Acid burns
7	Use/repair of	High pressure operation	Physical injury
	hydraulic jacks &	Oil spillage	
	pumps	Rupture of hydraulic hoses	

Draft EIA Report

Medical Surveillance and Examinations

In order to evaluate the impacts from stone mining project activities on health of workers, baseline health studies will be conducted on every worker before joining their duties.

- Identifying workers with conditions that may be aggravated by exposure to dust & noise and establishing baseline status for determining changes in health
- Evaluating the effect of dust and noise on workers
- Enabling corrective action to be taken when necessary
- providing health education and awareness
- The medical surveillance program will consist of the following:
 - o Pre-employment medical examinations
 - Periodic medical examinations
 - o Health & Safety awareness and training
 - Record keeping

Awareness and Training Program

All workers will be subjected to pre-employment and periodic awareness program on health and safety issues of stone mining and related activities. They would also be imparted with proper training and would be made to understand the health impacts of inhaling high concentration of dust laden air. All the workers will also be provided training in first aid.

- Holders of first aid certificate will be given refresher training once in two years
- Rescue trained person will acquire highest standards of proficiency in first aid
- Ambulance van will be provided fully equipped with lifesaving drugs, medicines and appliances needed in emergency

Record keeping

Khasra No: 2610 Min, Area: 5.72 Ha, Village: Khaumoh, Tehsil: Panthachowk District: Srinagar, State: J & K. Draft EIA Report

A Registered Medical Practitioner (Doctor) will be appointed for examining the workers. All the health records of the workers will be maintained in separate file in site office and the records will be regularly updated.

Pandemic Situation

Under COVID-19 following precaution will be done:

- Temperature of employees will be checked by Thermometer Gun twice a day and log book for the same will be maintained.
- Face protection shields along with masks and PPFs and along with sanitizer will be provided.
- Gloves, masks and hand sanitizers will be provided.
- Social distance will be maintained & awareness will be given by Tool box talks etc.
- It is ensured by PP that the updated guidelines or MHA in content of COVID-19 will be followed during Mining operation at Mining site.

Public Health Implications of the Project

There is no village habitation in or adjacent to the Stone Quarry. As observed from the modeling results, the dust emissions and noise from the stone mining project will not cause any significant impact on the ambient air quality and ambient noise levels in the surrounding villages. The mine will be operated during day time only. Thus, there will not be any disturbance to the nearby habitations during night. Mining area is 6.6 Km away from village link road, which is well connected to NH-1A. Thus, there will not be any disturbance to the normal traffic of the area. Also, the mine management will conduct periodic medical camps in the nearby villages to provide medical facilities to the villagers. Thus, no significant impact is envisaged on the public health due to the project.

4.7 TRAFFIC ENVIRONMENT

Impact	Mitigation Measure
No. of vehicles will increase due to mining in existing traffic scenario lead to air pollution which can cause adverse effect on human health of neighboring villagers like effect on breathing and respiratory system, damage to lung tissue, cancer and premature death, influenza or asthma. Vehicle collation may occur unwanted sound and can also cause impact on human health.	Vehicles with PUC Certificate will be hired. Regular maintenance of vehicles will be done to ensure smooth running of vehicle. It is proposed to plant number of native species per year with consultation of Forest Department with some fruit bearing and medicinal trees, along the haul roads, outer periphery within the lease area to prevent the impact of dust in the nearby village.
Accidents may be occurring due to fast movement of vehicles.	To avoid accidents the speed of vehicles will be low near habitation areas.

4.8 SOLID WASTE GENERATION & MANAGEMENT

Waste generation in ML area will be mainly in the form municipal solid waste generated by day workers. Waste will be generated during the mine life. The soil will be temporarily stacked within the mine lease area and will be used for spreading on the safety barrier for plantation (if any).

There is no overburden in the mine lease area. All the mined out rock is saleable. Hence, there is no stacking or disposal of overburden/waste rock is required. Damaged/worn out parts of the machinery deployed in mine will be sold to the authorized recycling vendors. No other solid waste is envisaged to be generated from the stone mining activities.

Khasra No: 2610 Min, Area: 5.72 Ha, Village: Khaumoh, Tehsil: Panthachowk

District: Srinnger, State: J & K.

The waste/reject generated during mining will be initially stacked in corner of the lease and will be stabilized by planting grasses & leguminous plants. A retention wall and garland drain will be constructed around the toe of the dumps to arrest silt wash off during rains. The garland drains will be connected to settling tank. The waste/reject will be used for spreading on safety barrier and top benches of mined out pit for plantation.

Draft EIA Report

4.9 SOCIOL ENVIRONMENT

Social Impact Assessment is carried out separately but concurrently with Environment Impact Assessment (EIA). It focuses the effect of the project on social and economic wellbeing of the community. It is obvious to assume that the activities of the mining operations will improve the socio-economic levels in the study area. The anticipated impact of this project on various aspects is described in the following sections

4.9.1 Impact on Socio - Economic Aspects

The proposed project will provide employment to the local people. It has been estimated that 51 people will get direct employment in this mining project. It is a positive impact of the project since it is providing employment opportunities to the local people.

Impact on Human Settlement

There is no human settlement in or adjacent to the Stone Quarry. Nearest human settlement is located at 0.56 Km of the mine lease area. Thus there will not be any impact on the human settlement in the area. The operation of the stone mine and associated activities will improve the economic development, civic amenities, and educational facilities in the project vicinity. Overall, due to employment generation and economic progress, there will be small scale positive changes in the socio-economic condition of the people residing in the vicinity of the project site.

Impact on Population Growth

This is a stone mining project. There will be employment of approximately 34 labours in the proposed project. Mostly local persons will be employed in the mine. Additional manpower requirement in the mine will be employed from the nearby villages. Thus, there will not be any population growth in the area due to the stone mining project.

Impact on Civic Amenities

The existing infrastructure facilities are sufficient to cater the needs of the stone mine. However, the mine management will take efforts as a part of CER for improvement in civic amenities like sanitation, drinking water facilities, transport road, etc in the nearby villages.

Impact on Health Care Facilities

The Primary Health sub center Khanmoh -1.60 Km of the proposed mine site, Govt. Hospital Pampore at 7.55km towards SW. Mine management will also conduct periodic medical camps in the nearby villages.

Impact on Economic Aspects

There will be 34 persons employed in the mine. Mostly local persons will be employed in the mine. The local population will be given preference in employment. The employment potential will improve economic conditions of these families directly and provide employment to many other families

Khasra No: 2610 Min, Area: 5.72 Ha, Village: Khaumoh, Tehsil: Panthachowk

District: Srinnger, State: J & K.

indirectly who are involved in business and service oriented activities. These will in-turn improves the quality of life in the region.

Draft EIA Report

4.10 Details of Transportation as Per the Indian Road Congress for both the Ways (Loaded as well ws unloaded trucks) Load and Its Impact on Environment

Traffic analysis is carried out by understanding the existing carrying capacity of the roads near to the project site. The road is wide enough to facilitate easy and smooth movement of heavy duty trucks.

Then depending on the capacity of the Industry, the number of trucks that will be added to the present scenario will be compared to the carrying capacity. Truffic impact study can be used to help evaluate whether the development is appropriate for a site and what type of transportation improvements may be necessary. It will help:-

- To establish the existing trips/ day without the project activity;
- To understand the increment on the traffic load due to the project activity;
- To know the existing road will sustain or not after the commission of the project.

Vehicle Count

The vehicles passing through the road (in both ways) were counted separately for 24 hours at one location from 06:00 hrs to 06:00 hrs next day continuously. Category-wise vehicle counting has been done continuously and recorded in the traffic volume count on hourly basis under respective categories.

Categorization of Traffic

The engine driven vehicles were categorized into various heads viz. Trucks/Bus, Light Carriage Vehicles (LCV), Car/Jeep, Multi Axle Vehicles, Two/Three Wheelers and Cycles/others.

Indian Road Congress (IRC) Guidelines

Factors for conversion of different type of vehicle into equivalent passenger car unit (PCU) based on their relative interference value as per Indian Road Congress Guidelines i.e. IRC 64: 1990 & IRC 106: 1990 is given below Table No:-4.1

Table 4.1 Recommended PCU Factors for Various Types of Vehicles on Road

Vehicle Type	Rural Road
	Equivalency factor for PCU
Fast Vehicles	
Two wheelers	0.50
Passenger Car, Pickup Van, Auto Rickshaw	1.00
Agricultural Tractor, Light Commercial Vehicle	1.5
Bus or Trucks	3.0
Truck Trailer, Agricultural Tractor - Trailer	4.50

(Source: - IRC 64-1990 & IRC 106-1990)

Khasra No: 2610 Min, Area: 5.72 Ha, Village: Khaumoh, Tehsil: Panthachowk

District: Srinnger, State: J & K.

Draft EIA Report

Level of Service (LOS)

Capacity standards are fixed normally in relation to the Level of Service (LOS) adopted for design, Five levels of service are recognized commonly designated from A to E. Considering the need for smooth traffic flow; it is recommended that normally LOS-C be adopted for design of urban roads. At this level volume of traffic will be around 0.70 times the maximum capacity. Capacity or Design Service volume is the maximum hourly volume at which vehicle can reasonably be expected to transfers a point or uniform section of a lane or road way during a given time period. As per IRC 64: 1990 guidelines, ratio of existing volume of PCU on roads (V) and its capacity (C) with corresponding level of services (LOS) and their performance is given below Table No.4.2.

Table 4.2 LOS and Their Performance

V/C	LOS	Performance	
0.0 - 0.2	A	Excellent	
0.2 - 0.4	В	Very Good	
0.4 - 0.6	C	Good / Average / Fair	
0.6 - 0.8	D	Poor	
0.8 - 0.9	E	Very Poor	
1.0	F	Worst	

Highway Capacity Manual (HCM) used travel speed and volume by capacity ratio (v/c ratio) to distinguish between various levels of service. The value of v/c ratio can vary between 0 and 1. Depending upon the travel speed and v/c ratio, HCM has defined six levels of service, level A to level F based on a graph between operating speed and v/c ratio as shown in the table above. Level of service A represents the zone of free flow. Here the traffic volume will be less, traffic will be experiencing freeflow also. The effect of minor incidents and point breakdowns are easily aborted at this level. Level of service B represents zone of reasonably free flow. At level of service C, the presence of other vehicles begins to restrict the maneuverability within the traffic stream. At level of service D, the average speeds begin to decline with increasing flows. Level of service E defines operation at capacity. At this level, the stream reaches its maximum density limit. Level of service F represents the region of forced, having low speed, and complete breakdown of the system.

Presentation of Results

The present level of traffic has been converted to Passenger Car Units (PCU) at all the locations as per the conversion factors stipulated by Indian Road Congress (IRC). The traffic volume at each location is summarized below 4.3.

Table 4.3 Traffic Volume Count on NH- 1A and Village Road

Traffic Vehicle category	PCU Factor	No. of vehicle/day Near NH 1A	No. of PCU/day	No. of vehicles per day near Village Road	No. of PCU/day
2 Wheelers	.0.5	222	111	18	9
Mini Bus/ Tractor Trolly	1,5	371	556.5	8	12

Khasra No: 2610 Min, Area: 5.72 Ha, Village: Khamnoh, Tehsil: Panthachowk District: Srinagar, State: J & K. Draft EIA Report

Car	1.0	1487	1487	10	10
Tempo/LCV	1.5	54	81	4	6
Truck	3.0	509	1527	40	120
Bus	3.0	133	399	0	0
T otal	44	2776	4161.5	80	157

Table 4.4 Impacts during Operation Phase of the Area

No. of working days	330
Considering loaded & unloaded truck per day	20
PCU/Day	60
PCU/hr	2.5
Working Hours per day	24
Design Service Volume for Two Lane Roads as per IRC :64:1990	15000 PCU/Day 625 PCU/hr
Recommended Design Service for Intermediate Lane Roads asper IRC .64.1990	6000 PCU/Day 250 PCU/hr
With trade and the second	

Table 4.5 (A) Incremental Rise at NH-1A near Project Site

Design Service Volume PCU/day	Existing Traffic I	The second secon	1000	ed Traffic tionPhase	A SECTION AND A SECTION AND ASSESSMENT OF THE PERSON AND ADDRESS OF THE PERSON ADDRESS OF THE PERSON AND ADDRESS OF THE PERSON ADDRESS OF THE PERSON ADDRESS OF THE PERSON ADD	ve Movement ost Project	
15000	PCU/ day	PCU/ hr	PCU/ day	PCU/ br	PCU/ day	PCU/ hr	
	4161.5	173.39	60	2.5	4221.5	175.89	В

4.10 CONCLUSION:

Mining effect environment in various ways including depletion of land cover, vegetation, removal of soil, change of landscape & deposition of the solid waste product thus causing imbalance in the landscape and increasing air, water and soil pollution. Land use in mining areas consists of mainly forestry, pasture and agriculture. The mined out land which will be fully exhausted by virtue of excavation upto full depth of mineralization will be simultaneously/progressively reclaimed by backfilling of OB & waste generated during the course of mining. The level of backfilling will be parallel at lower level to original topography. The reclaimed area will be rehabilitated by way of growing fruit bearing trees or fuel wood.

Air Monitoring: The air quality analysis and modeling analysis predicted that the maximum cumulative concentration of parameters selected like PM₁₀, CO etc. are within permissible limit so the impact beyond 300 m distance might be insignificant. The same is confirmed by the low predicted values at other ambient air monitoring stations. The overall impact on air quality due to proposed mining project is expected to be low extending to close vicinity of mining lease area and in proximity of unpaved haul roads only. The proposed mining operations are not anticipated to raise the concentration of the pollutants beyond prescribed limits. However, the measures are suggested to mitigate any harmful impact on the surrounding areas like plantation, water sprinkling etc.

Noise monitoring: It is found that the impact on the present noise levels due to mining operations will be restricted mostly to the work zone areas only. Drilling, excavator and other equipment even

Khasra No: 2610 Min, Area: 5.72 Ha, Village: Khaumoh, Tehsil: Pamhachowk

District: Srinnger, State: J & K.

vehicular transport will be applied for limited time. Hence, the noise levels and vibration impact due to the proposed mining operations on community will be minimal.

Draft EIA Report

Water monitoring: In this mining project the activity will not intersect the water table and there will be no impact on the water environment.

Biological environment: The proposed mining will be carried out in a scientific manner and not much significant impact is anticipated to the flora and fauna. Further, in order to avoid any adverse effect, the mining will be restricted during monsoon season. The haul roads and trucks will be sprinkled with water twice in a day to avoid any impact on agricultural activities.

CHAPTER 5 ANALYSIS OF ALTERNATIVES (TECHNOLOGY & SITE)

S. No.	CONTENTS	Page No.
CHAPT	ER-5 ANALYSIS OF ALTERNATIVES (TECHNOLOGY &	5/1
SITE)		

Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachowk

District: Srinagar, State: J & K.

Draft ELA Report

CHAPTER 5

ANALYSIS OF ALTERNATIVES (TECHNOLOGY & SITE)

5.1 Analysis of Alternate Site

Consideration of alternatives to a project proposal is a requirement of EIA process. During the process, alternatives to a proposal can be considered or refined, either directly or by reference to the key issues identified. A comparison of alternatives help to determine the best method of achieving the project objectives with minimum environmental impacts or indicates the most environmentally friendly and cost effective options.

It is a proposed mining lease area measuring 5.72 hectares falling under category "B1" located at at Khasra no.- 2610 Min, Village- Khamnoh, Tehsil- Panthachowk, District- Srinagar, State- J&K

The mine is to be located where the mineral exists in sufficient quantity to be economically extracted. The site selected has following advantages:

- The project site is a Government Wasteland.
- There are other stone mines in the study area, however, basic infrastructure such as road and electric

Connections are available.

- Better availability of experienced labors from nearby villages.
- 4. No endangered species around the mine site.
- The mining project site is mineral specific.

This is site specific project and it is allocated by state government through biding so no alternate site will propose. Project: Minor Mineral Quarry Cluster (Idasonry Stone) Block Project Proponent: Mr. Gh Ahmad Ahanger & Manjoor Ahmad Bhat Khasra No: 2610 Min., Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachowk

District: Srinagar, State: J & K.

Draft ELA Report

CHAPTER 6

ENVIRONMENTAL MONITORING PROGRAMME

S. No.	CONTENTS	Page No.
CHAPTER-6: ENVIRONMENTAL MONITORING PROGRAMME		
6.0	INTRODUCTION	
6.1	ENVIRONMENTAL MONITORING	0
6.2	ENVIRONMENT MONITORING CELL: HIERARCHY	
6.3	SCOPE OF ENVIRONMENTAL MONITORING PROGRAM	12
6.4	LOCATIONS OF MONITORING STATIONS	0
6.5	MONITORING SCHEDULE	
6.6	POST PROJECT MONITORING PLAN	
6.7	REPORTING SCHEDULES OF THE REPORTING DATA	
6.8	BUDGET ALLOCATION FOR MONITORING	0
6.9	ENVIRONMENTAL POLICY	
6.10	CONCLUSION	

Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthochouk District: Srinagar, State: J & K. Draft ELA Report

CHAPTER 6 ENVIRONMENTAL MONITORING PROGRAMME

6.0. INTRODUCTION

Regular monitoring of the various environmental parameters is necessary to evaluate the effectiveness of the management Programme so that the necessary corrective measures can be taken in case there are some drawbacks in the proposed Programme. Since environmental quality parameters at work zone and surrounding area are important for maintaining sound operating practices of the project in conformity with environmental regulations, the post project monitoring work forms part of Environmental Monitoring Program. Environmental Monitoring Program will be implemented once the project activity commences.

Environmental Monitoring Program includes:

- Environmental surveillance
- (ii) Analysis and interpretation of data
- (iii) Preparation of reports to support environmental management system and
- (iv) Organizational set up responsible for the implementation of the Programme.

6.1. ENVIRONMENTAL MONITORING

Environmental Monitoring will be taken up for various environmental components as per conditions stipulated in TOR Letter issued by JKEIAA, and Compliance of same will be submitted to respective authorities on regular basis

In order to maintain the environmental quality within the stipulated standards, regular monitoring of various environmental components is necessary which will complied as per conditions. For this the lessee Mr. Gh Ahmad Ahanger & Manjoor Ahmad Bhat has taken decision to formulate an Environment Policy of the mine and constitute an Environmental Management Cell and committed to operate the proposed mine with the objectives mentioned in approved Environment Policy. The system of reporting of Non-conformances /violation of any Environmental Law/Policy will be as per quality management system. The internal audit will be conducted on periodic basis and any Non-conformances/violation to Environmental Law/Policy will be closed and discussed during Management Review Meetings of board of directors/partners.

6.2. ENVIRONMENT MONITORING CELL: HIERARCHY

Environmental monitoring cell will be established for monitoring of important and crucial environmental parameters which are of immense importance to assess the status of environment during minor mineral mine operation.

In order to have a permanent organizational set up charged with the task of ensuring its effective implementation of mitigation measures and to conduct environmental monitoring. In this effect, Mr. Gh Ahmad Ahanger & Manjoor Ahmad Bhat a will assign responsibilities to officers from various disciplines to co-ordinate the activities concerned with management and implementation of environment control measures. An Organ gram of Environment management system is shown in figure No. 6.1.

Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthochowk District: Srinagar, State: J & K. Draft ELA Report

6.2.1 The responsibilities of the EMC include the following:

- Environmental Monitoring of the surrounding area
- Developing the green belt/Plantation
- Ensuring minimal use of water
- Proper implementation of pollution control measures
- Access the risk area
- Mounting the proposed attributes benefitting the surrounding habitation taken as a part of corporate responsibility

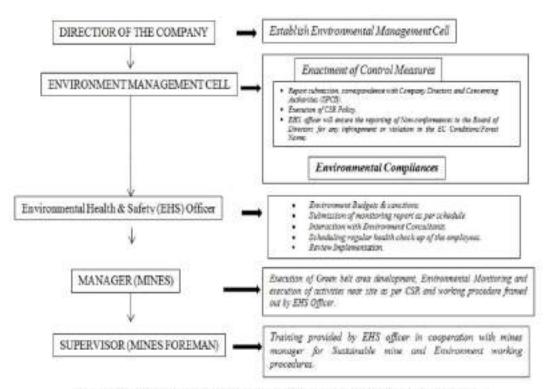


Figure 6.1: Organizational Structure of Environmental Management Cell: With respective roles

6.3. SCOPE OF ENVIRONMENTAL MONITORING PROGRAM

Environmental monitoring program includes periodic analysis of air, soil, noise and water, samples. Environmental monitoring will be conducted on regular basis to assess the pollution level in the mining lease area as well in the surrounding areas. Therefore, regular monitoring program of the environmental parameters is essential to take into account the changes in the environment.

The key aims of environmental monitoring are:

To ensure that results/ conditions are as forecast during the planning stage, and where they
are not, to pinpoint the cause and implement action to remedy the situation.

Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthochonk District: Srinagar, State: J & K. Draft ELA Report

- To verify the evaluations made during the planning process, in particular with risk and impact
 assessments and standards and target setting and to measure operational and process efficiency.
- Monitoring will also be required to meet compliance with statutory and corporate requirements.
 Finally, monitoring results provide the basis for auditing, i.e. to identify unexpected changes.
- To identify the state of pollution within the mining lease area.
- To verify the result of the impact assessment study in particular with regards to new developments.
- Generate data for predictive or corrective purpose in respect of pollution.
- To assess and monitor the environmental impacts

6.4. LOCATIONS OF MONITORING STATIONS

The location of the monitoring stations was selected on the basis of prevailing micro meteorological conditions of the area like; wind direction and wind speed, relative humidity, temperature. Locations for the post project monitoring shall be as under.

Table 6.1: Locations of Monitoring Stations

S. No.	Description	Location	
1	Ambient Air Quality	Lease area, Villages in downwind direction from the Lease Boundary	
2	Noise Level Monitoring	Lease Boundary, High noise generating areas within the lease boundary	
3	Water Level and Quality	Nearby Surface and Ground water sources from villages	
4	Soil Quality	Lease area and Villages within study area.	

6.5. MONITORING SCHEDULE

Regular Monitoring of all the environmental parameters viz., air, water, noise and soil as per the formulated program based on CPCB and MoEF&CC guidelines will be carried out every year in order to detect any changes from the baseline status.

Table 6.2: Monitoring Schedule & Parameters

S.No.	Attributes	Parameters	Source and Frequency
1.	Land use	Present land-use categories to assess receiving environment within study area	Based on latest satellite imagery and ground trothing
2.	Soil Characteristics	Physical and chemical parameters	Grab Sample once at 8 locations once during monitoring period
3.	Meteorology	Wind speed and direction, temperature, relative humidity and rainfall	Near project site continuously for one season with hourly recording and from secondary sources of nearest IMD station.
4.	Ambient Air Quality	Particulate Matiers (PM ₁₀ , PM ₂₅), SO ₂ , NO _X	24 hourly samples twice a week for one season at 8 locations.

Khasra No: 2610 Mm, Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthochowk District: Srinagar, State: J & K. Draft ELA Report

5.	Noise levels	Noise levels in dB(A)	At 8 locations data monitored for 24 hours during study season.
6.	Hydrology	Drainage area and pattern, nature of streams, aquifer characteristics, Recharge and discharge areas.	Based on data collected from secondary sources as well as site study of hydrology.
7.	Water quality	Physical, Chemical and Bacteriological parameters	Grab samples were collected at 8 ground water and 2 surface water locations once.
8.	Traffic Density	Density and type of traffic	2 locations for 24 hours once.
9.	Ecology	Existing terrestrial and aquatic flora and fauna within 10-Km radius circle.	Random survey of terrestrial and freshwater flora and fauna in the study area.
10.	Socio- Economic Aspects	Socio-economic and demographic characteristics, worker characteristics	Based on secondary sources data like primary census abstracts of Census of India 2001 and 2011.
11.	Risk Assessment & DMP	Identify areas where disaster can occur by fires & explosions and release of toxic substances	Based on mine plan and site study

6.6. POST PROJECT MONITORING PLAN

Environmental monitoring and analysis will be carried on air, water and soil testing as per the formulated Programme in order to ensure no severe impact on the surrounding.

6.7 REPORTING SCHEDULES OF THE REPORTING DATA

It is proposed that voluntary reporting of environmental performance with reference to the EMP will be undertaken.

The Environmental Monitoring Cell will co-ordinate all monitoring programs at site and data thus generated will be regularly furnished to the State regulatory agencies. The frequency of reporting will be on six monthly basis/ as per norms to the office of State Pollution Control Board and to the Regional Office of MoEF&CC. The Environmental Audit reports will be prepared for the entire year of operations and will be regularly submitted to regulatory authorities as per EC conditions.

6.8. BUDGET ALLOCATION FOR MONITORING

The cost of the project is 106.53 Lakhs and a budget for monitoring of Air, water, Noise and Soil in EMP will be Rs. 5.40 Lakhs to be incurred by the project proponent for undertaking pollution prevention measures during the mining activity.

Table 8.1: Budget Allocation for Monitoring

S. No	o. Description	Unit	Capital Cost (in Lakhs)
		Environment Monitoring Programme (In lakhs)	1
: Am	Market .		0.000.000.000.000

Khasra No: 2610 Mm, Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthochowk District: Srinagar, State: J & K.

Draf	O E	74	Da	a and
SYMI	E E.		MC3	DATE E.

	TOTAL		5,40,000
6	Inventory of flora and funna (Biodiversity survey and conservation)		80,000
5	Socio economic condition of local population, Physical Survey		80,000
4	Soil Quality	@10000 x 6	60.000
3	Ambient Noise Level	@ 10000 x 8	80,000
2	Water Quality	@ 10000 x 8	80,000

6.9. ENVIRONMENTAL POLICY

Project Proponent is committed to providing a quality service in a manner that ensure a safe and healthy workplace for employees and minimize potential impact i.e air, water, soil, noise on the environment. They will operate in compliance with all relevant environmental legislation and strive to use pollution prevention and environmental best practices. The lessee will:-

- Comply with applicable environmental laws and regulations at all time; at all locations and at all stages of exploration, development, operations and reclamation.
- Incorporate sound environmental management practices in all our activities.
- Conduct our operation in an environmentally responsible manner to comply with applicable legal and other requirement related to its environmental aspect and endeavor to go beyond.
- Strive for continual improvement in our environmental performance by measuring progress, taking corrective actions and communicating all information to concerned authorities under the guidance of NABET Accredited consultants.
- To encourage green belt development for the areas allotted in nearby areas of the mine lease.
- Data analysis from NABL accredited lab for its authentication.
- Ensure that all employees and contractors are aware of their environmental responsibilities and create an environment that adheres to the Company's Policies, procedures and applicable regulations.
- Encourage our business associates to adopt similar approach for environmental protection.

6.10 CONCLUSION

Post Environmental monitoring is an essential step in the EIA process if the predicted impacts, the efficiency of mitigation measures and the shortcomings of prediction methods, measures and even regulations are to be verified and EIA practice improved. Environmental indicators could contribute to designing and evaluating monitoring programs, thus improving establishment of the cause effect relationship and the reporting and communication of environmental data.

The Environmental Monitoring Cell will co-ordinate all monitoring programs at site and data thus generated will be furnished as per statutory requirements. The frequency of reporting will be on half yearly basis to the J&K State Pollution Control Board and to Regional Office of MoEF&CC, Jammu and Kashmir. The Environmental audit reports will be prepared for the entire year of operations and will be regularly submitted to regulatory authorities.

CHAPTER-7 ADDITIONAL STUDIES

S. No.	CONTENTS	
CHAPTER 7 ADDITIONAL STUDIES		
7.1	INTRODUCTION	
7.2	HAZARD IDENTIFICATION	
7.3	RISK ASSESSMENT AND DISASTER MANAGEMENT PLAN	
7.4	OCCUPATIONAL HEALTH HAZARDS	
7.5	EMERGENCY PREPAREDNESS PLAN & TRAINING	
7.6	IMPLEMENTATION OF EMP AND MONITORING SYSTEM	
7.7	ACTIVITIES TO BE MONITORED / INSPECTED BY EMC	
7.8	SOCIO-ECONOMIC ASSESSMENT OF THE STUDY AREA	

Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khannoh, Tehsil: Panthochowk District: Srinogar, State: J & K. Draft EIA Report

CHAPTER-7

ADDITIONAL STUDIES

7.1 INTRODUCTION

Public hearing is a mandatory requirement laid down as per Govt. of India, Ministry of Environment and Forests (MoEF& CC) Notification No. SO 1533 dated 14th September, 2006.

7.2 HAZARD IDENTIFICATION

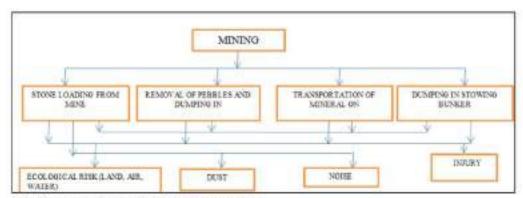


Figure 7.1: Identification of Hazard in Mine

7.2.1 Types of Hazard Identified: There are various factors, which can create disaster in stone mine.
The main hazards identified are as follows:

- Slope Failures in open pit.
- Solid waste generations, their disposal and rehabilitation.
- Inundation-Filling of the mine pit due to excessive mins/flooding.
- Slope failures at the mine faces.
- Accident due to fire.

7.3 RISK ASSESSMENT AND DISASTER MANAGEMENT PLAN

Risk assessment is based on the philosophy that "Prevention is better than cure". Mining operations may be carried to the utmost safety but there is always some element of danger or risk in it. No major disaster is envisaged. Only minor accidents may take place. The applied area is plain. No perennial source of surface water is present in the ML area. The mining operations will be carried out under supervision of statutory personnel's as per provisions of MCR 1960, MCDR 2017, Mines Rules 1955, Mines Act 1952 & strictly following safety aspects as per MMR 1961 monitored by Directorate General of Mines safety.

The complete mining operation will be carried out under the management control and direction of a qualified mine manager. The DGMS have been regularly issuing standing orders, model standing orders and circulars to be followed by the mine management in case of disaster, if any. Moreover, mining staff will be sent to refresher courses from time to time to keep them alert. However, following natural/industrial hazards may occur during normal operation.

- Accident due to explosives;
- Accident due to heavy mining equipment; and
- Sabotage in case of magazine.

Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khannoh, Tehsil: Panthochowk District: Srinogar, State: J & K. Draft ELA Report

In order to take care of above hazard/disaster, the following control measures will be adopted:

- All safety precautions and provisions of Mine Act, 1952, Metalliferrous Mines Regulation, 1961 and Mines Rules, 1955 will be strictly followed during all mining operations;
- Entry of unauthorized persons will be prohibited;
- Fire fighting and first-aid provisions in the mines office complex and mining area;
- Provisions of all the safety appliances such as safety boot, belinets, goggles etc. will be made available to the employees and regular check for their use;
- Training and refresher courses for all the employees working in hazardous premises.

Table 7.1 Risk Assessment and its Management Plan

S.No.	Source	Mitigation
1	Mining Machinery and Loading operation	
a.	Heavy Machinery	 At the time of loading no person will be there within the swing radius of the excavator; The dumpers/ trucks will stand near the loading equipment and fully braked when the muck is filled in it; The truck would be brought to a lower level so that the loading operation suits to the ergonomic condition of the workers; The workers will be provided with helmets, gloves and safety boots; Operations during daylight only; All the mining machineries will be regularly maintained and checked to keep in the efficient working order;
b.	Vehicular Movement	 The mine working will be carried out directly under the supervision and control. The truck will be covered with tarpaulin and maintained to prevent any spillage. The vehicles must be maintained in good repairs and checked thoroughly at least once in a week. Overloading should not be permitted and the maximum permissible speed limit should be ensured. The truck drivers should have proper driving license. A statutory provision of the fences, constant education, training etc. will go a long way in reducing the incidents of such accidents.
2	Bench stabilization	 Opencast working will be done as per Regulation 106 of MMR 1961. Ultimate slope angle will be 45°. Bench height should not be more than the digging height of the shovel. The width of the bench should not be less than the height. The loose rock adhering to high wall should be dressed under the guidance of competent person. Retaining parapet wall on bench edge to prevent fall of man and machinery. Every entrance from a roadway in the mine temporarily discontinued will be provided with a fence, barrier or gate to prevent any unauthorised entry. The top of every opencast working shall be kept securely fenced.

Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khannoh, Tehsil: Panthochowk District: Srinogar, State: J & K. Draft ELA Report

	The slope of the sides of the OB dump to the horizontal will not exceed 30°, and the average height of the OB dumps would be 3m;
--	--

7.4 OCCUPATIONAL HEALTH HAZARDS

The working conditions in the mines are governed by the enactments of the Director General of Mines Safety (DGMS). As per the guidelines of the Mines Act, the management will take all necessary precautions.

Table 7.2Work Related Health Hazards

S. No.	Hazardous Activities	Type of Hazards	Severity of Injury
1	Drilling	Exposed to high level of Noise	Hearing impairment
	- 80	Exposed to dusty environment	Respiratory diseases
2	Loading	Struck by rolling big boulders	Serious injury, and equipment damage
		Struck by fall of objects	Serious Physical injury
3	Transportation	Accidental runaway of vehicle	Serious injury, and equipment
		Fall of vehicle from height while reversing	damage
		Exposed to high level noise	Hearing impairment
		Fire in engine due to over heating	Serious Physical injury
4	Welding, gas cutting	Emission of gases & fumes	Asphyxiation
	2000 200	Release of radiation & light	Eye injury
		Fire	Burns
		Release of heat	Skin problem, Burns
5	Storage of oil, lubricant	Leaks and spills	Fire & vigorous chemical reaction
6	Battery maintenance handling	Acid spillage	Acid burns
7	Use/repair of hydraulic jacks & pumps	High pressure operation	Physical injury
-		Oil spillage	
		Rupture of hydraulic hoses	

7.4.1 Mitigation:

In order to evaluate the impacts from stone mining project activities on health of workers, baseline health studies will be conducted on every worker before joining their duties.

- Identifying workers with conditions that may be aggravated by exposure to dust & noise and establishing baseline status for determining changes in health
- Evaluating the effect of dust and noise on workers
- Enabling corrective action to be taken when necessary
- providing health education and awareness
- The medical surveillance program will consist of the following:
- Pre-employment medical examinations
- Periodic medical examinations
- Health & Safety awareness and training
- · Record keeping

Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khannoh, Tehsil: Panthochowk District: Srinogar, State: J & K. Draft ELA Report

 All workers will be subjected to pre-employment and periodic awareness program on health and safety issues of stone mining and related activities.

7.5 EMERGENCY PREPAREDNESS PLAN

In order to take care of above hazards/disasters the following measures have been envisaged.

- Checking and regular maintenance of garland drains will be taken to avoid any in flow of surface water into the mine pit.
- Provision of suitable capacity pumps for pumping out water from mining pit.
- · Regulation 1961 will be strictly followed during all mine operations.
- Entry to unauthorized persons will be prohibited.
- Provision of all safety appliances such as safety boots, helmets Goggles etc. to the employees and regular check for their use.
- Training and refresher courses for all employees working in hazardous places.
- · Working of mine, as per approved plans and regularly updated.
- · Cleaning of mine faces will be regularly done.
- Regular maintenance and testing of all mining equipment as per manufacturer's guidelines.
- Suppression of dust on haulage roads.
- Increasing the awareness of safety and disaster through competitions, posters and other similar drives.

As a part of disaster management, a rescue team is formed by imparting specialized training to select mining staff.

7.5.1 TRAINING

The training of mine personnel is conducted regularly with respect to environmental protection. Training facilities are also extended to equipment maintenance and operation also to the operators. Training will cover the following fields.

- Awareness regarding pollution control and environmental protection.
- Operation and maintenance of pollution control equipment.
- Afforestation / plantation and post care of plants.
- Field monitoring, maintenance and calibration of pollution monitoring instruments.
- Chemical analysis of various environmental parameters at laboratory.
- Repair of pollution monitoring instruments.
- Knowledge of norms, regulations and procedures.
- Occupational health and safety.
- Risk assessment and disaster management plan.

7.6 IMPLEMENTATION OF EMP AND MONITORING SYSTEM

Various measures have been proposed to implement for mitigating the adverse impacts due to mining on the environment in the area. A separate wing "Environmental Management Cell (EMC)" will be formed to look after the inspection / monitoring requirements. The mine management will undertake the control measures in coordination with the State Forest Department, Regional UPPCB and Environmental consultant. The management of environment shall be made an integral part of the major activities of mining.

Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khannoh, Tehsil: Panthochowk District: Srinogar, State: J & K. Draft ELA Report

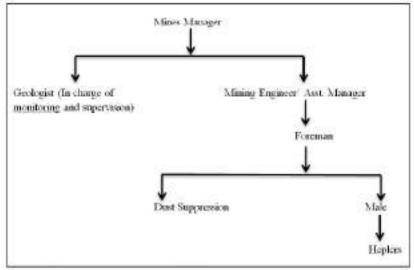


Fig.7.2 Organisational setup of EMC

Important records to be maintained by EMC are:

- Field monitoring results for air, water, meteorology
- Inspection records of slope failure, land erosion, drainage, socio-economic development.
- Format to record / monitor plantation measures.
- Environmental and related standards / norms.
- Records pertaining to statutory consents, approvals
- Code of actions for population control in identified areas.
- Periodic medical examination (PME) records.
- Complaint register (environmental pollution)
- Records on water and electricity consumption
- Periodic progress records
- Environmental audit records
- Records of annual budgetary requirement and allocation for pollution control.

7.7 ACTIVITIES TO BE MONITORED / INSPECTED BY EMC

7.7.1 Slope failure

Regular examination will be carried out to look after for slope failure on open cast mine faces, ore and over burden benches etc. Any abnormal condition, if observed will be brought to the notice of concerned department. Survey team shall also monitor mine face with precision level instruments.

7.7.2 Land erosion

Regular observations during the rainy season for checking land crosion will be made in back filled areas / hill slopes.

7.7.3 Drainage

The effectiveness of drainage system depends upon proper cleaning of all drains and sumps. Any blockage due to silting or accumulation of loose materials will be checked on a regular basis. Stone pitching, brick mounds etc. on drains shall also be monitored.

Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khannoh, Tehsil: Panthochowk District: Srinogar, State: J & K. Draft ELA Report

7.7.4 Green belt development

Planned schedule for green belt development will be checked after every year and improvement required will be implemented. Post plantation status will be regularly checked in every season. Phase wise development in the areas of plantation including rate of growth, survival rate etc. will be recorded systematically.

7.7.5 Air quality monitoring

PM2.5, RPM, NOx and SO₂ will be monitored every month in both core and buffer zones as per the MPPCB directions.

7.7.6 Water quality monitoring

Surface runoff during rainy season will be monitored for pH, TDS, SS and SO_4^{-2} contents. Ground water quality is monitored seasonally for the above parameters also.

7.7.7 Occupational health

Each group of mine workers undergo regular medical check-up at regular intervals by specialist doctors.

7.7.8 Socio-economic development

As a part of the social responsibilities, the project proponent will take up the following peripheral developmental works:

- Encouraging entrepreneurship among locals by vocational training.
- Upgrading one primary school.
- > Health camps
- Distribution of school uniforms and books to needy students
- Cultural activities in the villages
- > Provision or free Transportation of patients
- Preferential employment to the local people depending upon their qualification and suitability of post.

7.8 SOCIO-ECONOMIC ASSESSMENT OF THE STUDY AREA

7.8.1 Introduction

An essential part of environmental study is socio-economic environment incorporating various facts related to socio-economic conditions in the area, which deals with the total environment. Socio economic study includes demographic structure of the area, provision of basic amenities viz., housing, education, health and medical services, occupation, water supply, sanitation, communication, transportation, prevailing diseases pattern as well as feature of sesthetic significance such as temples, historical monuments etc. at the baseline level. This would help in visualizing and predicting the possible impact depending upon the nature and magnitude of the project.

Socio-economic study of an area provides a good opportunity to assess the socio-economic conditions of an area. This study will possibly make a change in living and social standards of the particular area benefitted due to the Project. The gross economic production of the area will be increased substantially due to the existence of this project. It can undoubtedly be said that this project will provide direct and indirect employment and improve the infrastructural facilities and standards of living of the area.

Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khannoh, Tehsil: Panthochowk District: Srinogar, State: J & K. Draft ELA Report

7.8.2 Objectives of the Study

The objectives of this socio-economic report consist of:

- To conduct socio-economic assessment study in Project Area.
- To know the current socio-economic situation in the region to cover the sub sectors of education, health, sanitation, and water and food security.
- To recommend practical strategic interventions in the sector.
- To help in providing better living standards.

7.8.3 Scope of Work

- To study the Socio-economic Environmental of area from the secondary sources,
- To conduct socio-economic survey for primary data collection and to know the current socioeconomic situation in the region to cover the sub sectors of education, health, sanitation, and water and food security,
- Developing a questionnaire for survey,
- Prediction of project impact and mitigation measures,
- To recommend practical strategic interventions in the sector.

7.8.4 Baseline Data & Analysis

The socio economic study includes data collection on Demography, Education, Medical & Health, Occupation, Agriculture & Cropping pattern, Basic Amenities and Religious Rituals details. The primary study was conducted within 10 km radius study area from the project site. The study area was categorized on the basis of the distance of the villages from project site. Primary zone was identified from 0 to 3 km radius area, Secondary zone in 3-7 km and Outer zone in 7-10 km radius area from the project site. Village specific information were collected from the data of census 2011 and the secondary information collected from various government departments like health department, agriculture department, IMD etc.

7.8.5 Demography

The population as per Census 2011 records is 126989 (for 10 km radius buffer zone). As per Census 2011 records, Sex ratio is 929 (females per 1000 males) observed in study area, Total SC & ST population is 67 & 2789, respectively in the study area. Literacy rate is 57.29% in the study area. Demographic Profile of the area given in Table No 7.3.

Project: Minor Mineral Quarry Cluster (Masoury Stone) Block
Project Proponent: Mr. Git Alamad Ahanger & Manjoor Ahmad Bhat
Khasra No: 2610 Min., Area: 5.72 Ha,
Village: Khanmoh, Tehsil: Panthachouk
District: Srinagar, State: J. & K.

Drug ELA Report

Table: 7.3

Name of Villigge No of Total Total Male Total Page					-	Demogra	Demographic Profile of the Area	of the Area						
9 - 3 km data 1129 2664 2017 647 321 39 12 75.56 65.38 11,71 1875 1660 1013 5558 2917 2641 935 12 7.86 1225 601 982 71 1129 8528 2917 2641 935 4620 36.83 18.97 7.86 173 160 1130 862 4934 328 666 39 4620 36.83 18.97 7.86 2887 1731 1833 1620 173 173 1833 1427 385 75 173 1833 1103 1103 0 85.88 37.34 18.34 380 142	Name of Village	No of Household		Total Male Population	Total Female Population	Sex	Total Population SC	Total Population ST	Literacy Rate (%)	Male Literacy Rate (%)	Fernale Literacy Rate (%)	Total Working Population	Total Main Worker Population	Total Non Worker Population
1013 5558 2917 2441 321 39 12 75.56 63.85 11.71 1875 1660 1013 5558 2917 2241 905 0 4608 18.26 12.25 6.01 982 71 1129 8822 4934 3288 666 0 4608 18.26 12.25 6.01 982 71 130 862 442 420 950 0 0 45.68 37.34 18.34 380 173 1310 862 442 420 956 0 0 55.68 37.34 18.34 380 142 1311 616 315 391 956 0 0 55.68 37.34 18.34 380 142 132 5874 2935 2941 1003 0 0 55.82 23.65 23.17 1833 1103 133 903 448 435 1016 0 0 55.48 37.34 18.34 380 142 235 1434 731 703 962 0 0 55.43 29.96 24.70 43.8 235 1434 731 703 962 0 0 55.43 30.50 26.95 41 44 2415 21093 11158 10034 0 144 50.00 30.63 19.47 7470 4518 2416 1342 651 691 1061 0 143 40.24 25.63 13.40 13.40 2417 2418 344 1026 0 6 45.01 31.34 13.68 22.24 2418 3418 344 1026 0 0 57.46 31.34 13.68 25.63 14.50 2418 1034 344 1026 0 0 57.46 31.40 25.63 44 44 2418 25.093 31.404 39.41 31.404 30.06 24.10 31.34 34.50	3		3			100	0 - 3 km d	lata				200		
1013 5558 2917 2641 905 0 4608 18.26 12.25 6.01 982 71 1139 862 442 428 666 39 4620 35.83 28.97 7.86 2857 1731 1130 862 442 420 420 956 0 0 55.68 37.34 18.34 380 14.2 1137 616 315 301 956 0 0 55.68 37.34 18.34 380 14.2 260 1759 917 842 918 0 55.82 32.65 23.17 1833 1103 260 1759 917 842 918 0 55.92 31.23 24.70 438 27.7 213 903 448 455 1016 0 0 55.92 31.23 24.70 438 27.7 214 141 66 75 1136 0 0 42.54 24.83 17.71 61.5 14.55 235 1434 731 703 962 0 0 42.54 24.83 17.71 61.5 235 1434 731 703 962 0 0 42.54 24.83 17.71 61.5 235 1434 731 703 962 0 0 42.54 24.83 17.71 61.5 235 1434 731 703 962 0 0 42.54 24.83 17.71 61.5 235 1434 731 703 962 0 0 42.54 24.83 17.71 61.5 235 1434 731 703 962 0 0 42.54 24.83 17.71 61.5 235 1434 731 703 962 0 0 42.54 24.83 17.71 61.5 235 1345 22093 11158 10935 35.95 31.29 31.29 31.24 31.84 236 1342 60613 31634 28959 915 289 40.24 25.63 14.61 73.2 48 246 3415 3415 3415 3415 3415 3415 3415 3415 3415 247 748 3415 3415 3415 3415 3415 3415 3415 248 3415 3415 3415 3415 3415 3415 3415 3415 249 778 384 394 1026 0 0 57.46 3416 3415 3415 240 778 384 394 1026 0 0 57.46 3416 3415 3415 241 241 241 241 2415 2415 3415 3415 3415 241 241 2415 3415 3415 3415 3415 3415 3415 241 241 241 241 3415 3415 3415 3415 3415 3415 3415 3415 241 241 241 241 241 241 2410 2416 3415 34	Khommoh	216	2664	2017	647	321	39	12	75.56	63.85	11.71	1875	1660	789
1329 8222 4934 3188 666 39 4620 36.83 28.97 7.86 2857 1731 1340 8622 442 420 956 0 91 47.80 33.53 14.27 35.5 7.5 1341 6166 3135 2941 1003 0 0 55.82 37.34 183.4 38.0 1103 2932 5874 2933 2941 1003 0 0 55.82 37.34 183.4 38.0 1103 2932 5874 2933 2941 1003 0 0 55.82 32.65 23.17 183.3 1103 233 1438 448 455 1016 0 0 55.92 31.23 24.70 438 27.1 234 141 66 75 1136 0 0 42.54 24.83 17.71 61.5 14.5 235 1434 731 703 962 0 0 42.54 24.83 17.71 61.5 17.5 236 3338 1645 1693 1093 0 0 42.54 24.83 17.71 61.5 17.5 237 2409 31654 28959 915 28 14.61 30.60 30.53 19.41 31.54 238 491 492 1005 0 0 47.51 27.77 19.74 34.5 239 354 491 492 1005 0 0 47.51 27.77 19.74 34.5 230 338 491 492 1026 0 0 57.46 31.49 25.96 484 12.2 231 241 241 1046 0 0 57.46 31.49 25.96 484 12.2 231 241 241 1046 0 0 57.46 31.49 25.96 484 12.2 231 241 241 241 241 241 241 241 241 241 232 241 241 241 241 241 241 241 241 241 241 232 231 24	Saugri	1013	5558	2917	2641	906	0	4608	18.26	12.25	6.01	982	11	4576
130 862 442 420 950 0 91 47.80 33.53 14.27 555 75 75 75 75 75 75	Sub Total	1229	8222	4934	3288	999	39	4620	36.83	28.97	7.86	2857	1731	5365
130 862 442 420 950 0 91 47.80 33.53 14.27 555 75 117 616 315 301 956 0 55.68 37.34 1834 380 142 220 117 616 315 301 956 0 55.82 32.67 23.17 1833 1103 220 1759 917 842 918 0 53 49.80 29.96 19.84 29.97 1103 21 141 66 75 1136 0 0 55.92 31.23 41 4 235 1434 731 703 962 0 0 55.92 31.73 41 4 235 1434 731 703 962 0 0 55.92 31.73 41 4 300 3138 1645 703 962 0 0 55.94 14.86 957							03 - 07 km	data						
117 616 315 301 956 0 55.68 37.34 1834 380 142 932 5874 2933 2941 1003 0 55.82 32.65 23.17 1835 1103 260 1759 917 842 918 0 6 55.82 32.65 13.71 1833 1103 21 113 903 448 455 1016 0 0 55.92 31.23 24.70 438 27 235 143 731 66 75 1136 0 0 55.92 31.23 24.70 438 27 235 1434 731 703 962 0 0 42.54 24.83 41 4 309 3338 1645 1693 1029 0 0 25.04 14.56 957 750 3045 3415 1168 0 0 25.04 14.56 <	Bathon	130	862	442	420	950	0	91	47.80	33.53	14.27	555	75	307
932 5874 2933 2941 1003 0 53.82 32.65 23.17 1833 1103 260 1759 917 842 918 0 53 49.80 29.66 19.84 525 29.7 133 903 448 455 1016 0 65.92 31.23 24.70 438 27 21 141 66 75 1136 0 0 57.45 30.50 26.95 41 4 235 1434 731 703 962 0 0 42.54 24.83 17.71 615 145 509 3338 1645 1693 1029 0 0 42.54 24.83 17.71 615 145 1078 7166 3661 3602 0 0 42.54 24.83 17.71 4318 17.75 1078 7166 3661 3673 0 0 42.54 24.83<	Zmetrag	117	919	315	301	986	0	0	\$5.68	37.34	18.34	380	142	236
260 1759 917 842 918 0 53 49.80 29.96 19.84 525 297 133 903 448 455 1016 0 5592 31.23 24.70 438 27 21 141 66 75 1136 0 0 57.45 30.50 26.95 41 4 235 1434 731 703 962 0 0 42.54 24.83 17.71 615 145 509 3338 1645 1693 1029 0 0 42.54 24.83 17.71 615 175 1078 7166 3661 3505 957 0 0 50.50 17.71 4318 17.75 175 1078 7166 361 1029 0 144 50.00 30.53 18.91 21.26 1775 216 1345 250 31.59 31.59 18.91 21.26	Woyan	932	5874	2933	2941	1003	0	0	55.82	32.65	23.17	1833	1103	4041
133 903 448 455 1016 0 5592 3123 24.70 438 27 21 141 66 75 1136 0 0 57.45 30.50 26.95 41 4 235 1434 731 703 962 0 0 42.54 24.83 17.71 615 145 509 3338 1645 1693 1029 0 0 42.54 24.83 17.71 615 145 1078 7166 3661 3505 957 0 0 42.54 24.83 17.71 615 1775 3415 22093 11158 10935 957 0 0 42.50 18.91 2126 1775 4415 22093 11158 10935 915 28 1229 53.95 19.47 7470 4318 11905 516 1342 266 35.95 33.27 20.68	Maij	260	1759	917	842	918	0	53	49.80	29.96	19.84	525	297	1234
21 141 66 75 1136 0 6745 30.50 26.95 41 4 235 1434 731 703 962 0 0 42.54 24.83 17.71 615 145 509 3338 1645 1693 1029 0 0 39.60 25.04 14.56 957 750 1078 716 3661 3505 957 0 0 50.50 18.91 2126 1771 615 1775 3415 22093 11158 10935 0 144 50.00 30.53 19.47 7470 4318 9325 60613 31654 28959 915 28 1229 53.95 33.27 20.68 22631 11905 216 1342 28 1229 53.95 33.27 20.68 22631 187 44 351 49 49 1061 0 64 45.01	Befroo	133	903	448	455	1016	0	0	55.92	31.23	24.70	438	27	465
235 1434 731 703 962 0 0 4254 24.83 17.71 615 145 509 338 1645 1693 1029 0 0 39.60 25.04 14.56 957 750 3415 7166 3661 3505 957 0 0 50.50 18.91 2126 1775 3415 22093 11158 10935 0 144 50.60 30.53 19.47 7470 4318 9325 60613 31654 28959 915 28 1229 53.95 19.47 7470 4318 216 1342 651 691 1061 0 183 4024 25.63 14.61 732 48 137 983 491 492 1002 0 47.51 27.77 19.74 345 146 109 778 384 394 1026 0 0 47.51	Bagh Anayat Ulleh	11	141	99	27	1136	0	0	57.45	30.50	26.95	41	4	100
509 3338 1645 1693 1029 0 9 9.60 25.04 14.56 957 750 1078 7166 3661 3505 957 0 0 50.50 31.59 18.91 2126 1775 3415 22093 11158 10035 957 0 144 \$0.00 30.53 19.47 7470 4318 9325 60613 31654 28959 915 28 1229 53.95 33.27 20.68 22631 11905 216 1342 661 1061 0 183 40.24 25.63 14.61 732 48 64 351 204 147 721 0 0 45.01 31.34 13.68 222 48 199 778 384 394 1026 0 57.46 31.49 25.96 484 122 166 165 166 0 57.46 31.49 25.9	Lal Pora	235	1434	731	703	296	0	0	42.54	24.83	17.71	615	145	618
1078 7166 3661 3505 957 0 0 65050 3159 18.91 2126 1775 4318 3415 22093 11158 10935 3 0 144 50.00 30.53 19.47 7470 4318 3415 22093 11158 10935 3 2 19.47 7470 4518 4518 4524 56.00 30.53 19.47 7470 4518 1905 11905 <td>Balhama</td> <td>606</td> <td>3338</td> <td>1645</td> <td>1693</td> <td>1029</td> <td>0</td> <td>0</td> <td>39.60</td> <td>25.04</td> <td>14.56</td> <td>756</td> <td>750</td> <td>2381</td>	Balhama	606	3338	1645	1693	1029	0	0	39.60	25.04	14.56	756	750	2381
3415 22093 11158 10935 0 144 50.00 30.53 19.47 7470 4318 9325 60613 31654 28959 915 28 1229 53.95 33.27 20.68 22631 11905 216 1342 651 691 1061 0 183 4024 25.63 14.61 732 187 64 351 204 147 721 0 0 45.01 31.34 13.68 222 48 137 983 491 492 1002 0 0 47.51 27.77 19.74 34.5 146 109 778 384 394 1026 0 67.451 25.96 484 122 166 1058 517 66 24.10 667 25.11	Khrew	1078	2166	3661	3505	156	0	0	50.50	31.59	18.91	2126	1775	5040
07-10 km 9325 60613 31654 28959 915 28 1229 53.95 33.27 20.68 22631 11905 216 1342 651 691 1061 0 183 40.24 25.63 14.61 732 187 64 351 204 147 721 0 0 45.01 31.34 13.68 222 48 137 983 491 492 1002 0 0 47.51 27.77 19.74 345 146 109 778 384 394 1026 0 67 57.46 31.49 25.96 484 122 166 1058 517 1046 0 67 54.10 667 251	Sub Total	3415	22093	11158	10935		0	141	90.08	30.53	19.47	7470	4318	14623
9325 60613 31654 28959 915 28 1229 53.95 33.27 20.68 22631 11905 216 1342 651 691 1061 0 183 40.24 25.63 14.61 732 187 64 351 204 147 721 0 0 45.01 31.34 13.68 222 48 137 983 491 492 1002 0 0 47.51 27.77 19.74 345 146 109 778 384 384 1026 0 0 57.46 31.49 25.96 484 122 166 1058 317 346 0 67 24.10 667 251							07 - 10 k	B						
216 1342 651 691 1061 0 183 4024 25.63 14.61 732 64 351 204 147 721 0 0 45.01 31.34 13.68 222 137 983 491 492 1002 0 0 47.51 27.77 19.74 345 109 778 384 394 1026 0 0 57.46 31.49 25.96 484 166 1058 517 541 1046 0 0 54.16 30.06 24.10 667	Pampore	9325	60613	31654	28959	915	28	1229	53.95	33.27	20.68	22631	11905	37982
64 351 204 147 721 0 0 45.01 31.34 13.68 222 137 983 491 492 1002 0 0 47.51 27.77 19.74 345 109 778 384 394 1026 0 0 57.46 31.49 25.96 484 166 1058 517 541 1046 0 0 54.16 30.06 24.10 667	Sata Pokhrati	216	1342	159	169	1001	0	183	40.24	25.63	14.61	732	187	610
137 983 491 492 1002 0 47.51 27.77 19.74 345 109 778 384 394 1026 0 67.46 31.49 25.96 484 166 1058 517 541 1046 0 67.16 30.06 24.10 667	Nagander	13	351	204	147	721	0	0	45.01	31.34	13.68	222	48	129
109 778 384 394 1026 0 0 57.46 31.49 25.96 484 166 1058 517 541 1046 0 0 54.16 30.06 24.10 667	Moni Pora	137	983	491	492	1002	0	0	47.51	27.77	19.74	345	146	638
166 1058 517 541 1046 0 0 54.16 30.06 24.10 667	Dusoo	109	778	384	394	1026	0	0	57.46	31.49	25,96	484	122	254
	Androsa	166	1058	517	541	1046	0	0	54.16	30.06	24.10	199	251	391

Project Minor Mineral Quarry Cluster (Masonry Stone) Block
Project Proponent: Mr. Git Ahmed Aharger & Manjoor Ahmed Bhat
Khasra Noc 1610 Min., Area: 5.72 Ha,
Villager Khanmob. Tehsil: Panthachowk
District: Stangar, State, J & K.

1		
	Š	į
****		į
	1	

319	544	3477	745	3265	2264	3071	11.6	312	1690	3750	2124	1433	249	254	383	86	1584	11599	81200
99	118	1808	306	739	545	1191	178	15	655	1106	400	291	09	69	124	30	149	21001	25319
197	239	2701	5111	1339	1287	1818	276	87	672	1531	831	435	64	73	140	35	206	38319	45789
25,32	22.73	13.58	19.59	22.55	22.89	22.44	19.41	13.78	21.30	26.04	19.39	18.04	20.13	23.55	23.52	17.29	23.45	20.74	21.81
34.90	27.84	40.51	29.70	33.32	33.06	33.83	25.66	29.07	29.59	34.27	29.58	26.50	29.07	29.66	26.96	39.10	31.38	32.99	35.48
60.23	50.57	54.10	49.28	55.86	96'55	5627	45.07	42.86	50.89	60.31	48.97	44.54	49.20	53.21	50.48	56.39	54.83	53.72	57.29
0	0	337	238	259	0	0	0	399	0	0	0	0	0	0	0	0	0	2645	2789
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28	29
296	1105	634	1019	973	929	983	1002	887	950	166	923	786	841	1224	1027	1046	1016	916	626
302	411	2396	634	2270	1710	2424	624	187	1151	2636	1418	928	143	180	265	88	1253	50224	61139
314	372	3782	622	2334	1841	2465	623	212	1211	2645	1537	940	170	147	258	99	1233	54672	65830
919	783	8219	1256	4604	3551	4889	1247	399	2362	5281	2955	1868	313	327	523	133	2486	104896	126989
68	611	853	203	823	520	260	174	69	425	928	424	257	41	47	69	17	358	16141	19556
Gund Bal	Krancho	Shar-L-Shali	Mundak Pat	Ladher	Chanda Haro	Sambora	Kandizal	Mulanar	Soiteng	Lasjan	Rakh Shalina	Shalina	Sear Bagh	Bagh Shokr Shah	Zoomi Pora	Qasim Bagh	Khani Bal	Sub Total	Grand Total

Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khanmoh, Tehsil: Ponthochowk District: Srinagar, State: J & K. Draft ELA Report

7.8.6 Vulnerable Group

While developing an Action Plan, it is very important to identify the population who fall under the marginalized and vulnerable groups and special attention has to be given towards these groups while making action plans. Special provisions should be made for them. In the observed villages schedule caste (S.C.) population is 0.05% and Schedule Tribe population 2.20 % in study area, 97.75 % population observed as others.

S. No.	Particular	Details of observed Villages
1.	Total Population	126989
2.	Total SC Population	67
3.	% of SC Population	0.05 %
4.	Total ST Population	2789
5.	% of ST Population	2.20 %
6.	Others Population	124133
7.	% of others	97.75 %

7.8.7 Literacy Rate

Literacy Rate is the amount of people in a country with the ability to read and write. The analysis of the literacy levels is done in the study area. The 10 km radius study area demonstrates a literacy rate of 57.29% as per survey data. The male literacy rate in the study area works out to be 35.48% whereas the female literacy rate, which is an important indicator for social change, is observed to be 21.81% in the study area. This indicates that there is a need to focus in sociological aspect in the region and enhance further development.

in the present study, the literacy rate is quiet low in the study area. Male and Female literacy rate of villages are varying place to place. Although Female literacy rate in the region is coming out very low as compared to male. Literacy is one of major issue to focus in the study area and also try to reduce the difference between male and female literacy rate.

7.8.8 Economic Activity

The economy of an area is defined by the occupational pattern and income level of the people in the area. The occupational structure of residents in the study area is studied with reference to work category. The population is divided occupation wise into three categories, viz., main workers, marginal workers and non-workers. The main workers include cultivators, agricultural laborers, those engaged in household industry and other services.

The marginal workers are those engaged in some work for a period of less than 180 days during the reference year. The non-workers include those engaged in unpoid household duties like, students, retired persons, dependents, beggars, vagrants etc. besides institutional immates or all other non-workers who do not fall under the above categories.

The percentage of total working population and non-working population is 36.06% and 63.94% respectively of whole population of observed villages. As per the analysis of all the villages the ratio of non-working population is more than working population.

7.8.9 Various Sources

The Income & Expenditures of an area is defined by the occupational pattern and income level of the people in the area. The occupational structure of residents in the study area is studied with reference to income sources. Most of the people are involved in agriculture and wage labor as occupational

Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthochowk District: Srinagar, State: J & K. Draft ELA Report

pattern, while some are earning from government services, private business, poultry farming etc. for livelihood in study area.

7.8.10 Agriculture & Cropping Pattern

Most of the villagers are involved in agricultural activities. Apart from agricultural activities they also work as wage labour to earn livelihood. In these areas cropping pattern is based on the two season crops- Rabi and Kharif. But mostly villagers start their agriculture activities in rainy season. Some villagers sow their crops in both seasons. These farmers sow crops like wheat, rice, maize, Vegetables and Saffron etc.

7.8.11 Basic Amenities

A better network of physical infrastructure facilities (well-built roads, rail links, irrigation, power and telecommunication, information technology, market-network and social infrastructure support, viz. health and education, water and sanitation, veterinary services and co-operative) is essential for the development of the rural economic.

A review of infrastructure facilities available in the area has been done based on the information from base line survey of the study area. In this review, the villages which fall within 10 Km radius round the site has been considered. Infrastructure facilities available in the area have been described in the subsequent sections as below:

i) Educational facilities

As per the census of 2011, there is no college in the 10 km zone of study area. In observed villages, there are 51 primary schools, 30 Middle Schools, 6 Secondary Schools and 2 Sr. Secondary School. Education facilities are good in the observed area.

ii) Health facilities and services

Health facility refers to any place where health facility is provided. Health facility ranges from small clinics to big hospitals consisting of emergency rooms and trauma centers. The number and standard of health facilities is a measure to validate prosperity and quality of life in that area. Health facilities in study area are tabulated in Table.

Distanc e	Communit y Health Centre	Primary Health Centre	Primary Health Sub Center	Mobile Health Clinic	Hospital Alternative Medicine
0-3 km	0	0	0	0	0
3-7 km	0	2	2	0	0
7-10 km	3	6	2	1	0
Total	3	8	4	1	0

Table 7:4 Availability of health centers in study area

iii) Water facilities

Table 7:5 Water facilities in study area

Distance	Tap Water Untreated	Covered Well	Uncovered Well	Hand Pump	Tube Wells /Borchole	Spring	River/Canal	Tank/Po nd/Lake
0-3 km	NA*	NA*	NA*	Available	NA*	NA*	NA*	NA*
3-7 km	Available	Available	Available	Available	Available	Available	NA*	Available

Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khanmoh, Tehsil: Ponthochowk District: Srinagar, State: J & K. Draft ELA Report

1	7-10 km	Available	Available	Available	Available	Available	Available	Available	Available	
	A T. A. WITH	C.F. A. OSTRO-CIRC	5.6 correctore	L'A CHEROLOGIC	AT KREDSTONE	S.r. our upar	T. F. A GIFTOLO. De.	Crymanose.	Transmore.	ı

[&]quot; NA- Not available.

iv) Communication Facilities

Table 7:6 Communication Facilities in study area

Description	Units
Post Offices	6
Sub Post Offices	3
Telephones (Land lines)	18

v) Transportation facilities

Table 7:7 Transportation facilities in study area

Description	Units
Bus service (Public & Private)	14
Railway stations	0

7.8.11 Mitigation Measures

As the negative impacts on society are insignificant hence no specific mitigation measures are envisaged for demography and socio-economic environment. Health and safety of the workers will be ensured during mining operation by making effective provisions for the basic facilities of sanitation, drinking water, safety of equipment or machinery etc. The following recommendations will be followed:

- Site services have been provided as per the provisions of Mines Act 1952, MMR 1961.
- Clean drinking provided to all the workers.
- Adequate number of decentralized latrines and urinals will be provided to mine workers.
- All parts of dangerous machinery will be guarded.
- · Protective equipment's like helmets etc. will be provided to the workers.
- A well-laid plan for employment of the local people will be prepared by giving priority to local villagers.
- Social welfare programme like provision of medical facilities educational facilities, water supply, recreational amenities for the employees as well as for nearby villagers.

Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khanmoh, Tehstl: Panthachowk District: Srinagar, State: J & K.

Draft ELA Report

CHAPTER: 8 PROJECT BENEFITS

8.1 BENEFITS OF MINING

The Company will undertake activities for the up liftmen of the social community through community development in various ways as under:

4	Education
	Promotion of education programs
	Promotion of Adult Education program
	Crèche for children.
٠	Water
	Repairing of wells and hand pumps.
	Support for water harvesting schemes.
	Awareness programs on safe drinking water.
	Facilities for School (Drinking Water)
٠	Health
	An ambulance at the mine site
	Periodic medical check-up of employees
	Preventive medical care for rural population shall be promoted.
	Awareness to improve health and hygiene standards.
٠	Employment Generation
	Besides direct employment by the mine, indirect employment will also be generated.
	Preference will be given to the local population for employment based on their educational
	qualifications and experience.
	Some of the cultivators/agricultural workers, who may be displaced from their work,
	due to land conversion, would be absorbed as workforce into the proposed mine depending
	upon their capabilities.
٠	Others
	 Supplementing Government efforts in health monitoring camps, social welfare and
	various awareness programs among the rural population.
	Communication facilities such as phone will also be available on mine site.
PR	OJECT SCHEDULE& COST ESTIMATES:
e pr	oject cost is about Rs. 106.53 Lakhs as all the Equipments will be required for Mining & hence
	HTML : CHEST CHEST CONTROL : CHEST CHEST CHEST CONTROL : CHEST CHEST CHEST CHEST CHEST CHEST CHEST CHEST CHEST

8.2

Th will be taken on rent. There is built in profit margin, therefore, proposed project will be economically viable.

Project: Minor Mineral Quarry Cluster (Masonry Stone) Block Project Proponent: Mr. Gh Ahmad Ahanger & Manfoor Ahmad Bhat Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khanmah, Tehsil: Panthachawk

District: Srinagar, State: J & K.

Draft ELA Report

Table 8.1: Project Cost along with analysis in terms of Economic Viability of the Project

S. No.	Description	Unit	Capital Cost
A. Pro	ject Operation Cost	70 77	(in Lakhs)
1.	Manpower Cost: Mine Engineer (Full time) -01 EHS Officer (Full time) -01 Skilled -10 Semi-Skilled -08 Unskilled: Laborers -14	(Total Man power 34) Assuming 300 days (Full time – 10 Months) Rs. 25,000/ Month = 2,50,000 Rs. 35,000/ Month = 3,50,000 Rs. 600/day= 600 x 300 x 10 = 18,00,000 Rs. 500/day= 500 x 300 x 8 = 12,00,000 Rs. 400 /day= 400 x 300 x 14= 16,80,000	52,80,000
2.	Expenditure on Occupational Health: PPE & First Aid Facility Medical checkup and Medicine	3000/worker (3000 x 34)= 1,02,000 Doctor's visit: 10,000/ month (10 working months) = 1,00,000 Medicines (Assuming 500/worker) 500 X 34 x 10 = 1,70,000	3,72,000
3.	Equipment's/Tools/Machineries	300 days Assuming Rs.5000/day	15,00,000
4.	Drinking and Sanitary Facilities	 ➤ Rs. 2000/day for drinking/domestic (300 days) =6,00,000 ➤ Rs. 30,000/ Bio-toilets x 3=90,000 	6,90,000
	Total Project Operation Cost (A)		Rs. 78,42,000
B. Bre	ak-up of Expenditure on Environment	Monitoring Programme (In lakhs): Annual	
1	Air Quality:	@ 20000 x 8	1,60,000
2	Water Quality	@ 10000 x 8	80,000
3	Ambient Noise Level	@ 10000 x 8	80,000
4	Soil Quality	@10000 x 6	60,000
5	Socio economic condition of local population, Physical Survey		80,000
6	Inventory of flora and funna (Biodiversity survey and conservation)		80,000
	TOTAL (B)	•	5,40,000
C. Bre	ak-up of Expenditure on Environment	Protection & Environment Management	2
1,	Haulage Road Repair & Maintenance	Annual (810 m L X 7 m W) @100/sqm.	5,67,000
2.	Water Sprinkling on Haulage Road for Dust Suppression	Assuming Rs. 4000/day for 300 days of working Tanker Cost: Rs. 1000/Tanker (Need of Tanker: Twice in a day). Water Tanker Capacity: 5000 liter, No. of Tankers required: 4	12,00,000
3.	Plantation along the road side & post plantation care	Plantation@500/sapling (570 sapling) = 2,85,000 Maintainace & Plantation Care@	5,04,000

Khasra No: 2610 Min , Area; 5.72 Ha, Village: Khanmoh, Tehsil: Panthachowk District: Srinagar, State: J & K. Draft ELA Report

	Rs.600/day(365 days)=2,19,000 Note: Annual cost will increase with increase in na_of sapiling	
Total Environment I	Rs. 22,71,000	
Total Project Cost	(A+B+C) = 78,42,000 + 5,40,000 + 22,71,000	Rs. 106,53,000 Lakhs (106.53 Lakhs)

Corporate Environment Responsibility (CER)

- ➤ Total Cost of the Project = 106.53 Lakhs
- > 2 % of the total Project Cost will be expended towards CER i.e. 2.13 Lakhs

As Per The G.O.I Notification, File No. 22-65/2017-I A, III dated on 1st May, 2018

Table 8.2 Budget for Corporate Environment Responsibility

his is the Proposed cost CER Plan, Activities and actual cost will be Finalized as per the Actual ne of the area. (ON THE BASIS OF NEED BASE ASSESSMENT SURVEY)					
S. No.	Activity	Cost per Unit (Rs)	Quantity	Total (Rs)	
L	Solar street light Installation in rural areas	15,000	8	1,20,000	
2.	Toilets for women nearby primary school	60,000	1	60,000	
3.	Awareness Program on Personal Hygiene (COVID 19) and distribution of Mask and Sanitizers	33,000	•	33,000	
	Total Proposed CER Cost			2,13,000 (2.13 Lakhs)	

Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachovk District: Srinagar, State: J & K. Draft ELA Report

CHAPTER-09

ENVIRONMENTAL COST BENEFIT ANALYSIS

9.0 PROJECT COST:

Project cost for the Proposed Minor Mineral Quarry Cluster (Masonry Stone) Block at Khasra no. - 2610 Min, Area - 5.72 Ha. Village- Khanmoh, Tehsil- Panthachowk, District- Srinagar, State- J&K is Rs. 106.53 Lakhs.

Table-9.1: Project Cost and Benefit

Major Heads	Total
Production Activity	2,00,000 MT/Annum

9.1 ENVIRONMENT COST ANALYSIS AND PROJECT IMPLEMENTATION:

The Environment cost for this proposed mining includes Environmental Management Plan, Corporate Environment Responsibility, Occupational Health and Safety, The detailed cost of Environmental Expenses is given below in the Table 9.2.

Table- 9.2: Environmental Cost Analysis

S.No.	Major Heads	Expenses (Rs.)
1	Corporate environment responsibility	Rs. 2.13 Lakhs
2	Occupational Health and Safety	Rs. 3.72 Lakhs
3 Ecology and Biodiversity Rs. 0.80 Lakhs		
4	Environmental Management Plan	Rs. 28.11 lakhs

From the above table it is clear that total cost of project Operation is more than Environment Management Cost so the project is viable and feasible for the current project location.

Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khanmoh, Tehsil: Pauthachowk District: Srinagar, State: J & K. Draft ELA Report

CHAPTER 10 ENVIRONMENTAL MANAGEMENT PLAN

10.0 INTRODUCTION

To mitigate the adverse impacts which are likely to be caused due to the mining operation and overall scientific development of local habitat, environmental management plan (EMP) has been formulated and integrated with the mine planning.

The assimilative capacity of the study area is the maximum amount of pollution load that can be discharged in the environment without affecting the designated use and is governed by dilution, dispersion and removal due to physico-chemical and biological processes. The EMP is required to ensure sustainable development in the study area of 10 Km radius of the proposed mining site; hence it needs to be an all encompassive plan for the proposed activity. Government regulating agencies like Pollution Control Board working in the region and more importantly the people living in the study area need to extend their co-operation and contribution.

10.1 POLLUTION CONTROL MEASURES

10.1.1 Air Pollution Control

The proposed mining operations are not anticipated to raise the concentration of the pollutants beyond prescribed limits. However, the following measures would be adopted to mitigate the pollution levels in ambient air.

Air pollution caused as above can be classified into the following categories:

- Gaseous pollutants (Nitrogen Oxides, Sulphur Dioxide and Carbon Monoxides); and
- Particulate Matter

10.1.2 Controlling of NO2 levels

The source of NO₂ would be due to vehicular emissions. This can be controlled by proper maintenance and servicing of vehicles.

10.1.3 Control Measures of air pollution

- Water will be sprayed over the muck pile and dumps to reduce the dust generation.
- Dust masks will be provided to all workers.
- Regular spraying of water by tanker fitted system over handage and village roads will be proposed.
- Good plantation has been developed along the mining lease boundary and along the haul roads.
- Periodic maintenance of haulage and village road.
- Regular maintenance of vehicles and machinery's to control emissions.
- Use of wet drilling method to reduce the dust emission

10.1.4 TRAFFIC ENVIRONMENT

Impact	Mitigation Measure
No. of 7 PCU/hr will increase due to mining in existing traffic scenario lead to air pollution which can cause adverse effect on human health of neighboring villagers like effect on	Regular maintenance of vehicles will be done to ensure smooth running of vehicle.

Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khanmoh, Tehsil: Pauthachowk District: Srinagar, State: J & K. Draft ELA Report

breathing and respiratory system, damage to lung tissue, cancer and premature death, influenza or asthma. Vehicle collation may occur unwanted sound and can also cause impact on human health.	Department, with some fruit bearing and medicinal trees, along the haul roads, outer
Accidents may be occurring due to fast movement of vehicles.	To avoid accidents the speed of vehicles will be low near habitation areas.

10.2 NOISE ENVIRONMENT

There are a number of sources from which high noise level is generated, some continuously and some intermittently. Intermittent noise is also generated during un-loading and loading operations. Ambient Noise level monitoring in and around core zone of the mining lease area reflects that at locations near to mining activity/roads, noise levels are within the standards prescribed. The working environment in the mines satisfies the standards prescribed by OSHA.

10.2.1 The following control measures shall be taken to keep the ambient noise levels well within Limits:

- Use of personal protective devices i.e., earmuffs and earplugs by workers, working in high noise areas.
- The greenbelt with species of rich canopy in the lease area at suitable places and along the roads will further attenuate the noise levels.
- Conducting periodical medical check-up of all workers for any noise related health problems
- Proper training to personnel to create awareness about adverse noise level effects.
- Planned noise monitoring at suitable locations in the mine and outside location for proper effective remedial actions.
- Minimum use of homs and speed limit of 10 km/h
- > Timely maintenance of vehicles and their silencers to minimize vibration and Sound.
- > Care will be taken to produce minimum sound during sand loading.

10.3 WATER ENVIRONMENT

No surface water course exists in the area therefore there will be no effect of mining on the water regime. The area falls in moderate ground water potential zone. The mining Bench Level is proposed Highest Bench Level: 1875 m and Lowest Bench Level: 1737 mfrom upper hillock or over burden. Thus ground water table is not expected to disturbed due to mining. There will be a pit due to mining activity. Water will be filled into mining pits during rainy season. This water will be pumped back before start of production. The pumped out water will flow on the basis of topography

10.3.1 Surface Water

The major concern is that the silt and the fine suspended particulate matter carried by the surface runoff from the mining area during the monsoon may cause siltation of surface water sources in the buffer zone. The only pollution anticipated in the surface drainage water is the suspended solids, due to wash off from the existing dump and mine workings.

Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachowk District: Srinagar, State: J & K. Draft ELA Report

10.3.2 Ground Water Pollution Control Measures:

There will be no adverse impact on ground water condition and quality by mining or any kind of leaching of any substance that shall deteriorate the surface or ground water quality.

10.3.3 Proposed Water Pollution Control Measures:

- Garland drains are constructed around the dumps to arrest silt and sediment flows. The drains are connected to a settling tank and/or mine pits and accumulated water is being used for dust suppression and plantation.
- Cleaning of drains has been observed which help to arrest the siltation.
- The accumulated water is being provided to farmers of the area apart from other uses.
- Toilet facility has been provided near to the office.
- Use of water is observed for dust suppression, wet drilling and green belt development in Open
 Cast mine Following drain are observed and suggested for management of mine discharge and
 rumoff

10.4 LAND ENVIRONMENT

As the proposed mining operations are open cast & Semi mechanized and the lease area is 4.0 ha, there will be less possibility of and damage to Land Environment. During the proposed mining the top soil shall be used for reclamation purpose for the existing pits, but the quantity of OB shall not be sufficient for reclamation of whole area, as the stripping ratio 1:0.40. After the mining the pits are left open and acts as water reservoir, this will improve the water charging in the adjoining areas.

- Minimal damage to the flora standing around the lease area.
- Operations during daylight only.

10.4.1 Top soil management

The average thickness of top soil is available in the lease area, which will be used for spreading on OB dumps, to establish them. The top soil is kept separately equipped with retaining wall. The top soil is also used for plantation purpose, in consultation with experts.

10.4.2 Green Belt Development

The main objective of the green belt is to provide a barrier between the source of pollution and the surrounding areas. The green belt helps to capture the fugitive emission and to attenuate the noise generated spart from improving the aesthetics

Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khanmoh, Tehsil: Pauthachowk District: Srinagar, State: J & K. Draft ELA Report

Table 10.1: Greenbelt Programme

Year wise no of saplings to be planted is as below:

Year	Saplings to be Planted	Unit	Total Cost (in Rs.)
Ist	All 570 saplings will be planted in I' Year,	Plantation@500/sapling (570 sapling) Maintenance & Plantation Care @ Rs.600/day(365 days) Note: Maintenance Plantation care cost will increase with increase in no. of sapling. 100 trees per Ha	2,85,000 2,19,000
Total	570		Rs. 5,04,00

10.5 BIOLOGICAL ENVIRONMENT

The mining activity will have insignificant effect on the existing flora and fauna. Data have been collected from various Government Departments such as forests, agriculture, fisheries, animal husbandry and various offices to establish the pre-project biological environmental conditions.

10.5.1 Mitigation of Impacts on Biological Environment

Since there are no notified endangered species in the area, which will be affected due to the mining activities, therefore the biological environment would not be affected significantly. The Impact due to negligible amount dust generation on the biological environment is minimized by well-developed green belt in and around mining lease area.

- Improvement in mining site stability
- Conservation of biological diversity of plants, birds and animals,
- As dust receptor and dust filter, this is likely to be produced during mining.
- If birds are noticed crossing the core zone, they will not be disturbed at all
- Labors will not be allowed to discards food, plastic etc., which can attract animals/birds near the core site
- Only low polluting vehicles having PUC will be allowed for carrying mining materials.

10.6 SOCIO-ECONOMIC ENVIRONMENT

10.6.1 Management Plan for Socio-Economic Environment

- In general, socio-economic environment will have positive impact due to the mining project in the area.
- The deployed laborers will be from nearby villages only as these people are mainly dependent upon such mining activities.
- In order to further improve the socio-economic conditions of the area, the management will contribute for development works in consultation with local bodies.
- The lessee has already allocated budget (As per demand) for Socio-Economic measures.

Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachowk District: Srinagar, State: J & K. Draft ELA Report

Corporate Environment Responsibility

10.7 OCCUPATIONAL HEALTH AND SAFETY MEASURES

Detail of Occupational Health hazard is mentioned in Chapter-07 Section 7.4

10.7.1 Implementation of Occupational Health and Safety Measures

Occupational Health & Safety measures result in improving the conditions under which workers are employed and work. It improves not only their physical efficiency, but also provides protection to their life and limb. Management will consider the following safety measures:

- The collection of minor minerals from the Sand mine does not cause any occupational ill effects.
- Except fligitive dust generation there is no source which can show a probability for health related diseases and proper dust suppression will control dust generation and dispersion.
- Dust masks will be provided to the workers working in the dust prone areas as additional personal protective equipment.
- The occupational health hazards have so far not been reported.
- Awareness program will be conducted about likely occupational health hazards so as to have preventive action in place.
- Any workers health related problem will be properly addressed.
- Periodical medical checkup will be conducted.
- Promote occupational health and safety within their organization and develop safer and Heal their ways of working.
- Help supervise the investigation of accidents and unsafe working conditions, study possible causes and recommend remedial action.
- Develop and implement training sessions for management, supervisors and workers on health and safety practices and legislation.
- Coordinate emergency procedures, mine rescues, firefighting and first aid crews.

10.8 ENVIRONMENTAL MONITORING PROGRAMME

Details of the Environmental Monitoring Programme have been incorporated in Chapter 6 (Environmental Monitoring Programme) of this report.

CHAPTER- 11 SUMMARY OF DRAFT EIA

S. No.	CONTENTS	Page No.
HAPTE	R-11: SUMMARY OF EIA	11/1-11/10
11.1	PROJECT DESCRIPTION	
11.2	DESCRIPTION OF THE ENVIRONMENT	
11.3	ANTICIPATED ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES	
11.4	ENVIRONMENTAL MONITORING PROGRAMME	

Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachowk District: Srinagar, State: J & K. Draft EIA Report

CHAPTER: 11 SUMMARY AND CONCLUSIONS

11.1 PROJECT DESCRIPTION

11.1.1 Introduction of the Project & Proponent

The proposed project is Minor mineral (River bed material) Mining Project which is proposed by Mr. Gh Ahmad Ahanger. The proponent has applied for mining lease of Minor Mineral Quarry Cluster (Masonry Stone) Block at Khasra no.- 2610 Min, Area- 5.72 Ha. Village- Khanmoh, Tehsil-Panthachowk, District- Srinagar, State- J&K as per the provisions of EIA Notification 2006. It has been proposed to collect 2,00,000 MT per annum of Minor Mineral Quarry Cluster (Masonry Stone) Block.

Therefore, as per MoEF&CC, GoI O.M. No. L-11011/175/2018-IA-II (M) Dated: 12/12/2018 if a cluster or an individual lease exceeds 5.0 Ha the project is classified as Category – B since the project does not attracts the General Condition.

The mining lease area falls under cluster (if periphery of one lease is within 500 meters of the other lease) which is ≥ 5.0 ha therefore as per MoEF&CC GoI O.M. No. L-11011/175/2018-IA-II (M) Dated: 12/12/2018. It is applied under Cat-B1 and Cluster Certificate is attached as Annexure.

Table No.11.1: Project Details

On-line Proposal No.	SIA/JK/MIN/5735	4/2020		
File No. allotted by SEIAA, JK	SEAC/JK/20/385			
Name of Proponent	Mr. Gh Ahmad Ahanger S/o Ab Razak Ahanger (Partner:- Manjoor Ahmad Bhat S/o Mohd Subhan Bhat			
Full correspondence address of proponent	Village-Khanmoh, Tehsil- Panthachowk District- Srinagar, State- J&K			
Name of Project	Minor Mineral Qu	arry Cluster (Masonry Sto	one) Block	
Project location (Plot/Khasra/Gate No.)		Min, Area: 5.72 Ha, Villa wk, District: Srinagar, St		
Name of Minor Mineral	Minor Mineral Quarry Cluster (Masoury Stone) Block			
Type of Land	State Government Land			
Land utilization Pattern	The area is barren land.			
Sanctioned Lease Area (in Ha)	5.72 Ha			
Schedule (as per EIA notification 2006)	1(a)i			
Category of Project	B(I)			
Proposed Production	2,00,000 MT/Annum (Average Annual Production)			
Method of Mining	Open Cast, Semi-mechanized			
Sanctioned Period of Mine lease	New Mine, The applicant being the highest bidder was issued with Letter of Intent (LOI) by DGM office vide letter No. 373/MCC/DGM/CQK/16/3520-22 Dated: 22-08-2017 for the exploitation for 5 Years.			
Pillar Coordinates	Pillar	Latitude	Longitude	
6-2007a-24-55-457000006	RP	34°04'11.67"N	74°57'41.03"E	

Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachowk District: Srinagar, State: J & K.

Draft EIA Report

	N			
	Α	34	°04'13.26"N	74°57'44.07"
	В	34	04'15.05"N	74°57'39.44"
	C	349	04'13.29"N	74°57'36.34*1
	D	34°	04°14.19"N	74°57'33.35"]
	Е	349	04'11.98"N	74°57'28.19"
	F	34	04'14.72"N	74°57'26.38"
	G	340	04'19.22"N	74°57'33.18"
	Н	34	04'18.21"N	74°57'42.61"
Toposheet No	43 J/16	10	107	
Total Geological Reserves	22.16,738 N	ďΤ		
Total Mineable Reserves	20,81,877 N	AT .		
Proposed Production/year in Mining Plan Approval Letter	2,00,000 M	T/Annum (Avera	ige Annual Produ	ction)
Production of mine/day	666.66 T/da	ıy		
No. of Working days	300 Days			
Working hours/day	8 hours/day			
No. of Workers	34 Manpower			
No. of vehicles movement/day	67 Units (Assumed Loading Capacity: 10 Tonnes/Unit)			
Altitude of the Area	The Highest Point: 1875 mRL The Lowest Point: 1737 mRL			
Depth of Mining	8-12 (average Depth) (Source: Approved Mining Plan)			
Ground Water Level	1.50 - 2.50 Source:http		istrict_Profile/Jar	ndK/srinagar.p
Nearest metalled road from site	Metalled Ro	oad 0.35 km awa	y from the mine s	iite.
Water Requirement	Source	Purpose	Detail	Avg. Demand Day
	Portable Tankers	Drinking @15lpcd/wor ker	34 workers x 15 lpcd = 510 Lit/day	0.510 KLD
		Land reclamation / plantation @5 Lit/Tree (@ 100 trees/ Ha)	570 Trees x 5 1/day = 2850 Lit/day	2.85 KLD
		Mine Operation	2	1.0 KLD
		Dust suppression @1 Lit/Sq.m	Haul Road Area = (810 m Length x 7m Width = 5670 m ²) x 1	5.67 KLD

Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachowk District: Srinagar, State: J & K. Draft EIA Report

lit/Sq.m = 5670 Lit/d	ay
Total	10.03 KLD
GLOBUS Environment Engineering Se Certificate No. NABET/EIA/2124/RA024 Valid Till August 24/2024	
No	
Rs. 106.53 Lakhs	
Rs. 2.13 Lakhs (2% of the total Project Co	ost)
Rs. 28.11 Lakhs (Haulage Road repair Plantation & Environmental Monitoring)	, Dust Suppression,
Haul Road Length 810 m Length & Widt	h 7 m
570 trees will be planted	
	Total GLOBUS Environment Engineering Se Certificate No. NABET/EIA/2124/RA024 Valid Till August 24/2024 No Rs. 106.53 Lakhs Rs. 2.13 Lakhs (2% of the total Project Co Rs. 28.11 Lakhs (Haulage Road repair Plantation & Environmental Monitoring) Haul Road Length 810 m Length & Width

11.2 DESCRIPTION OF ENVIRONMENT

11.2.1 BASE LINE DATA: This section contains the description of baseline studies of the 10 km radius of the area (Core Zone and Buffer Zone) surrounding the mine lease area located at Minor Mineral Quarry Cluster (Masonry Stone) Block at Khasra no. - 2610 Min, Area- 5.72 Ha. Village-Khanmoh, Tehsil- Panthachowck, District- Srinagar, State- J&K. The data collected has been used to understand the existing environment scenario around the proposed mining project against which the potential impacts of the project can be assessed.

Environmental data has been collected in relation to proposed mining for:-

(a) Air

(b) Noise

(c) Water

(d) Soil

(e) Ecology and Biodiversity

(f) Socio-economy

Table 11.2: Baseline Environmental Status

Attribute	Baseline status
Ambient Air Quality	Ambient Air Quality Monitoring reveals that the maximum & minimum concentrations of PM ₁₀ & PM ₂₅ for all the 8 AQ monitoring stations were found to be within the prescribed limit of CPCB. As far as the gaseous pollutants SO ₂ and NO ₂ are concerned, the prescribed CPCB limit of 80µg/m ³ for residential and rural areas has never been surpassed at any station.
Noise Levels	Noise monitoring was carried out at 8 locations. The results of the monitoring program indicated that both the daytime and night time levels of noise were well within the prescribed limits of NAAQS, at all the four locations monitored.
Water Quality	8 Groundwater samples and 2 surface water samples were analyzed and concluded that: The ground water from all sources remains suitable for drinking purposes as all the constituents are within the limits prescribed by drinking water standards by Indian Standards IS: 10500.

Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachowk District: Srinagar, State: J & K. Draft EIA Report

Soil Quality	Samples collected from identified locations indicate the soil is sandy Clay, Sandy Clay Loam type and Clay loam type.
Ecology and Bio- diversity	There are no Ecologically Sensitive Areas present in the study area.
Socio-economy	The implementation of the mining project in the district will throw opportunities to local people for both direct and indirect employment. The study area is still lacking in education, health, housing, water, electricity etc. It is expected that same will improve to a great extent due to proposed mining project and associated industrial and business activities.

Table 11.3 ENVIRONMENTAL MONITORING

PARAMETERS	1	DESCRIPTION
Ambient Air Quality → PM10-58.41 (Min.) at AQ-3 to 68.1 μg/m3 (Max.) at AQ-1 → PM2.5 - 30.43 (Min.) at AQ-2 to 38.6 μg/m3 (Max.) at AQ-1 → SO2 - 6.45(Min.) at AQ-3 to 12.53 μg/m3 (Max.) at AQ-8 → NOx - 14.39(Min.) at AQ-3 to 22.81 μg/m3 (Max.) at AQ-5 → CO -<0.5 (Min.) to <0.5 μg/m3 (Max.) → Noise Quality Monitoring → Noise level during day time - 50.6 dB (A) (Min.) at AQ-4 to 53.2 or (Max.) at AQ-1 → Noise Levels during night time - 41.2 dB (A) (Min.) at AQ-5,6 to 42.7		
Water Quality Sampling & Analysis	(Max.) at A	AQ-2, 8. Analysis results of ground water in the study area reveal the following: • pH 7.24(Min.) at GW-2 to 7.51(Max.) at GW-6, • Total Hardness 84 (Min.) mg/l at GW-6 to 252 mg/l (Max.) at GW-5, • TDS 133 (Min) mg/l at GW-6 to 380 mg/l (Max) at GW-5, • Sulphate 3.67 (Min.) mg/l at GW-6 to 13.31 mg/l (Max.) at GW-4, • Chloride 19.57(Min.) at GW-6 to 31.31 mg/l (Max.) at GW-2
	Surface Water	The parameters results are as follows: PH value is 7.23 to 7.29 TDS was observed as 169 mg/l to 175 mg/l Chlorides were found as 19.57 to 25.44 mg/l Sulphates were found as 13.19to 27.54 mg/l Total hardness was observed 92 to 104 mg/l.
Soil Quality	◆ Total Kjele ◆ Phosphoro	to 7.87. atter 1.02 to 1.73 % dahl Nitrogen 0.085 to 0.0.128% us 41.76 to 74.26 mg/kg. 172.51 to 233.81 mg/kg

Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachowk

District: Srinagar, State: J & K.

Draft EIA Report

11.3 ANTICIPATED ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES 11.3.1 BIOLOGICAL ENVIRONMENT

The biological environment mainly consists of flora and fauna and its relationship with surroundings. Biological environment includes species of native plants and animals and one may measures the degradation of environment by noting the decrease in the commonly occurring species. As regards to fauna, the activity will have negative impact on them. At the beginning the animal will recede to distances due to noise generated from Transportation. They will trace back to an optimum distance after some time, on being habituated by disturbances. After the mining activity and growth of forest local fauna will again be reinstated even in a better way due to the generated forest cover in lieu of the existing denuded tract of land. There is no rare and endangered fauna species close to the mining area. Considering the small area of mining, insignificant impact is envisaged on biological environment.

11.3.2 Direct Impact:

The Minor Mineral Quarry Cluster (Masonry Stone) Block which proposes production of 2,00,000 MT/Annum of minor mineral. No direct impact is anticipated from the project on biodiversity.

Indirect Impact:

The major indirect impact include following.

- Mining activity is likely to affect the movement of the animal and birds.
- Increase in noise may affect the feeding, breeding and movement of animals.
- Likely settling of dust to be generated by movement of vehicles on leaves may results in to stunted growth of vegetation and may also affect the capacity of production.
- Large numbers of labor population will influx the area during mining operation.
- The major threat to surrounding flora is through collection of fuel wood by labor for cooking purposes and thereby loss of trees.

Cumulative Impact:

- Indirect and cumulative impacts are associated with various mining activities such as clearing of vegetation for establishment of various project units, movement of vehicles, Mining equipment s& machineries etc, interferences due to influx of labours etc.
- The losses of land for various project units will also not adversity affect the fauna as similar habitat is present throughout the project immediate influenced area. Therefore, impact due to loss of habitat for birds, reptiles and mammals of the project area is not expected.

11. 3.2: LAND ENVIRONMENT

The sanctioned MLA is a virgin land and the mining for the extraction of granted quantity of minor mineral will be started after the grant of environment clearance. At present, there is no any type of pit is present in the mining lease area. However, at the end of the first year period of mining lease granted period the impact on land use will be limited.

Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachowk

District: Srinagar, State: J & K.

Draft EIA Report

11.3.3: AIR ENVIRONMENT

Anticipated impacts and evaluation:

In mining operations, loading, transportation and unloading operations may cause deterioration in air quality due to handling dry materials. In the present case, only wet materials will be handled, thus eliminating problems of fugitive dust.

MITIGATION MEASURES:

The collection and lifting of minerals will be done manually. Therefore the dust generated is likely to be insignificant as there will be no drilling. The only air pollution sources are the road transport network of the trucks. The mitigation measures like the following will be resorted.

- Water sprinkling will be done on the roads regularly. This will reduce dust emission further by 75%
- Care will be taken to prevent spillage by covering the carrying vehicles with tarpaulin and sprinkling of water, if dry.
- Fortnightly scraping of road in order to keep the roads almost leveled. This will ensure smooth flow of vehicles and also prevent spillage.
- Overloading will be kept under check by giving prior awareness.
- Proper Tuning of vehicles to keep the gas emissions under check.
- Plantation of trees along the roads to help reduce the impact of dust in the nearby villages.
- Care will be taken to use PUC certified trucks.

11.3.4: WATER ENVIRONMENT

- Various surface and ground water samples are collected and analyzed in the reputed laboratory. The report indicated that the water available in the area is potable and all values are within the permissible limit.
- Hand pumps and dug wells are situated within 500 m Core Zone in which drinking water facilities are available.
- No pumping of water will be done in any surface body directly. The mine water will be pump out during rainy seasons. The pumped out water will be stored and utilized for sprinkling of water on haul roads, watering of plants, drilling and other dust suppression measures.
- Post-monsoon and Pre-monsoon groundwater level will be monitored regularly through nearby hand pumps and dug wells.
- Awareness programs will be taken up to educate public for conservation of water.
- Mobile toilets will be used at site.
- ML area under reference is water scarce and water reservoir will be a source of water to villagers.
 It will also attract birds and will improve aquatic environment.

11.3.5 NOISE ENVIRONMENT

Anticipated impacts and evaluation:

The mining methodology is done in semi mechanized process so there will not be any major impact on noise level due to the mining. The only impact will be due to transportation of materials by trucks.

- Mental disturbance, stress & impaired hearing.
- Decrease in speech reception & communication.
- Distraction and diminished concentration affecting job performance efficiency.

Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachowk

District: Srinagar, State: J & K.

Draft EIA Report

Mitigation measures

- Well maintained vehicle will be used which will reduced the noise level.
- Plantation: Plantation of trees along the road will be done to dampen the noise, if possible.
- The vehicles will be maintained in good running condition so that noise will be reduced to minimum possible level.
- Awareness will be imparted prior to mining operations that smoke silencers remain in a good conditions not to generate noise.
- In addition, truck drivers will be instructed to make minimum use of homs at the village area.
- Where ever space is made available by the authorities' plantation will be done and also post Plantation care will be provided.

11.4 ENVIRONMENT MONITORING PROGRAME

Regular Monitoring of all the environmental parameters viz., air, water, noise and soil as per the formulated program based on CPCB and MoEF&CC guidelines will be carried out every year in order to detect any changes from the baseline status.

Table 11.4: Monitoring Schedule & Parameters

S.No.	Attributes	Parameters for monitoring	Frequency	Locations
1.	Meteorology	Wind speed, Wind direction, Dry bulb temperature, Wet bulb temperature, Relative humidity, Rainfall	Minimum 1 site in the project impact area	Regularly in one season by Weather Monitorina Station
2.	Ambient Air	PM ₁₀ , PM _{2.5} , SO ₂ , NOx, Free Silica	As per CPCB/ MoEF&CC requirement i.e. 24 hourly monitoring for one month in each season except monsoon.	One location in down wind direction /impact zone (core Zone) & seven locations in Buffer zone.
3.	Noise	Noise level at Day and Night - Leq dB (A). Day Time: Leq (6.00 AM to 10.00 PM), Night Time: Leq (10.00 PM) To 6.00 AM)	Periodic/ As per CPCB nomis	One location in core Zone (Mine Boundary) & High noise generating areas within buffer Zone
4.	Water Quality & Surface Water Quality	TDS, Total Hardness, Calcium hardness, Magnesium hardness, Chloride, Fluoride, Sulphate, Nitrates, pH	Diurnal and Season wise As per IS 10500-2012	Set of gmb samples during pre monsoon for ground and surface water for 10 km distance.

Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachowk District: Srinagar, State: J & K. Draft EIA Report

		,Alkalinity, Iron, Odour, Zinc, Cyanide, Taste, Copper & Microbiological Parameter As per IS 10500:2012		
5.	Soil quality Monitoring	pH, Bulk Density, Soil texture, Nitrogen, Available Phosphorus, Potassium, Calcium, Magnesium, Sodium, Electrical Conductivity, Organic Matter, Chloride	Yearly	8 location in the Project impact area
6.	Socioecono mic Status	Demographic structure Infrastructure resource base Economic resource base Health status: Morbidity pattern Cultural and aesthetic attributes Education	Yearly	Socio -economic survey is based on proportionate, stratified and random sampling Method. Secondary data from census records, statistical hard books, Topo-sheets, health records and relevant official records available with Govt. Agencies.
7.	Ecological Impact	Green Belt Development Conservation of Wild Life	Yearly	Survey Secondary data from statistical hard books, toposheets and relevant official records available with Govt. agencies

Table 11.5: Budget Allocation for Environment Monitoring Programme

	TOTAL	5,36,000	
6	Socio Economic Survey	¥1	80,000
5	Biodiversity Survey	577 a 2	1,00,000
4	Soil Quality	@10000 x 8	80,000
3	Ambient Noise Level	@2000 x 8	16,000
2	Water Quality	@10000 x 10	1,00,000
1	Air Quality:	@20000 x 8	1,60,000

Corporate Environment Responsibility (CER)

- Total Cost of the Project = 106.53 Lakhs
- ≥ 2 % of the total Project Cost will be expended towards CER i.e. 2.13 Lakhs

Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachowk

District: Srinagar, State: J & K.

Draft EIA Report

As Per The G.O.I Notification, File No. 22-65/2017-I A, III dated on 1th May, 2018

Table 11.6: The Proposed Cost for CER Plan

This is the Proposed cost CER Plan, Activities and actual cost will be Finalized as per the Actual need of the area. (ON THE BASIS OF NEED BASE ASSESSMENT SURVEY)					
S. No.	Activity	Cost per Unit (Rs)	Quantity	Total (Rs)	
1.	Solar street light Installation in rural areas	15,000	8	1,20,000	
2.	Toilets for women nearby primary school	60,000	1	60,000	
3.	Awareness Program on Personal Hygiene (COVID 19) and distribution of Mask and Sanitizers	33,000	O#10	33,000	
	Total Proposed CER Cost			2,13,000 (2.13 Lakhs)	

Conclusion:

In general, socio-economic environment will have positive impact due to the mining project in the area. The lessee has already allocated Rs 2.13 Lakhs (As per demand) for Socio-Economic measures.

CHAPTER 12

DISCLOSURE OF CONSULTANT ENGAGED

Project Name: Minor Mineral Quarry Cluster (Masonry Stone) Block at Khasra no. - 2610

Min, Village- Khanmoh, Tehsil- Panthachowk, District- Srinagar, State- J&K.

Area: 5.72 Ha. Schedule- 1 (a)i, Category- B1

Applicant Name: Mr. Gh Ahmad Ahanger S/o Ab Rajak Ahanger

(Partner:- Manjoor Ahmad Bhat S/o Mohd Subhan Bhat)

Village-Khanmoh, Tehsil- Panthachowk

District- Srinagar, State- J&K.

Name and address of the Consultant	GLOBUS ENVIRONMENT ENGINEERING SERVICES 326-AB, 3rd Floor, Sahara Shopping Center, Faizabad Road,
Certificate No.	Lucknow -226016. Contact: 0522-4037540,+91-7398041242 NABET/EIA/2124/RA0245, Valid Till August 24/2024
Name and address of the Laboratory	Ultra Testing & Research Laboratory C-43,1* Floor,Sector-88,Phase-2,Noida,Uttar Pradesh
Certificate No.	TC-8189, Valid Till 15/11/2024



Quality Council of India



National Accreditation Board for Education & Training

Certificate of Accreditation

Globus Environment Engineering Services

326-AB, 3rd Floor, Sahara Shopping Center, Faizabad Road, Lucknow

The organization is accredited as <u>Category-B</u> under the CICI-NABET Scheme for Accreditation of EIA Consultant Organization, Version 3: for preparing EIA-EMP reports in the following Sectors –

S. No	Control Broad (Control	Sector (as per)		Cat.
	Sector Description		MoEFCC	
1	Mining of minerals including opencast / underground mining	1	1 (a) (i)	Α
2	Cement plants	9	3 (b)	A
3	Synthetic organic chemicals industry (dyes & dye intermediates; bulk drugs and intermediates excluding drug formulations; synthetic scrubbers; basic organic chemicals, other synthetic organic chemical sand chemical intermediates)	21	5 (f)	Α
4	Building and construction projects	38	8 (a)	8
5	Townships and Area development projects	39	8 (b)	. 8

Note: Names of approved EIA Coordinators and Functional Area Experts are mentioned in RAAC minutes dated Dec 10, 2021 and Supplementary Assessment minutes dated May 20, 2022 posted on QCI-NABET website.

The Accreditation shall remain in force subject to continued compliance to the terms and conditions mentioned in QCI-NABET's letter of accreditation bearing no. QCI/NABET/ENV/ACO/22/2414 dated July 05, 2022. The accreditation needs to be renewed before the expiry date by Globus Environment Engineering Services following due process of assessment.

Bung.

Sr. Director, NABET Dated: July 05, 2022 Certificate No. NABET/EIA/2124/RA 0245

Valid up to August 24, 2024

For the updated List of Accredited EIA Consultant Organizations with approved Sectors please refer to QCI-NABET website







National Accreditation Board for Testing and Calibration Laboratories

Hent.

CERTIFICATE OF ACCREDITATION

ULTRA TESTING & RESEARCH LABORATORY

has been assessed and accredited in accordance with the standard

ISO/IEC 17025:2017

"General Requirements for the Competence of Testing & Calibration Laboratories"

for its facilities at

C-O, SECYOR-BE, NORDA, GAUTAM BUDDHA NAGAR, UTTAR PRADESH, INDIA

in the field of

TESTING

Certificate Number:

TC-4198

Isone Date:

16/11/2022

Valid Until:

15/11/2024

This certificate remains valid for the Scope of Accreditation as specified in the nanexare subject to continued entiripated compilance to the above standard & the relevant requirements of NABL.

(To see the scope of occreditation of this laboratory, you may also visit NABL verially waveauld-ledit.org)

Name of Legal Identity: Ultra Testing & Research Laboratory

Signed for and on behalf of NABL

N. Venkateswarus

Chief Executive Officer

12/3

ANNEXURES

ANNEXURE 1: LETTER OF INTENT

ANNEXURE 2: AFFIDAVIT

ANNEXURE 3:AUTHORITY LETTER

ANNEXURE 4:REVENUE PAPER

ANNEXURE 5: APPROVED MINING PLAN

ANNEXURE 6: NAQSHA AMINI AND AUTHORIZE AFFIDAVIT

ANNEXURE 7: LAB REPORT

ANNEXURE 8: QUESTIONNAIRE

Annexure -1 Letter of Intent

Quarry cluster

Occurrence of James and Kather Charleste of Geology and Phinty, Srinings

Subject: Declaration of Cluster of Quarties for grant of Quarry Lie

Reference: 7DR/F-21/Ngr/D/312 deed 28.06.2016 .

Whereas, extraction of Stones from individual Stone Quarties was regulated addition of Short Term Quarry Permits under the provisions of Jak Histor Miseral Concess Rules, 1962.

Whereas, Government promalgated the Jammu and Kashnir Minor Mineral Concess. Storage, Transportation of Minerals and Prevention of Bergal Mining Rules, 2016. vide Si 105 of 2016 dated 31.03.2016 impealing 38K Minor Mineral Concession Rules, 1962.

Whereas, Under Rule, 14 of said rules the individual quarties falling in areas ancests occupied and certified by the revenue authority falling are to be slubbed and declared cluster of quarties for grant of Mineral Concession.

Whenes, in pursuance to this office letter No. 296/TG/Duster/16/734-40 dated 09.05.20 Stone Quarry Belts were identified and blocks governing the existing quarries we prepared.

Whereas, under Rule, 44 the said quarry bests/clusters are to be considered for grant quarry stance subject to the submission of following documents:

- 3. Approved Mining Plan with Environment Management Plan (EMP).
- 2. Environmental Clearance from the Competers Authority.

In view of the above and in pursuance to the provisions of Rule 14 of the James and Kashnar Minor Mineral Concession, Storage, Transportation of Minerals and Provents of Regal Mining Rules 2016, the quarry betts of District, Srinagar inclusion in annexa "A" are declared as Cluster of Quarries subject to authentication by revealer authorities.

No.: 373 /MCC/DGM/CQN/16/ 3.5°340 -13_ Dated: -32:08.2017.

Copy to:-

The Commissioner/Secretary to Govt; Industries and Commerce Department, Civ. Secretarist, Sitragar for information please.
 The Dy. Commissioner, Sitnagar for information and necessary action.

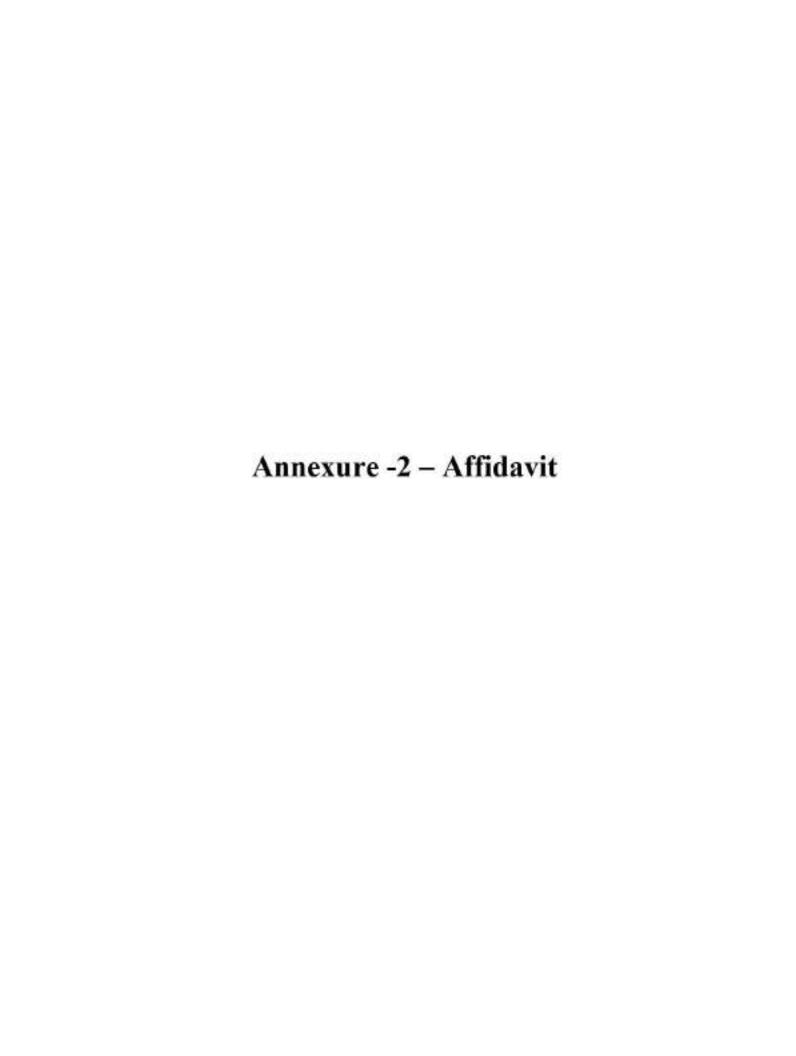
...ii. The Joint Director(K) Geology & Mining Department, Srinagar for information with the request to direct I/C DMO concerned for advising the quarry holders to submit the requisite documents as required under rules for processing their cases for grant of Quarry Licence.

> Director Geology & Mining JAK Govt; Sinneger.

Director Geology & Mining

38K Govt; Srinager.

2018





AFFEDAVIT

BS 862378

We, Mr. Gh Ahmed Ahanger S/o Ab Razak Ahanger and Manzour Ahmed Bhat S/o: Muhd Subhun Bhat Rist Khanmoh (project proponents) & Globus Environment Engineering Services do here by solemnly declare on onth as follows,

That Deponents 1 is Project Proposent and Deponent 2. Globus Environment Engineering Services is Environment Consultant of project Masonry Stone Minor Minoral Quarry Cluster Block at Shivdekel, Khaumsh Tensil Pathanchowk District Srinagar J&K State (Area of 5.72 Hoctares).

- a. That, the mining activity has not been started at site and No violation of Environment Protection Act of 1986 and Rules made there under has taken place.
- b. That, no Court Case with respect to mining project/ block is pending in any Court of law.
- c. That, area does not full in Forest/ Wildlife Protected arm/ ESZ or within 10 Km from Wildlife Prefected Area boundary and does not attract General Condition of EIA Notification of 2006 read with amendments.
- That, the project related activities shall not cause result in violation of Forest Conservation Act, 1980. William Protection Act, 1972, Mines and Mineral Development Act, 1957, Environment Protection AgC 1986 (and Rules made there under), standing instruction/OMs from MnEF & CC, Gol or IBM or any orders from Courts of Competent jurisdiction or orders from Hon'ble NGT.

Dist, all the information furnished to the JKEIAA is true. Grant of TORs on the basis of any wrong Rifermation furnished/ facts concealed by the Project Proponent/ Consultant on his behalf, is liable to summary cancellation at any point of time.

SNAND

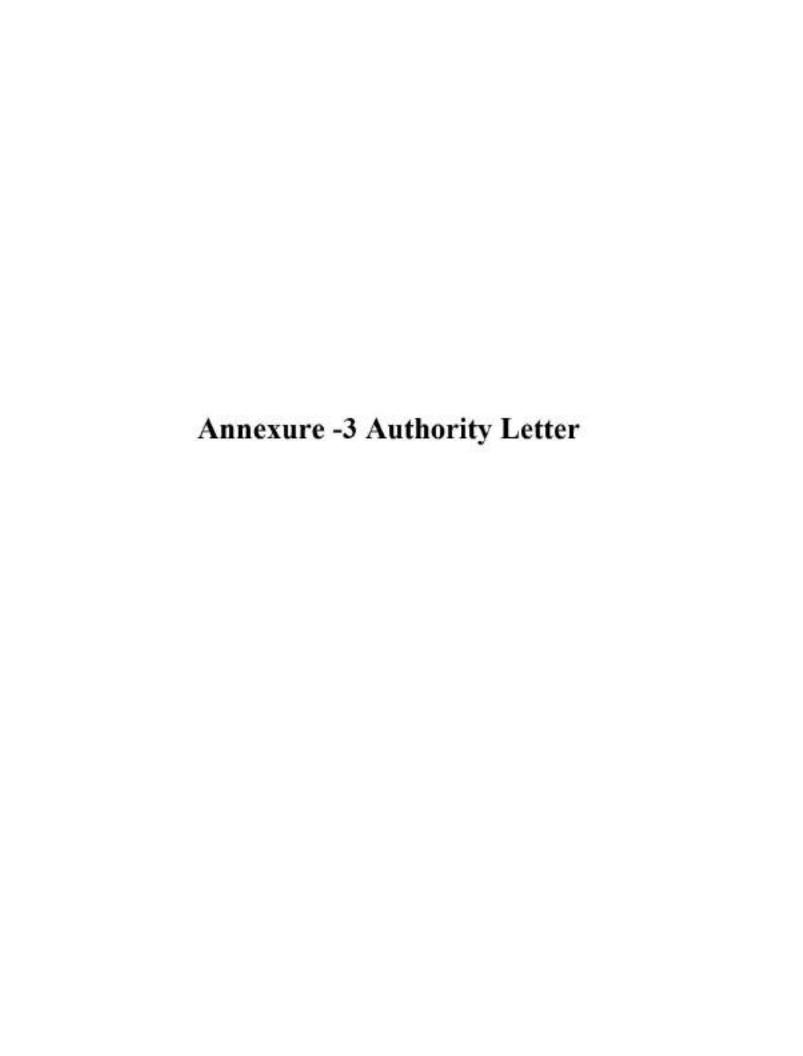
Verification

Verified that the contents of this affidavit are true and correct to the best of my knowledge and belief nothing has been concealed therein.

Depende

Henon Arrosard

First Class, Srinagar





BS 862386

TO WHOM SO EVER IT MAY CONCERN

This is centify that M's Globus Environmental Engineering Services, Regd. Office at 326-AB, 3rd Floor, Sahara Shipping Center, Fatzahad Road, Lucknow – 226016 are the environmental consultant for our proposed Masonry Stone Minor Mineral Quarry Cluster Block at Shivdekri, Khanmah Tensil Pathuncheleck District Srinagar J&K State (Area of 5.72 Hectarcs).

As per the truck order released and job allossed from the preparation of the report and present out proposal in the SEAC/SEIAA I&K meeting as and whenever required.

Mr. Gh Ahmed Ahanger

(Project Proposent)

Manzoov Annad Shat

Date-

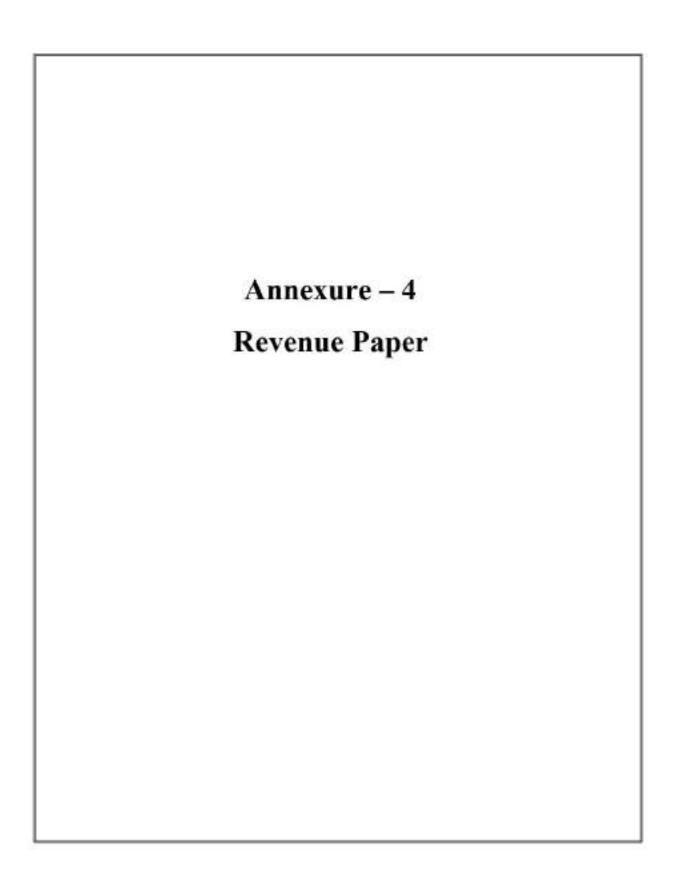
Certified on ball

Certified that the restaured declared on this

day of 12/10/2020

SHARIMAN

natura agri



Ahmed Ahenger Whumoners

GOVERNMENT OF JAMMU AND KASHMIR OFFICE OF THE TEHSILDAR PANTHA CHOWK SRINAGAR



The District Mineral Officer, Geurcay and Mining Department, Srinagar.

No. 232/TPC/09-2014

Date:- 07.08.2018

Subject: Declaration of Clusters of Quarries for Grant of Quarry Licences.

Sir.

Regarding the subject cited above, the case submitted by the DMO Srinagar along with the list of Quarry Holders from S. No. 01 to 20 has been got verified on spot by the field agency. The report submitted by the field agency reveals that the Quarry Holders from S. No. 01 to 20 are existing in Khasra No. 2610 Min under cluster at Shiv Dekri village Khonmoh is recorded as Sarkar 242 Kanal 18 Marlas Gair Mumkin Kohistan. The village Khonmoh is outside municipal limits in the Shape of hills. Reportedly these quarries are existing there since long which is the main source of income for them. These Quarry Holders have applied before the District Mineral Officer Srinagar for issuing of licences. The case has been got verified as per the letter submitted by the DMO office vide their letter No.:- DMO/DGM/SGR/SQ/56/1486-90 Dated: - 05-05-2018.

Hence, the report is submitted for favour of further necessary action at your end.

Yours faithfully

fehsildar.

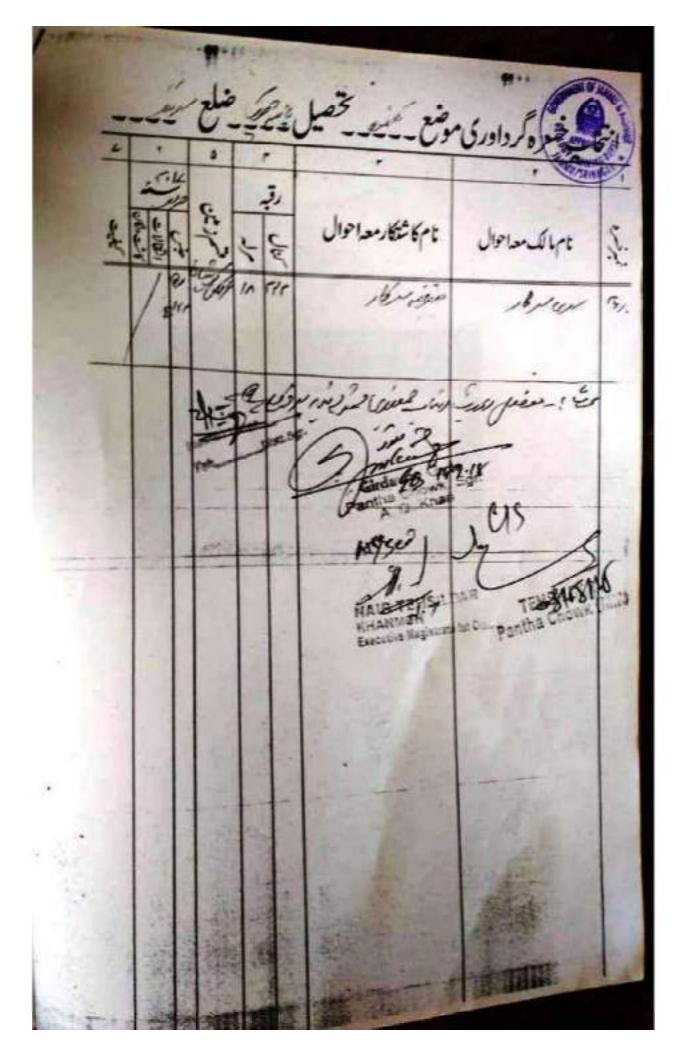
Copy to the:-

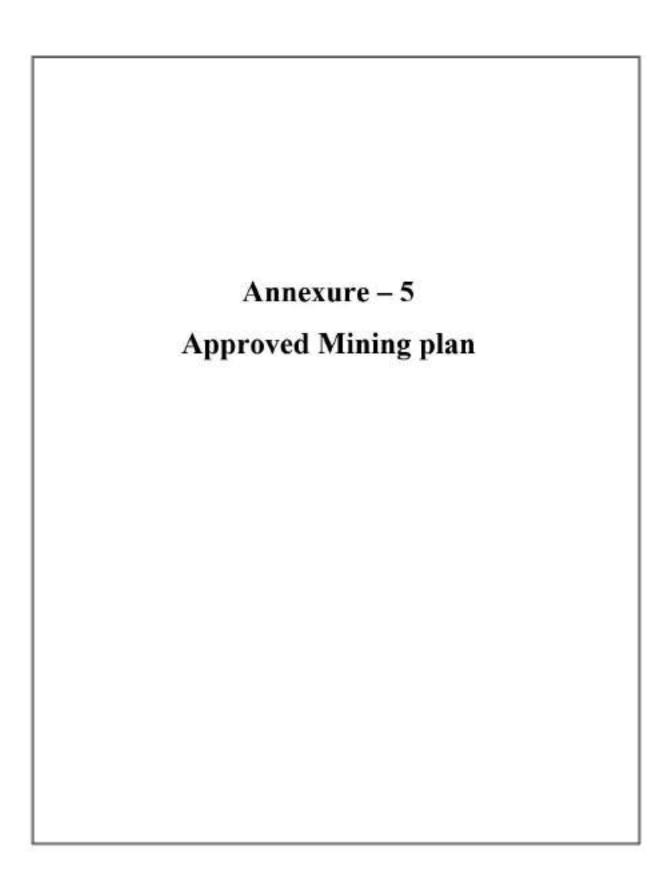
Deputy Commissioner Srinagar for his kind information.

2. Deputy Director "MS" Geology and Mining Department Srinagar for information.

Tilleverific in ofland series of some with the wind the boy Seld in Endbilisting was Est being with seculation in interpresentations willis wistigues of white which williams residentility and its state of an and in the Construction, Sous in Des 3000 pourse white a Colin was die of the State of in the series 1/31/548 eigensichtig ann withday of cighin 10 Com Till Mento Tilps (19 0 48) its diensing Eles 1) Sin cilled con it affine in fate willist All me will - & Bull with with with & Chare 14 / Chin cricio de 110 de com recion de Lister Surch Sind Soldier - Crack winds for a second of the work of the state of were is survey is constitution in workers 6-90 gir in whilele to is direction 15 / weight site of Dist.sgr. Instructe Constitute of the

المات وفع مستن DIN'LL عمركا فتكارمعا الال نام بالك معدا حوال Milia 14 Cold and the state of the cold of the state of the 0,1900000 word 7 leas





(Submitted under Jammu &Kashmir Minor Mineral Concession, Storage, Transportation of Minerals AND Prevention of Illegal Mining Rules, 2016 and MoEFCC's Gazette Notification dated 15/01/2016)

FOR

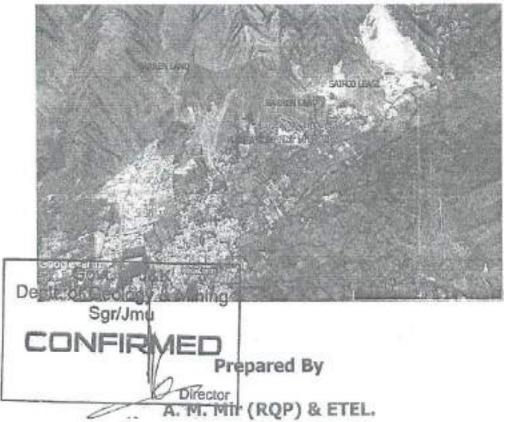
Minor Mineral Quarry Cluster Block at Shivdekri, Khanmoh Tehsil Panthachowk District Srinagar covering an area 5.72 hectares of M/S Gh Ahmad Ahanger and Mnazoor Ahmad Bhat

(Mobile No:)

Period of Proposal from 2018-19 to 2022-23 (5years)

Project Proponent: M/S Gh Ahmad Ahanger and Mnazoor Ahmad

Bhat



REGD No. 11/DGM/RQP/2017 9-Jamia Road Pattan Baramulla

Phone no: 9419458699 87086703576mu & Koshmir

Deptt, of Geology 3 9
APPROVEG
WITH CONDITION
Vide Communication No. 2/16/132-79
Dated 7.4 5 5 5 h
Dy Carector
Officer Authorized



AUTHORIZATION LETTER BY THE APPLICANT

We Gh Ahmad Ahanger and Manzoor Ahmad Bhat, Applicant hereby authorize Shri Ab. Majid Mir, (RQP) 11/DGM/RQP/2017 from J&K Govt. Geotechnical consultant, to prepare the Mining Plan with Progressive Mine Closure Plan in respect of Minor Mineral Ouarry Cluster Block, at Shivdekri, Khanmoh Tehsil Panthachowk District Srinagar covering an area 5.72 hectares (Submitted under Minor Mineral Concession, &Kashmir Jammu Transportation of Minerals and Prevention of Illegal Mining Rules). I request Director, Geology & Mining, Jammu & Kashmir Govt. to correspondence further make Submission/modification/re-submission/ withdrawal and to collect the approved copies of the aforesaid Mining Plan with the said agency on following address:

> Ab. Majid Mir RQP No. 11/DGM/RQP/2017 Mobile: 9419458699 & 7006303528 9-Jamia Road Pattan Baramulla

Date:

28/08/2018

Place: Srinagar

Prop:

Ab Gh Ahmad Ahanger and

Manzoor Ahmad Bhat

CERTIFICATE



- 1. The provisions of The Jammu & Kashmir Minor Mineral Concession, storage, transportation of minerals and prevention of illegal Mining Rules, 2016 have been observed in the Mining Plan and Progressive Mine closure plan in respect of Minor Mineral Quarry Cluster Block at Shivdekri, Khanmoh Tehsil Panthachowk District Srinagar covering an area 5.72 hectares of M/S Gh Ahmad Ahanger & Manzoor Ahmad Bhat. Whenever specific permissions are required the lessee will approach the concerned authorities for the same.
- 2. The plan has been prepared as per the revenue details, lease agreement and site identification by the proponent and subsequent discussions held with the project proponent. It is also certified that information furnished in the above said Mining plan and PMCP are true and correct to the best of my knowledge and belief and in case of default the approval maybe withdrawn.

A. M. Mir (RQP) & ETEL.

REGD No. 11/DGM/RQP/2017 9-Jamia Road Pattan Baramulla. Cell No. 9419458699 & 7006303528

A.M.MIR

Geo Technical Consultant

RQP-11/DGM/RQP/2017



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



Basero Trust Building, Mehjoor Nagar Near-Refude Hotel, Kashmir, Srinagar (J&K) Ph/Fax: 0194-2430192 Emott-sympologymak/on

CERTIFICATE OF RECOGNISATION AS QUALIFIED PERSON

(under Rule 12 of the Jammu and Kashmir Minor Mineral Concession, Storage, Transportation of Miserals and Prevention of Illegal Mining Rules, 2016).

Sh. Abdul Majid Mir S/o Haji Assadullah Mir Resident of Pattan District, Baramulla-193121 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 Elegal Mining Rules, 2016 as a qualified person to prepare Mining Plans/ Schemes.

His registration No. is 11/DGM/ROP/2017. This recognition is valid for a period of 10 years ending 16.05.2027.

No. 366/MCC/DGM/RQP/16/ 73 (Dated: 20.05.2017

DECSE PUBLICITES

himitee. Yes

20/05/2017 DIRECTOR Dipertores Depth. Gove of James & Kashmir Deptt. of Geology & Mining APPROVED WITH CONDITIONS vide Communication No. 1994

Marie Sar (5 tes / 172 7 Dr. A. S.

CONTENTS

CHAPTER	PARTICULARS	PAGE NO
	MINING PLAN	
CHAPTER 1	INTRODUCTION	1
CHAPTER 2	GENERAL	3
CHAPTER 3 GEOLOGY AND EXPLORATION		7
CHAPTER 4	RESERVES & RESOURCES AS PER UNFC	13
CHAPTER 5 MINING		19
CHAPTER 6 MINE DRAINAGE		23
CHAPTER 7	PROGRESSIVE MINE CLOSURE PLAN	25



LIST OF PLATES

				A. Land
s.No.	LIST OF PLATES		PLATE NO.	1400
1.	LOCATION PLAN		1	
2.	KEY PLAN		2	
3	SURFACE PLAN	3		
4	GEOLOGICAL PLAN		4	
5	EXTRACTION PLAN FOR FIVE YEARS		5	
6	ENVIRONMENT PLAN		6	
	1			

LIST OF ANNEXURE

s.No.	PERTICULARS	ANNEXURE NO.
1	LETTER OF INTENT	A
2	SITE PLAN	В
3	KHASRA MAP, INTIKHAB GIRDAWARI	С
4	PHOTO IDENTITY OF THE OWNERS	D
5	PAN-CARD OF THE OWNER	E

LIST OF CERTIFICATES

S.NO.	TITLE	NUMBER.
1	AUTHORISATION LETTER BY THE PROPONENT	1
2	CERTIFICATE FROM THE RQP	2
3	CERTIFICATE OF RQP AS QUALIFIED PERSON	3

MINING PLAN INCLUDING PROGRESSIVE MINE CLOSURE PLAN FOR ROAD METAL AND BUILDING STONE QUARRY OVER AN EXTENT OF 5.72 Ha IN MINOR MNERAL CLUSTER QUARRY BLOCK —AT SHIVDEKRI KHANMOH TEHSIL PANTHCHOWK DISTRICT SRINAGAR, JAMMU AND KASHMIR STATE

INTRODUCTION

In pursuance to the provisions of Rule 14 of the "Jammu and Kashmir Minor Mineral Concession, Storage, Transportation of Minerals and Prevention of illegal Mining Rules 2016", the Department of Geology & Mining has declared individual quarries ancestrally occupied quarry belts of Shivdekri khanmoh as cluster of quarries for grant of Mineral Concession subject to the submission of Approved Mining Plan with Environmental Management Plan. The quarry cluster Block consists of 20 quarries located at Shivdekri Khanmoh covering an area of 5.72ha (copy enclosed as Annexure-B). The Minor Mineral Block is located at village Khanmoh Tehsil Panthachowk District Srinagar.

The submission of Mining plan is a pre requisite for quarry lease as per Rule 44 of "Jammu and Kashmir Minor Mineral Concession, Storage, Transportation of Minerals and Prevention of illegal Mining Rules 2016".

In this connection, the quarry holders have approached Mr. Ab Majeed Mir, Consultant Geologist & RQP to prepare the Quarry Mining Plan following the prescribed guidelines. Hence, this Mining Plan is being prepared and submitted under the Rules "Jammu and Kashmir Minor Mineral Concession, Storage, Transportation of Minerals and Prevention of illegal Mining Rules 2016", The proposed Mining Plan covers a scientific and systematic assessment of the deposit which indicates the details of conservation of the deposit and protection of environment in and around the quarrying area. The survey includes of Topographical Survey, Large Scale Mapping with contours.

The survey enables the lessee to take up the exploration of Road Metal & Building Stone in a systematic manner and plan for future expansion programme. This Mine Plan has been prepared taking into account strictly the restrictions to be adopted by the applicant while conducting quarry operations due to the existence of any structures railway water bodies such as river, lake etc.

The present Mining plan is being submitted for production of approximately 10,00,000 tones of road metal during the five year plan.

Universal Format for Mining Plan/Scheme of Mining including progressive Mine

1. GENERAL			
a) Name of the applicant	Gh Ahmad Ahanger S/o Ab Razak Ahanger & Manzoor Ahmad Bhat S/o Mohd Subh Bhat		
Address	Khanmoh		
District	Srinagar		
State	Jammu and Kashmir		
Pin Code	190001		
Phone	-		
Fax	2		
e-mall	25 C		
b) Status of the applicant			
Private individual	Private		
Cooperative Association	ia.		
Private Company	-		
Public Company	(#):		
Public Sector Undertaking	#W		
Joint Sector Undertaking	Ancestrally quarry holders(20)		
Other (pl.specify)			
c) Mineral(s) which are occurring in the area and which the applicant intends to	Masonry stone		

mine	THE WALL STORY
d) Period for which the mining lease is granted / renewed / proposed to be applied	
e) Name of the RQP preparing the mining plan	Ab Majeed Mir
Address	9-Jamia Road Pattan District Baramulla
Phone	9419458699"
Fax	9
e-mail	22
Pin	193121
Registration No.	11/DGM/RQP/2017
Date of grant / renewal	-
Valid upto	•
f) Name of the prospecting agency	NA
Address	
Phone	
g) Reference no. and date of consent letter from the State Govt.	373/MCC/DGM/CQK/16/3520-22 DT; 22/08/2017 (Copy enclosed as Annexure-A)

2. LOCATION AND ACCESSIBILITY	AMMU/SEWACE
a) Details of area (with location map)	Applied for quarry license over an area of 5,72 ha. Copy of site plan enclosed as Annexure-B. Location map refer plate 1.
District and State	Srinagar, Jammu and Kashmir
Taluka	South Srinagar
Village	Khanmoh
Khasra No./ Plot No./ Block Range / Felling Series etc.	2610 Min The details of Khasra (Jamabandi Nakal & Khasra Map) of the proposed area is enclosed as Annexure-C
Lease Area (hectares)	5.72
Whether the area is recorded to be in forest (please specify whether protected, reserved etc.)	The proposed licensed area falls in Khalsa
Ownership / Occupancy	Khalsa Sarkar
Existence of public road / railway line, if any nearby and approximate distance	
Toposheet No. with latitude an	d The area falls in Survey of Indian Toposhe

no.433/16, bounded by:longitude Latitude: 34004/11.98// to 34004/19.22 Longitude:74057/26.3811 to 74057/44.0711 Each corner points have been demarcated by the State Government DGM. The details of the corner boundary pillars are listed below. Pillar Latitude Longitude 34004/11.67// 74057/41.03// RP 34 04 13.26 74 57 44.07 34004/15.05/ 74057/39.44/ 34004/13.29/ 74057/36.34// C 34004/14.19// 74057/33.35// D 34004/11.98/ 74057 28.19 74057/26.38// 34004/14.72// 74057/33.18/ 34004/19.22 G 34004/18.21// 74057/42.61// H

Land Use Pattern (Forst, Agricultural, Grazing, Barren etc.)

Forest land- nil

Forst, Agricultural land- Nil

etc.) Grazing Land- Nil

Barren Land-5.72 ha (Khalsa Sarkar)

b) Attach a general location and vicinity map showing area boundaries and existing and proposed access routes. It is preferred that the area to be marked on a Survey of India topographical map or a cadastral map or forest map as the case may be. However if none of these are available, the area should be shown on an accurate sketch map on scale of 1: 50000.= The Location Map/Key Plan is enclosed as

Plate No.01&02

3. DETAILS OF APPROVED MINING PLAN / SCHEME OF MINING (If any): Nil



PART – A 1.GEOLOGY AND EXPLORATION

Briefly describe the topography and general geology and local / mine geology of the mineral deposit including drainage pattern.

a. Physiography:

i. Topography:

The Topography of the area is rugged mountainous with peaks rising to 2710m above msl and lowest point is 1737m above msl. The topography of the area is barren stony without any overburden and is there is no vegetation in the area. The area is devoid of any regular water sources.

The general slope of the area is from southwest and south east. The rain water flows as per natural slope to river Jhelum about 12Km from the proposed area. The surrounding area have two springs, with low discharge and are only source of water for the villagers.

II. Climate and Rainfall:-

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 middle of the November and severe winter conditions continues till the middle of February. The District receives an average annual precipitation of about 556.5mm in the form of rain and snow for about 60 days.

b. General Geology:

The Geology of the area has been studied in detail by pioneering workers like Middlemiss, Wadia etc . A Geological succession of Rock Formation is given in the table below:

Table 1: Regional Geology of the Area:

S.No	Formation	Lithology	Age

			T APPROVED
1	Alluvial, Scree, Talus deposits	Recent Alluvium, in the low-lying areas adjoining the Jhelum river and its tributaries consist of finely compacted detrital sediments such as loam, clay, silt and sand with occasional gravel.	Recent Many / Servin
2.	Karewas	Lacustrine deposits of alternate bands of loose sand, clays & slit	Pleistocene to Recent
3.	Triassic a. Upper b. Middle c. Lower	Limestone (High grade) with minor shale & siliceous limestone bands. Calcareous & argillaceous material. Shale with siliceous Limestone	Triassic
4,	Panjal Traps	Basaltic Lava	Upper Carboniferous.
5.	Nishatbagh Beds	the Formation comprises a 220 m thick sequence of tuffaceous shale/slate with plant fossils in the basal part, 60 m thick varvite in the middle and 20 m thick shale and sandstone in the upper part.	
6.	Agglomeratic Slate	The Agglomeratic Slate consists of pyroclastic slates, conglomerates and Agglomeratic/pyroclastic products and forms the lower part of the Panjal Volcanic Series.	100

LITHOLOGICAL DESCRIPTION:

The lithological description, aerial extent of different Formations and the

hydrogeological importance of some of the major rock types are briefly supplemental hereunder:

- 1. Agglomeratic Slate: The Agglomeratic slates constitute a conspicuous and an interesting group of rocks occurring in various parts of Kashmir. In district Srinagar, some good outcrops of this formation occur along the base of hill bordering the Dal Lake from Gupkar to Shalimar Garden. The Agglomeratic Slate consists of pyroclastic slates, conglomerates and Agglomeratic/pyroclastic products and forms the lower part of the Panjal Volcanic Series. They are gritty or greywacke-like, and often grade into slates. In the fine matrix, angular fragments of quartizite, slate, porphyry granites, etc., are sporadically distributed. The Agglomeratic Slates at Brein contain Lower Gondwana plants, associated with a series of sandstones and shales containing a marine brachiopod faunas.
- 3. Nishatbagh Beds: At Nishatbagh and Brein in Srinagar district Agglomeratic Slate is overlain by Gondwana plant fossil bearing beds, designated as Nishatbagh Formation. In the type locality Nishatbagh, the Formation comprises a 220 m thick sequence of tuffaceous shale/slate with plant fossils in the basal part, 60 m thick varvite in the middle and 20 m thick shale and sandstone in the upper part. The plant bearing beds have yielded Gangamopteris augustifolia, G. kashmirensis, Glossopteris augustifolia, G. Indica Psygmophyllum haydeni, Cordaites, etc. imparting a Lower Permian age to the rocks.
- 4. Panjal Trap: Agglomeratic States are overlain by a thick series of bedded and massive andesitic and basaltic flows, called the Panjal Traps. It forms a conspicuous, topographical feature by making prominent cliffs and precipices. The primary constituents are plagioclase and augite in a fine-grained semi crystalline ground mass. The ferromagnesian minerals have been chloritized and/or epidotized to give the traps a green colour. These litho-units are characterized by amygdaloidal (structure) and non-porphyritic and glomeroporphyritic texture. The Panjal Trap is widely distributed in the district Srinagar and well exposed at Panthachowk, Dalgate, Athwajan, Brain,

Chesmashal and Zewan areas. The Traps have developed secondary fissures, job weathered residuum.

- 5. Zewan Formation: In Zewan, which is a type locality in Vihi district, the Gangamopteris beds (Gondwana plant bearing calcareous beds) are overlain by a series of marine fossilferous calcareous shale and crystalline limestone. The name 'Zewan Formation' has been applied to the entire succession from Gangamopteris beds to Lower Triassic beds. The lower part of the Zewan formation is argillaceous but the upper part is calcareous. Zewan Formation is well developed in Zewan Spur, Guryal ravine near Khanmoh. This section forms the type section not only for Permian but also for Permo-Triassic boundary richly preserving the palaeo-climatic and biotic database. The site is of an international importance in geoscientific community and is promoted and developed as national Geo-heritage site.
- 6. Triassic Formation: The Triassic Formation is mainly composed of homogeneous compact, light grey coloured limestone with shale in the lower parts. In the middle part, shale and sandstone are intercalated with limestone whereas in the upper part it contains massive limestone. A superb development of litho-units of this system is exhibited in a series of picturesque escarpments and cliffs forming the best part of Khanmoh area of the district. Khanmoh Formation of Lower Triassic age comprises dark grey shale and limestone. The Formation is cavernous in nature and extensively folded, faulted, and jointed, besides identified with ammonoid and bivalve fossils.
- 7. Karewa Formation: The Karewas overlie the folded Triassic and pre-Triassic rocks, flanking the surrounding mountain precipices. The Karewas (Neogene-Quaternery sediments) are fluvio- lacustrine deposits; deposited in two stages, mutually separated by a dry interval during which sub-aerial agents intensively eroded them. In district Srinagar Upper Karewas are exposed which comprises yellow silt, grey clay, calcareous layers and sand with conglomerate in the marginal areas in the lower part and continental loess and reworked loess in the upper part. This Formation is disposed horizontally and is reportedly devoid of fossils or presence of lignite.
- 8. Alluvial, Scree, Talus deposits: The Recent Alluvium, in the low-lying areas

adjoining the Jhelum river and its tributaries consist of finely compacted detrical sediments such as loam, clay, silt and sand with occasional gravel. The fringe areas of the district are covered by scree and talus material derived from the hill slopes of surrounding ranges. The sediments are of heterogeneous nature ranging from boulder, cobbles, pebbles, gravels before merging into valley fill of fine-grained sediments.

The hydrogeological framework represents modest groundwater potentialities in the area wherein groundwater development is restricted in soft rock Formations of Karewa & colluviums/alluvium deposits of Quaternary age. The distribution of groundwater in these Formations is not ubiquitous and the aquifers (water bearing Formations) vary in their lateral and vertical extensions.

c. Prospecting Agency: Not Available.

d. Details of Prospecting/Exploration Aiready Carried Out:

The mining operations are already carried out since the decades and as such confirms the presence of the limestone (R) deposits in the proposed cluster. In addition, sufficient information gathered and careful observation during the site visit has aided in determination of the presence of reserves in the Quarry cluster area. Hence, specific exploration is not required. The subject area is demarcated on the ground with reference to the permanent reference point. Later topographical survey of the area was carried out.

The cluster quarry area is connected to Grid of Latitude: 34°04′11.98″ to 34°04′19.22″ Longitude:74°57′26.38″ to 74°57′44.07″ located in NE of the Khanmoh village. Based on topographical survey and geological features, collected from the surface data, the surface geological plan is prepared on 1:1000 scales with 5.0 m contour interval and enclosed as Plate – 4.

e. The Key Plan:

The key cum Location plan (Topo map) of the area is prepared on a scale of 1:50,000 with 5 km radius from the center of the cluster quarry area showing predominant wind

direction, drainage pattern, water bodies, topo features along with extremities of cum Location area(Plate - 1&2).

F. The Surface cum Geological Plan:

The surface cum geological plan of the Quarry cluster area is prepared on 1:1000 scale with 5.0 m contour interval and is enclosed as Plate – 4&5.

g. Geological Sections:

Five Geological cross sections AA', BB', CC', & DD' was drawn on 1:1000 scale and enclosed as Plate – SA, SB, SC, & SD.

h. Future Programme of Exploration:

Since the deposit is exposed over the surface, no future programme of exploration is required.

i. Previous Production Status:

The quarrying operations is going on, hence there was a Previous production.



2. Reserves and Resources as per UNFC

. Type of Deposit as Per UNFC Guidelines

Road metal and Building stone is not failing in any category of UNFC classification. It is a localized minor mineral available, spatially utilized for construction purpose such as laying of roads, construction of buildings etc., depending upon the characteristics of the rock.

ii. Parameter - Grade, Threshold Value, Sectional Area And Bulk Density:

As the ROM is intended for use in the Road Metal and Building Stone, no specific parameters considered. The bulk density of Limestone was considered at 2.5 to estimate the reserves.

iii. Status of Exploration: G1

b. GEOLOGICAL AXIS

1. Geological Survey:

i. Mapping:

Detailed geological survey was carried out in the cluster quarry area on 1:1,000 scale with 5.0 meter contour intervals.

ii. Preparation of Detailed Topographical Cum Geological Map:

The topographical cum Geological map including all surface Geological features, extent of deposit, structures, have been prepared on 1:1,000 scale with 5.0 contour interval duly marked with surface geological features, and presented on Plate-3&4.

iii. Topo Grid / Triangulation Stations:

The topo grid with Geological cross-sections has been prepared on 1:1,000 scale showing litho-units. Relevant plans are enclosed as Plate- 5A, 5B, 5C, & 5D.

2. Geochemical Survey:

Geo-Chemical survey is not warranted as the deposit is used for Road Metal & Building stone purpose only.

Geophysical Survey: Not carried out.

4. Technological Survey:

a. Detailed topographical and geological survey was carried out on 1:1,000 scale showing all the surface features, contours at 5.0 m interval, the lease boundary, surface Geology & Structural features.

- b. The maximum thickness of Road metal & Building stone was taken upto depth of 12 the surface, with RL in between 1737 m 1875 m that is considered to be proved reserved.
 - Reserves are estimated by cross sectional method.

5. FEASIBILITY AXIS

- a. Geology: The detailed Geology of the area has been presented in Part-A, which may kindly be referred to.
- i. Geology: Road Metal and Building stone will be exploited through opencast other than fully mechanized mining methods with drilling & Blasting. The quarrying operation will be carried out in a systematic way by forming benches of 6.0 m height and the height with proportionate width will be maintained. Jack Hammer drilling and controlled blasting will be carried out in the cluster quarry area.
- II. Environment: The deposit will be mined adopting conventional opencast semimechanized mining methods without any adverse environmental impact. The Licensee will
 obtain statutory clearances as soon as this Mining Plan is approved. Mining in the license hold
 does not disturb any human settlements as they are far away from the cluster quarry area.
 On the other hand, the quarrying operations will create livelihood to the villagers nearby. The
 Licensee will develop green belt around the cluster quarry area as part of his commitment to
 environment protection. At the time of rainy season water flows through stream channel from
 the up streams to downwards. This stream channel will goes from east to west in the quarry
 lease area, however precaution measures will take as per the norms of "Jammu and
 Kashmir Minor Mineral Concession, Storage, Transportation of Minerals and
 Prevention of illegal Mining Rules 2016".
- iii. Processing: After blasting, the ROM will be directly supplied to the consumers and crusher units holders/industries. No processing is required excepting sizing manually. Quarrying operations will be carried out by deploying the following machinery:

Table 2: Machinery & Equipment:

S.No	Type of Machine	No.	Motive Power	
1	Excavator /JCB	2	Diesel	
2	Tippers	12	Diesel	

3	Drilling machines	2	Diesel	V
4	Tractor mounted compressors	2	Diesel	
5	Water Tankers	2	Diesel	
6	Loaders	2	Diesel	
7	Pick-up/Jeep	2	Diesel	
8	Generator	2	Diesel	

- iv. Infrastructure: The necessary infrastructure of site services such as office, rest shelter, magazine, explosive van, water tankers, power connection etc., will be provided at the north eastern part of the Cluster quarry block, once the mining plan is approved. The cluster quarry area is connected with District headquarters.
- v. Costing: The cost of production of Road Metal & Building Stone works out to be approximately Rs300/- per ton.
- vi. Marketing: ROM generated from this quarry is proposed for captive purpose for the crusher and hot mix plant intended to put for use in the highway/District road project of Srinagar District. Besides the licensee intends to continue selling the Road Metal and Building stone for various civil projects in and around Srinagar District.
- vii. Economic Viability: As the proposed quarry license is in the near vicinity and quarrying of road metal is definitely economic and viable.
- viii. Other Factors: Relevant clearances shall be obtained for continuing the mining operations in the Cluster Quarry area.

6. ECONOMIC AXIS

- i. Detailed Exploration: Detailed topographic survey and geological mapping of the applied cluster quarry area was subject to detailed exploration by field traverses and well inventory data. The depth of rock is assessed by the litho log observed in the vertical cuttings made by the quarry holders during the quarrying for the last decades.
- ii. Mining Reports / Mining Plan: This is the first Mining Plan has been submitted.
- iii. Specific End-Use Grades Of Reserves (Above Economic Cut-Off Grade): ROM is intended for crushing to use in the aggregates for roads and building stone materials.
- iv. Specific Knowledge Of Forest / Non-Forest And Other Land Use Data: The entire cluster quarry area is Government waste land.
- v. Feasibility Report Along With Financial Analysis per Economic Viability of the Deposit:

The cost of production of road metal and building stone is arrived at Rs. 300/- per ton inclusive of taxes and royalty. The entire ROM is for captive purpose as such it is surely economic and profitable.

7. Reserves:

- i. Mining Method, Recovery Factor, Mining Losses, Processing Loss etc.: Road Metal and Building Stone will be quarried by open cast other than fully mechanized method with drilling and controlled blasting. The recovery factor is considered as 95% with 5% intercalated waste. There will not be any quarrying losses except handling loss, which will be recovered during next loading.
- ii. Cut-off Grade, Ultimate Pit Depth Proposed: There is no cut-off grade as the ROM will be put to use for road metal and building stone as aggregates. The Ultimate Pit average depth is 12 mts.
- III. Mineral/ Ore Blocked Due to Benches, Barriers, Pillars, Road, Railway, River, Nala, Reservoir, Electric Line and Other Statutory Barriers etc.: The mineral will be blocked in 7m safety barrier zone, roads and benches which is computed separately and tabulated below in the succeeding sections.
- iv. Total Mineral Reserves: The reserves are estimated basing on field traverses and the information gathered during the field visit of the area and cross section drawn. The area of

the influence and the cross sections on either side of the cross sections A-A were taken at 120m, BB' were taken at 85 m, C-C' were taken at 86 m, & D-D' were taken at 85 m. Based on the field traverses, the estimated reserves considered as Proved Reserves, four cross-section AA', BB', CC', & DD' is considered for computation of reserves. The depleted reserves have been accounted by cross section and reserves are computed.

Table 3: Reserves Estimation:

Section	Category	Sectional area (M ²)	Volume (M³)	Specific Gravity	Geological Reserves (MT)	Mineable Reserves @95% (MT)	Waste @5% (MT)
AA'	Proved	1038	124560	2.5	311400	295830	15570
BB'		3771	320535	2.5	801337.5	761270.6	40066.88
CC,		2850	245100	2.5	612750	582112.5	30637.5
DD'		1500	196500	2.5	491250	466687.5	24562.5
	Total				22,16,738	21,05,901	1,10,836.9

Table 3 a: Reserves Blocked in 7.00m Buffer Zone

Section	Category	Sectional area (M²)	Volume (M³)	Specific Gravity	Geological Reserves (MT)	Mineable Reserves @95% (MT)	Waste @5% (MT)
AA'	Proved	24	2880	2.5	7200	6840	360
BB'		24	2040	2.5	5100	4845	255
CC'		24	2064	2.5	5160	4902	258
DD'		24	3144	2.5	7860	7467	393
	Total				25,320	24,054	1,266

⁽A)Total Mineable Reserves = 21,05,901 tons

⁽B)Reserves blocked in 7.00 m buffer zone = 24,054 tons



Net Mineable Reserves A – (B)

= 21,05,901 - 24,054 = 20,81,847 tons

v. Mineable Reserves and life of the Quarry:

Initially the total quantity of mineable reserves is considered as (economic) marketable reserves. In this way a total mineable reserves available in this Quarry License area = 20,81,847 MT.

The average production is proposed to obtain per annum = 2,00,000 MT and as such the life of mine is almost ten years.

The life of mine is calculated for a period of five years as the ancestrally occupied quarry blocks shall be granted quarry license for a period of five years.

Vi . Mineral Reserves and Resources

Table 4: Resources

Level of Exploration	Resources in MT	Grade
G1 – Detailed exploration	20,81,847	
G2 – General exploration		-
G3 – Prospecting	4	-
G4 – Reconnaissance	1-	-

No benching proposed Benching wese resources not



2. MINING:

i. OPEN CAST MINING

a. Briefly describe the existing as well as proposed method for Excavation with all design parameters indicating plate nos of plans / sections.

The applied area belongs to hilly terrain with RL ranges from 1737m to 1875m above msi. Most of the area is covered by the ilmestone depoists at higher levels with less over burden. The mining activity is proposed to be carried out by open cast bench forming method with the help of drilling, blasting and using excavator. The rock is hard in nature as such the blasting is required for excavation. Hence the licensee is advised to get the explosive license, since it is a time taking process, the blasting will be allocated to put sourcing blasting licensed agencies which has an explosive license in starting of the lease period. The blasted ROM will be loaded into trippers of 7 tons capacity by using excavator/loader or even manually. The loaded ROM will be transported to the crushing plant or directly to the consumers. The ROM will crushed in the crusher plant to different sizes of 60mm, 40mm, 20mm, 12mm, 6mm and dust and supplied to construction, road and railway works. The quarry operations will be carried out by benches of 8.0 m height from higher levels to lower levels. It is proposed to raise about 10,00,000 tons ROM during the five years plan.

b. Year-Wise Tentative Excavation in Cubic Meters Indicating Development, ROM, Pit Wise:

It is proposed to raise the insitu ROM of 2,00,000 tons on an average per year from this quarry. The limestone deposit is exposed as a hillock, so no separate development is required in the beginning of the mining activity to get the target production from this quarry. The quarry working will be carried out by open cast method with the help of drilling and blasting from the top of the hill. Since the applicant does not have blasting license, the blasting part will be allocated to private licensed agency in the initial stage in which the licensee has get an blasting license. The blasted ROM will be loaded into trippers of 7 tons capacity by excavator/loader. The loaded ROM will be transported to the crushing unit or the consumers. The ROM will be crushed at the crushing unit to various sizes and sorted to 60mm, 40mm, 20mm, 12mm, 6mm and sand and supplied to different construction works, road works and

estimated at 10,00,000 tons of Road Metal and Building Stone will be mined out by open cast mechanised method by forming benches of 6.0m each and 7.0m buffer zone. The year-wise details are presented below in table 5:

Table 5: Year wise details:

Year	Be	nch	Av.Face	Av.	widt	Volume	Spec	Geologic	Mineabl	Waste
	From	То	length (m)	Height (m)	h(m)	(M³)	ific Grav ity	al Reserve s	e Reserv es @95% (MT)	@5% (MT)
2018-19	1875	1840	198	12	50	118800	2.5	297000	282150	14850
2019-20	1840	1815	170	12	36	73440	2.5	183600	174420	9180
2020-21	1815	1790	215	12	45	116100	2.5	290250	275737.5	14512. 5
2021-22	1790	1760	231	12	24	66528	2.5	166320	158004	8316
2022-23	1760	1737	160	12	23	44160	2.5	110400	104880	5520
Total								1047570	995191.5	52378. 5

No working will be carried out in rainy season.

c.Layout of Mine Workings, Pits, Roads etc:

The quarrying operation is going on, previous working one pit is observed in the cluster quarry area. At the time of quarrying operation the overburden will be used for existing haulage roads and strengthened for better navigation. Dump will be positioned at southern portion of the cluster quarry area. The Licensee intends to extract Road Metal and Building Stone production to the tune of 10,00,000 MTs of road metal and building stone of saleable mineral during this Plan. During this Plan period, it is proposed to exploit the road metal from the total area of 49200M² to an average depth of 8-12 m over the lease area maximum RL 1875 m to RL1737 m as depicted on Plate – 5.

- d. Production Schedule: The production of Road Metal and Building Stone of the for a minimum 300 working days per annum. An anticipated average production of 2,00,000 tons/annum is planned from this Quarry during this five years plan. Adequate men and machinery is planned to meet this production schedule.
- e. Drilling & Blasting. Drilling: 54 mm diameter hammer drilling will be employed for blasting holes in staggered pattern of 2X3m with a depth of 3.35m. Holes will be drilled vertically to a depth of 3.35m for a bench height of 3.0 m with a spacing and burden of 3.0 m and 2.5m respectively.
- f. Blasting: Blasting will be carried out by using controlled blasting techniques for the purpose to reduce the amount of over break and to control the ground vibrations. Blasting will be done with the help of electronic merger by using electronic detonators, ordinary detonators, fuse wire and Ammonium Nitrate. The applicant will be hiring a licensed blasting contractor for the services of blasting. Besides this, the applicant has to obtain all necessary permits to store, handle the explosives on site. The charge per hole will be about 1kg of explosive.

Amount of explosive required per hole - 1 Kg

No of holes planned per day - 8

Amount of explosive required per day - 8.0 Kg

Amount of explosive required per annum - 24,00 Kg

Amount of explosive required for five years plan - 12,000 Kg

After blasting working places will not be entered by any of the worker, unless sufficient time has elapsed for dust, smoke and fumes to be cleared by a current of air and the broken ore or rock will not be removed unless it has been thoroughly wetted with water.

g. Conceptual Mining Plan:

i. Details of the conceptual status of pits: The license period is for 5 years. By the end of the five years plan, total of 10,00,000 tons of ROM is planned for production. The planned depth of the quarry would be 6-12.0m. ii, The worked out pit as a whole will occupy an area of 49200 m² to a depth of the from the existing RL 1875 m of the worked out pit. The plantation would be occupying an area of 8000 m² in all the four directions in buffer zones of cluster quarry area. The conceptual plan and conceptual section on a scale of 1:1000 is presented on Plate –6.

UNDERGR GROUND MINING = N.A.



3. MINE DRAINAGE:

- a. Minimum and Maximum Depth of Water Table: The Quarry cluster area is a mound with a maximum height of 1875 m above msl. There are no water bodies existing in the vicinity. GW level is observed at the toe of the hill in Zewan village.
- b. Quantity and Quality of Water Likely to be encountered: No water will not be encountered in the cluster quarry area during the excavations and subsequent operations as the quarrying is on an elevated mound above the GL. Hence, need for pumping does not arise. Quality of GW tested from the surroundings is found to be potable.
- c. Regional and Local Drainage Pattern: The entire cluster quarry area has a down slope only. Sheet wash run-off is anticipated during the rainy season. Precautions measures takes as per the norms of "Jammu and Kashmir Minor Mineral Concession, Storage, Transportation of Minerals and Prevention of Illegal Mining Rules 2016", Solid wash expected during rainy season in the cluster quarry area is negligible.

STACKING OF MINERAL REJECT / SUB-GRADE MATERIAL AND OF WASTE

Tops soil in the quarry cluster area is negligible. The waste that would be generated is only form interstitial voids that is estimated at 5%. This will be utilized for the formation of internal roads periodically. Rest of the waste will be utilized to form a 2.0m high barrier all along he 7.00m buffer zone of the quarry cluster area.

5. USE OF MINERAL AND MINERAL REJECT

The ROM will be fed to the consumers and to the crushers outside the quarry cluster area where it will be crushed to desired sizes. Different grades of output from the crusher will be primarily used in the construction of National Highway and District road and also the material will be sold in the market for various civil works in and around Srinagar District.

6. PROCESSING OF ROM AND MINERAL REJECT

ROM will be fed to the crusher to obtain different sized aggregates required for road construction and input to hot mix plant.

7. OTHER

a. Site Services:

Site services such as office room, first aid, rest shelter, tollets for gents and ladies will be built at the Southern part of the QL area.

b. Employment Potential:

Highly skilled - Second Class Mines Manager - 1

Mine Supervisor - 1

- 2. Skilled &Semi-skilled Bore Compressor Operators 2
- Bore Compressor Assistants 2
- 4. JCB Backhoe Operator 2
- JCB Backhoe Assistants 2
- Skilled labours-10
- 6. Pick-up Drivers 2
- 7. Security Guard 2
- 8. Tipper Drivers-10

Total personnel in Mining Operations - 34

* TO APPROVED TO A

PART-B

8. PROGRESSIVE QUARRY CLOSURE PLAN (PQCP)

8.1. Environment Base line information:

- a. Existing Land Use Pattern: The QL area is a wasteland. An area of about 49200 m² will be excavated to a depth of 6-12.0m on an average to win the mineral. An area of 8000 m² is proposed for afforestation. The QL area is a barren land and surrounding lands are also are wastelands. In the north, northeast and northwestern part is the barren land. On the southern part agricultural land exists. Environmental Plan not to scale is enclosed as Plate-6.
- b. Human Settlements: Within a radius of 5km of QL area exists 13 villages. The main profession of the people is business and the Mining, rearing sheep and cows and other small business and labour on daily wages. More details of the villages in the surroundings are as tabulated below in Table No.6.

Table 6: Villages in the Vicinity of QL Area

S. No	Village	Distance (KMs)				
1.	Zawoora	6				
2.	Zewan	6.10				
3.	Khanmoh	1.0				
4.	Zawarah (Zaffron Colony)	8.8				
5.	Wuyan	13.06				
6.	Sampoora	8.6				
7.	Panthachowk	9.3				
8.	Athwajan	10.3				
9.	Lasjan	10.9				
10.	Aliabad	9.6				
11.	Sumerbugh	10.54				
12.	Pampore	9.09				
13.	Rakhshalina	9.8				

- c. Public Buildings, Places of Worship and Monuments: No public buildings, places of worship or interest and monuments are present in the vicinity of QL area.
- d. Sanctuary if any in the Vicinity of the Lease Hold: No sanctuary, zoo or park are present in the vicinity of the QL area.

8.2. Impact Assessment:

- Land Area Degraded: An area of about 4.92ha will be degraded for the working pit.
 Plantation will occupy 8000 Sq mts.
- b. Air Quality: Various activities involved in mining of Road Metal and Building Stone generates dust. To some extent, dust generated will be controlled by sprinkling of water on roads. Masks, earplugs and safety goggles will be supplied to the workers on site to protect themselves from dust.
- c. Water Quality: There are no water bodies like ponds, lakes in the vicinity of QL area. The precautions takes as per the norms of "Jammu and Kashmir Minor Mineral Concession, Storage, Transportation of Minerals and Prevention of illegal Mining Rules 2016". Quarrying of Road Metal and Building Stone generates minimal dust, which is not harmful. Hence, the quality of the water in the surrounding water bodies will not be affected by the mining activity.
- d. Noise Level: The QL area does not have any villages in the immediate neighborhood. The nearest village is Khanmoh which is 1.0km away from the QL area. Noise is anticipated in the various activities involved like Drilling, blasting and vehicle movement. As the mining activities are of the small scale in nature, the noise generated would be well within the limits and would not affect the residents in the surrounding villages. Lessee will take all necessary measures to minimize the sound generated particularly during blasting activity like using of mufflers. Site workers will be supplied with ear plugs to protect themselves from noise pollution.
 - e. Vibration Levels due to Blasting: As the drilling method proposed, is by using tractor mounted compressors and controlled blasting vibration level will be within the limits and will not affect the people working on site.

- f. Water Regime: Mining activity proposed is over the elevated mound and the over the object of the mining face will be kept 45° and as such does not affect the water bodies. Groundwater will no way, will be affected.
- g. Acid Mine Drainage: No chemicals are involved in the extraction or processing of the mineral, hence there is no danger of acid mine drainage.
- h. Surface Subsidence: The ground surface in around the QL area is covered by limestone hill mount and for the mining operation the overall slope is to be maintained at around 45° which does not disturb the slope that may results rock falling. Internal roads are well compacted to avoid any skidding of vehicles. The benches and ramp ways will be well built and maintained to avoid any kind of subsidence or skidding.
- i. Socio Economics: Quarrying of Road Metal and Building Stone will generate employment to the people of surrounding villages both skilled and unskilled. Government will get income in the form of royalty, rent etc. Raw material for the road and civil works will be generated by the quarrying activity that will be one of the boosting factors for the local economy.
- j. Historical Monuments: No historical, archaeological or Geological monuments are present in and around the OL area.
- k. Bio-Diversity: The slopes and crevices of the mound have some bushes and shrubs. No wild animals are reported within these bushes,

8.3. Progressive Reclamation Plan:

- a. Mined-Out Land: although the quarry cluster area is stony hilly terrain where the possibility of planting saplings is rare. However utmost efforts shall be applied towards plants growth. In case non-growth of plants, plantation shall be carried out outside the license boundary. It is proposed to develop green belt within the 7.0m statutory barrier along the license boundary. The plantation shall be planted every year at regular interval and in phased manner.
- b. Topsoil Management: Top soil present in the QL area is negligible and hence topsoil management does not arise.
- c. Tailings Dam Management: Tailings Dam is not required.
- d. Acid Mine Drainage and Mitigation Measures: No chemicals are involved in the extraction or processing of the mineral, hence there is no danger of acid mine drainage.

e. Surface Subsidence Mitigation Measures: The ground surface in around the October is covered by trap hill mount and for the mining operation the overall slope shall be kept at around 45° which does not disturb the slope that may results rock falling. Internal roads are well compacted to avoid any skidding of vehicles. The benches and ramp ways will be well built and maintained to avoid any kind of subsidence or skidding.

8.4. Disaster Management and Risk Assessment:

Disasters are possible in an industry like mining. To meet with any kind of emergency on or off site, risks are assessed in advance and Risk assessment plan is prepared. Assessing the possible hazards and planning the procedures to be followed in case of emergency will reduce the intensity impact. Proper bench design in mine and observing all kind of safety measures, usage of proper PPE on site, attentiveness of the work force on site, following predefined traffic rules by all the people on site some of the measures to be followed to reduce accidents on site. Proper care in storage and handling of explosives, hazardous materials, fuels is also necessary. Proper communication is key factor in minimizing the accidents on site. Safety of all working personnel will be the utmost priority of the lessee. Lessee will provide all the site personnel with necessary PPE like, hard hats, safety goggles, earplugs, dust masks etc.

To meet any kind of emergency, readiness to shift the injured to the nearest hospital is necessary. All mining personnel should be aware of the nearest health centres and hospitals. All managing personnel will take the responsibility of taking the injured immediately to the hospital in case of any accident. A few of the site personnel should be provided first aid training besides the presence of a well-maintained first aid kit. Khanmoh is at a distance of 1.0 km from the lease area, which has healthcare facilities. In case of emergency state government's service is available. Apart from this one additional pick up with driver will always be available to meet with emergency situation.

8.5. Care and maintenance during temporary discontinuance :

An emergency plan to deal with the situation of temporary discontinuance or incomplete programme due to court order / due to statutory requirements or any other unforeseen circumstance will be drawn by the technical and managerial person to suit the specific situation of this mine. This would be reviewed and modified to suit the changing conditions

and needs. This would take care of preventing of access to dangerous places and prevent accidental fall in to the water logged pit of animals and men. Security is also to looked in to the safety measures placed at various places like firefighting equipment, main switches etc. Security to be deployed at Explosive storage.

The mining is yet to commence. As mining continues till then the question of discontinuance does not arise. However, any untoward incidence happens the safety of the mining area will not be disturbed. Security / Watchmen will be posted at the mine site for watch and ward.

8.6. Financial Assurance:

As the mine belongs to "82" category mine hence Financial Assurance is calculated @ 25,000/- per hectare or the part the area put to use for mining and allied activities subject to minimum to rupees one lac in the form and manner as may be prescribed. The financial assurance is to be submitted in the form of Bank Guarantee at the time of final submission of this document.

Geo Technical Consultant

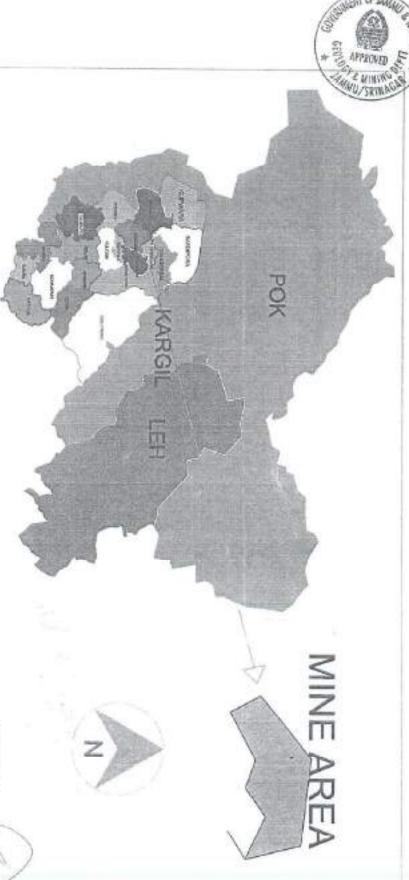


PLATE NO.01

MINOR MINERAL CLUSTER QUARRY BLOCK AT SHIVEDEKRI KHANMOH TEHSIL PANTHACHOWK DISTRICT SRINAGAR, J&K STATE LOCATION PLAN OF

SNO

DESCRIPTION

INDEX

AREA: 5 72 HECTARIES

LICENSEE MR, OH AHMAD AHANGER AND MANZOOR ABMAD BHAT SURVEYED BY: AB MAJEED MIR
SCALE: NTS
CERTIFIED THAT PLATES ARE PREPARED BASED ON THE PREPARED &

LEASE/LICENSE MAP AUTHENTICATED BY J&K STATE

GOVT.

AS MAJEED MIK

03

HABITATION

0 0 0

GPS READINGS

0

ch

da.

RIVER

Çά

ROAD

N

CONTOUR

/1676

3

LEASE BOUNDARY

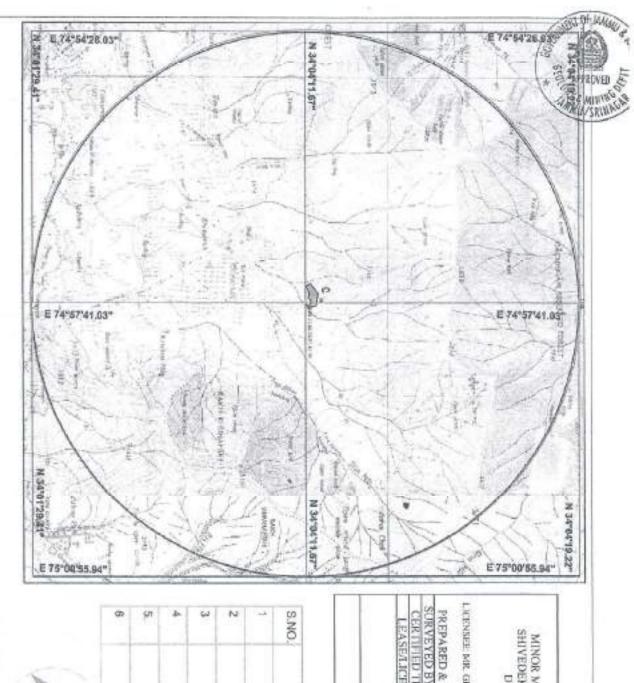


PLATE NO.02

KEY PLAN OF MINOR MINERAL CLUSTER QUARRY BLOCK AT SHIVEDEKRI KHANMOH TEHSIL PANTHACHOWK DISTRICT SRINAGAR, JÆK STATE

AREA: 5.72 RECTARES

LICENSEE MR. GH AHMAD AHANGER AND MANZOOR AHMAD BHAT

SURVEYED BY: AB MAJEED MIR

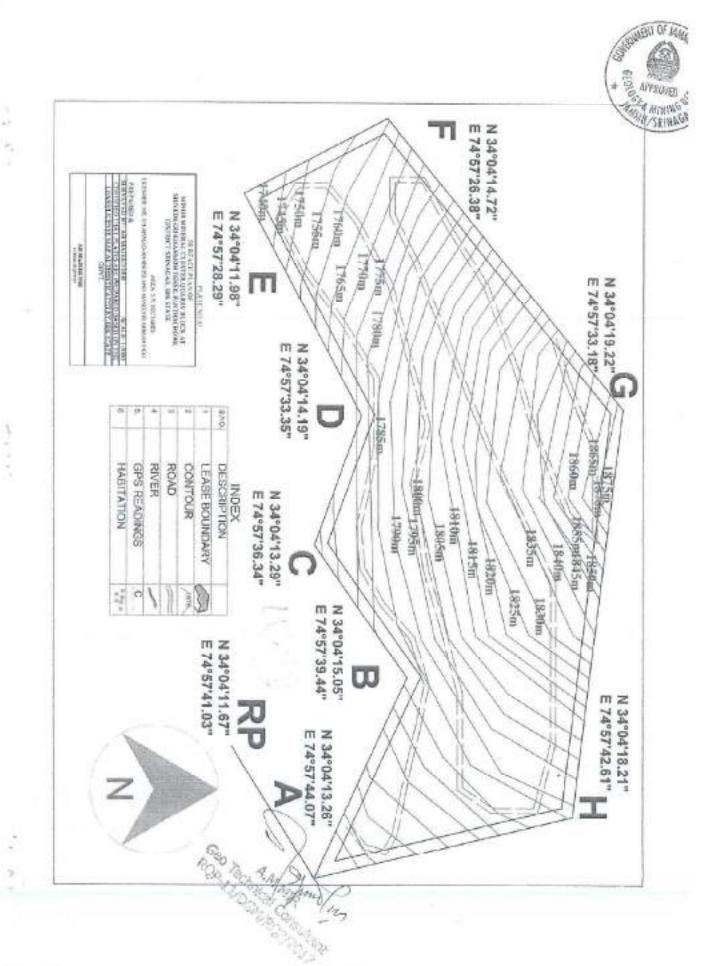
CERTIFIED THAT PLATES ARE PREPARED BASED ON THE
LEASEALICENSE MAP AUTHENTICATED BY J&K STATE

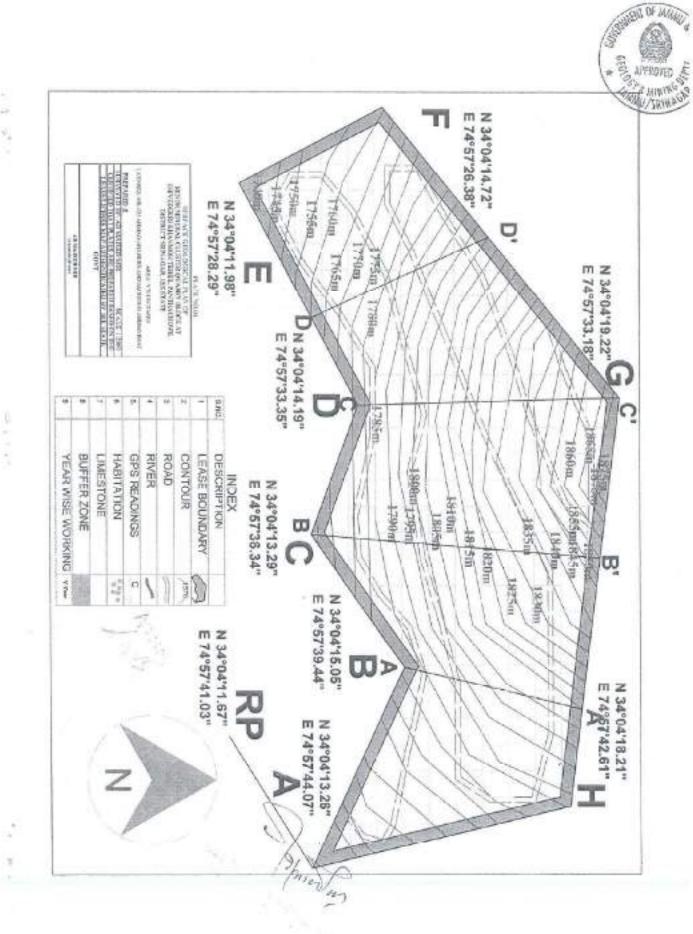
GOVT.

AB MAJEED MIR

6	şn.	4	3	2	-2	ONS	
HABITATION	GPS READINGS	RIVER	ROAD	CONTOUR	LEASE BOUNDARY	DESCRIPTION	INDEX
	3	1	1	A678	0		





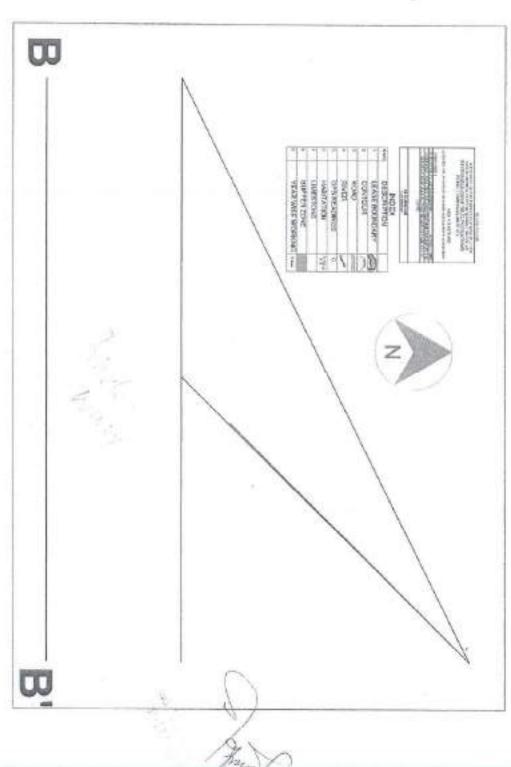




D						1	\		Z					
								\	\	\				
1										1	\			
							1	1			1			
	10	*	9			0	-	-	lane	<u>\</u> П	\ \ \	// / /	and the same of th	disconnection of the state of t
>	* YEAR WISE WORKING	BUFFER ZONE	+ LIMESTONE	* HABITATION	s GPS READINGS	O ROAD	PLOTINGS 4	- LEASE BOUNDARY	NDEX INDEX	mental in the second of the se	TO SECURITY TO SEC	HOUSE AND ADDRESS OF THE PARTY	principal socialistics and although principal social affect of social socialistica social social social social social social social social social soc	THE COLUMN TO TH

三天

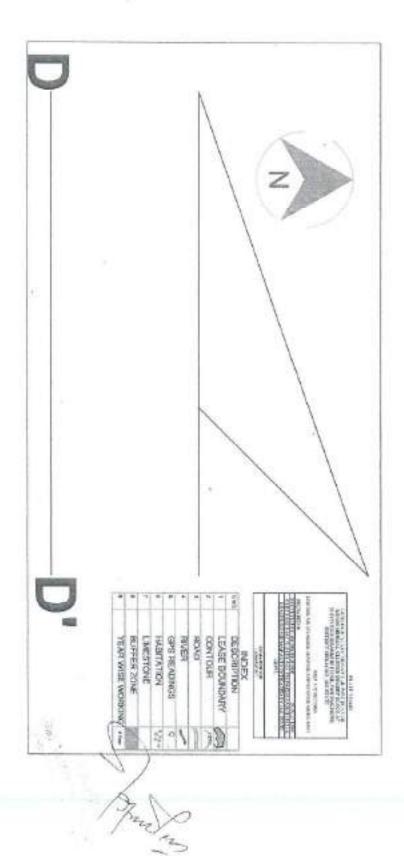


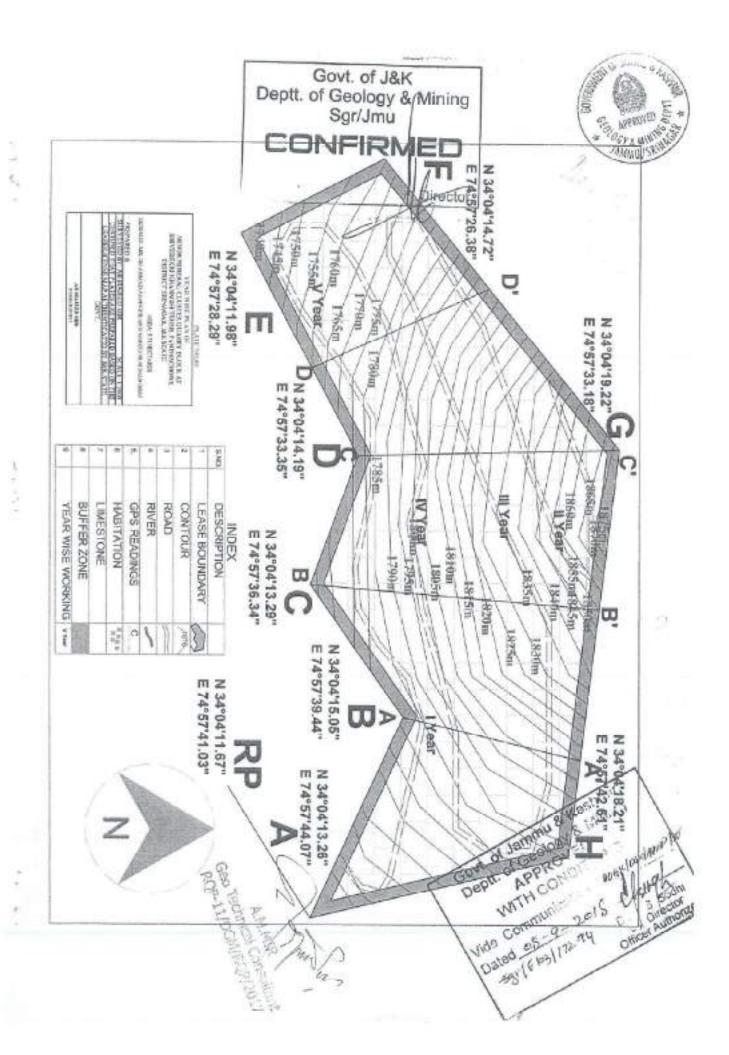


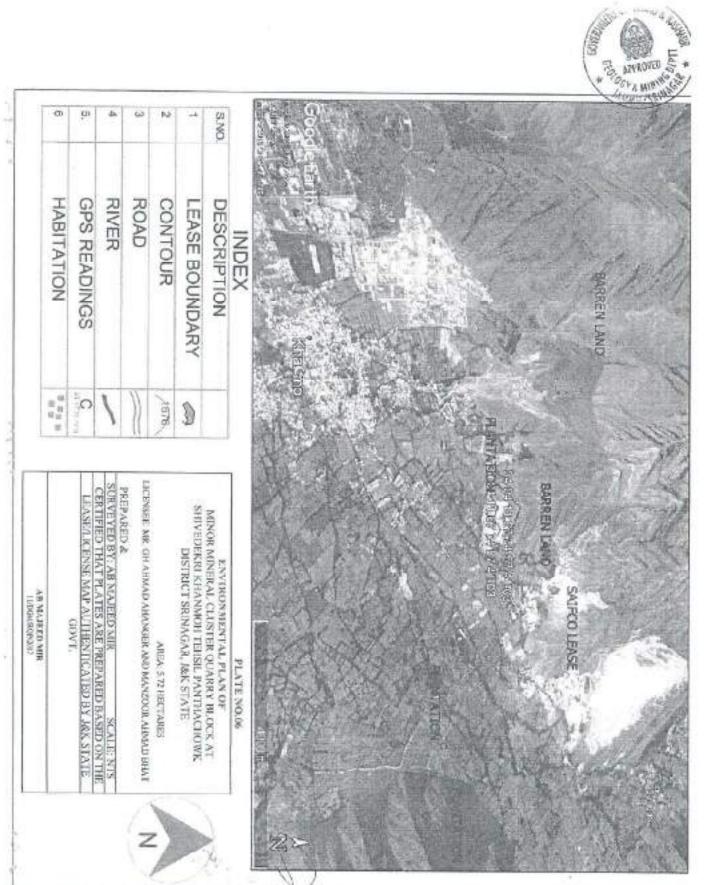
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
ODMTOUR PROVE ROWE RO	TOTAL THE PROPERTY OF THE PROP
	Z

0.11









72/2

1-1-25/2017

Government of Jammu and Kashmir
Directorate of Geology and Mining, Srinagan

Subject:-

Declaration of Cluster of Quarries for grant of Quarry Licence

Reference:- JDK/F-21/Sgr/II/352 dated 28.06.2016 .

Whereas, extraction of Stones from individual Stone Quarries was regulated tantages of Short Term Quarry Permits under the provisions of J&K Minor Mineral Conces Rules, 1962.

Whereas, Government promulgated the Jammu and Kashmir Minor Mineral Concess Storage, Transportation of Minerals and Prevention of Illegal Mining Rules, 2016 vide SI 105 of 2016 dated 31.03.2016 repealing J&K Minor Mineral Concession Rules, 1962.

Whereas, Under Rule, 14 of said rules the individual quarries falling in areas ancestr occupied and certified by the revenue authority falling are to be clubbed and declared cluster of quarries for grant of Mineral Concession.

Whereas, in pursuance to this office letter No. 296/TG/Cluster/16/734-40 dated 09.05.20 Stone Quarry Belts were identified and blocks governing the existing quarries w prepared.

Whereas, under Rule, 44 the said quarry belts/clusters are to be considered for grant quarry licence subject to the submission of following documents:

- 3. Approved Mining Plan with Environment Management Plan (EMP).
- 2. Environmental Clearance from the Competent Authority.

In view of the above and in pursuance to the provisions of Rule 14 of the Jami and Kashmir Minor Mineral Concession, Storage, Transportation of Minerals and Preventi of Illegal Mining Rules 2016, the quarry belts of **District, Srinagar** indicated in annext "A" are declared as Cluster of Quarries subject to authentication by reverge authorities.

No:- 373 /MCC/DGM/CQK/16/ 3520 -22 Dated:- 22:08,2017.

Copy to:-

 The Commissioner/Secretary to Govt; Industries and Commerce Department, Ci Secretariat, Srinagar for Information please.

2. The Dy. Commissioner, Srinagar for information and necessary action.

The Joint Director(K) Geology & Mining Department, Srinagar for information wi the request to direct I/C DMO concerned for advising the quarry holders submit the requisite documents as required under rules for processing their case for grant of Quarry Licence.

The wife.

Director Geology & Mining J&K Govt; Srinagar.

22/8/26/7

Director Geology & Mining

J&K Govt; Srinagar.

Office of the District Mineral Officer Goclogy and Mining Department, Srinagar



The Tehsildar, Panthchowk , Srinagar,

No: DMO/DGM/Sgr/SQ/SG/1481-90

Dated: OS-05-2018.

Sub: Declaration of clusters of quarries for grant of Quarry licences.

Sir

In pursuance to the provision of Rule 14 of the Jammu and Kashmir Minor Mineral Concession, Storage, Transportation of Minerals and Prevention of Illegal Mining Rules 2016 the department has declared all individual quarries ancestrally occupied falling in Zewan Bala/Shalguf/ Daktang/Zewan BSF/Shivdakhiri Khonmoh areas in District Srinagar as clusters of quarries.

In this regard and as per the provision of Rule 44 of Jammu and Kashmir Minor Mineral Concession, Storage, Transportation of Minerals and Prevention of Illegal Mining Rules 2016, the prepared plans of Minor Mineral quarry blocks of said areas along with lier of quarry holders are herewith enclosed for certification in respect of quarry areas ancestrally occupied besides title verification of the land for grapt of quarry License under

Rule 44 of said rules.

Yours faithfully.

District Mineral Officers

Reology and Mining Dept. Ser.

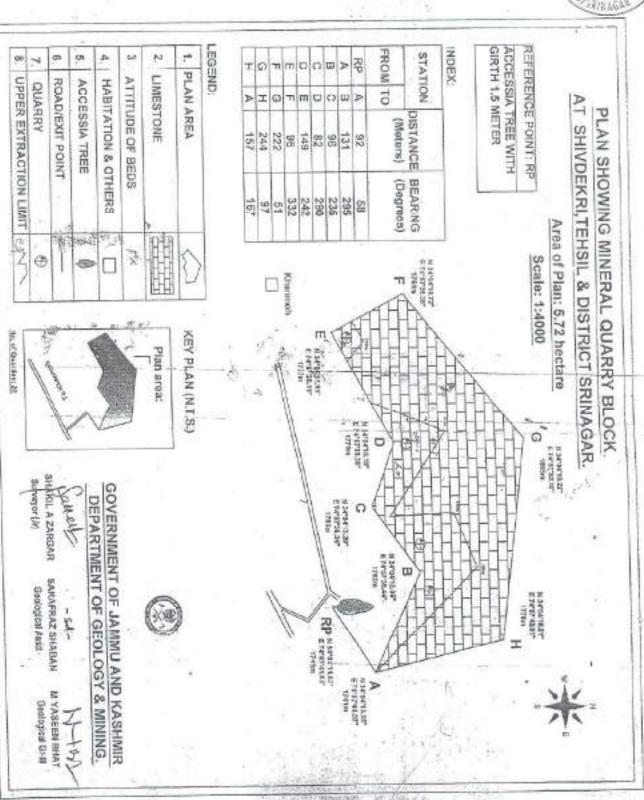
Copy to the

Deputy Commissioner, Srinagar, for his kind information.

 Deputy Director (MS), Geology and Mining Department, Srinagar, for information please. This has reference to your office letter No: MSK/ DGM/SGR/F-105/6126, dated: 24-04-2018.

3-4 Area Incharge Zewan / Khonmoh, for Information & n/action.





t.

ė

Quarry list of Shivdakri Khonmoh

S.No.	Name of the Quarry Holder	Parentage	Residence	Location	Remarks dige
01	Mohd Amin Chopan	Abdul Ahad Chopan	Khonmoh	Shivdakri	
02	Ghulam Mohd Bhat	Ghulam Rasool Bhat	-do-	-do-	
03	Nissar Ahmad Ahanger	Gh. Hassan Ahanger	-do-	-do-	
04	Abdul Gani Bhat	Mohd Rajab Bhat	-do-	-do	
05	Ghulam Hassan Wani	Abdul Salam Wani	-do-	-do-	
06	Abdul Rahim Dar	Mohd Sadiq	-do-	-do-	
07	G1ts CATVAhmad Ganie	Mohd Ramzan	-do-	-do-	
08	Abdul Ahad Ganie	Khazir Mohd	-do-	-do-	
09	Manzoor Ahmad Bhat	Mohd Subhan	-do-	-do-	
10	Showkat Ahmad Khan	Mohd Alam Khan	-do-	-do-	
11	Khurshid Ahmad Bhat	Mohd Subhan	-do-	-do-	
12	Ghulam Ahmad Ahanger	Abdul Razzaq	-do-	-do-	
13	Ghulam Mohd Ahanger	Abdul Razzaq	-do-	-do-	
14	Abdul Gani Chopan	Gh, Mohd	-do-	-do-	
15	Bilal Ahmad Chopen	Abdul Ahad Chopan	-do-	-do-	
16	Imitayaz Ahmad Chopan	Mohd Shafi	-do-	-do-	
17	Mehraj Sheikh	Gul Sheikh	-do-	-do-	
18	Mohd Ramzan Chopan	Gh. Mohd	-do-	-do-	
19	Abdul Khailq Ahanger	Abdul Razzaq	-do-	-do-	
20	Mohd Shafi Chopan	Abdul Ahad	-do-	-do-	

ge stient

Area Incharge

9h. Ahmed Ahenger Whummont.



GOVERNMENT OF JAMMU AND KASHMIR

OFFICE OF THE TEHSILDAR PANTHA CHOWK SRINAGAR

The Bistrict Mineral Officer, Gencyy and Mining Department, Srinagar.

No. 232/TAC/09-2018

Date: - 07.08-2018

Subject: Declaration of Clusters of Quarries for Grant of Quarry Licences.

Sir.

Regarding the subject cited above, the case submitted by the DMO Srinagar along with the list of Quarry Holders from 5. No. 01 to 20 has been got verified on spot by the field agency. The report submitted by the field agency reveals that the Quarry Holders from 5. No. 01 to 20 are existing in Khasra No. 2610 Min under cluster at Shiv Dekri village Khonmoh is recorded as Sarkar 242 Kanal 18 Marias Gair Mumkin Kohistan. The village Khonmoh is outside municipal limits in the Shape of hills. Reportedly these quarries are existing there since long which is the main source of income for them. These Quarry Holders have applied before the District Mineral Officer Srinagar for issuing of licences. The case has been got verified as per the letter submitted by the DMO office vide their letter No.:- DMO/DGM/SGR/SQ/56/1486-90 Dated: -05-05-2018.

Hence, the report is submitted for favour of further necessary action at your end.

Yours faithfully

Tehsildar Pantha Cnowk Srinagar

Copy to the:-

- Deputy Commissioner Srinagar for his kind Information.
- 2. Deputy Director "MS" Geology and Mining Department Srinagar for information. *

والماقالات نام مالك معداحوال نام كاشكار معا الوال 12 26 le pose ASICS get

۵ نام كاشتكار معداحوال نام ما لك معداحوال 5 rr 10 19/ wet. Portable Charles

there in gland \$ 100 M Lie is Sullifity many good and was a secretary the the process they the the a supplied the or indigitation of the contraction Chapping and and selling appearance of the Bi The season in the season of the state of the second warmen The White College was great for Chilles with it is in college ENTER ENTERING WIN CHANNER WAS CASANTE in the forther the set of ofthe property sen Edition colin sills come at a training the fact with in ingressell, at wisher of the free way of the way and 66-2 Ebyria Joursain Esper & South Side Commerciale No reference 200 Side Le Can 6 6/11 co Sugar f Sin 36 60 000 - 042 6 Eurein Copel Specific whilesephaniciles with Ester Proper of her wall wind south in Surface 5 06-90 gen in astronico de isting is the stantion Prints 26 25 5 20 0NO/DUN STY/SA/SE 11/2010 iscis 20/11.



आयकर विभाग

INCOME TAX DEPARTMENT

GHULAM AHMED AHAGER

ABDUL RAZAK AHAGER

01/03/1950

Permanent Account Number

AKJPA7652F

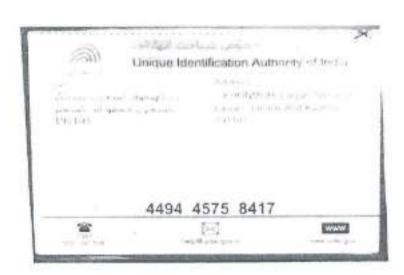
Sometical

भारत सरकार GOVT OF INDIA

9









आयकर विभाग INCOMETAX DEPARTMENT

MANZOOR AHMAD BHAT

MOHAMMAD SUBHAN BHAT

10/12/1976 Etimeter Alexant Number BIYPB4280J

ON THE

Nonaner

मारत सरकार GOVT OF INDIA









543

حکومت بند Government of India



principal controller

2190 2303 1432



ميرا أدهار،ميرى شناخت



بهارین مسرد بیناجت اتهارش Unique identification Authority of India

and the state of the second se

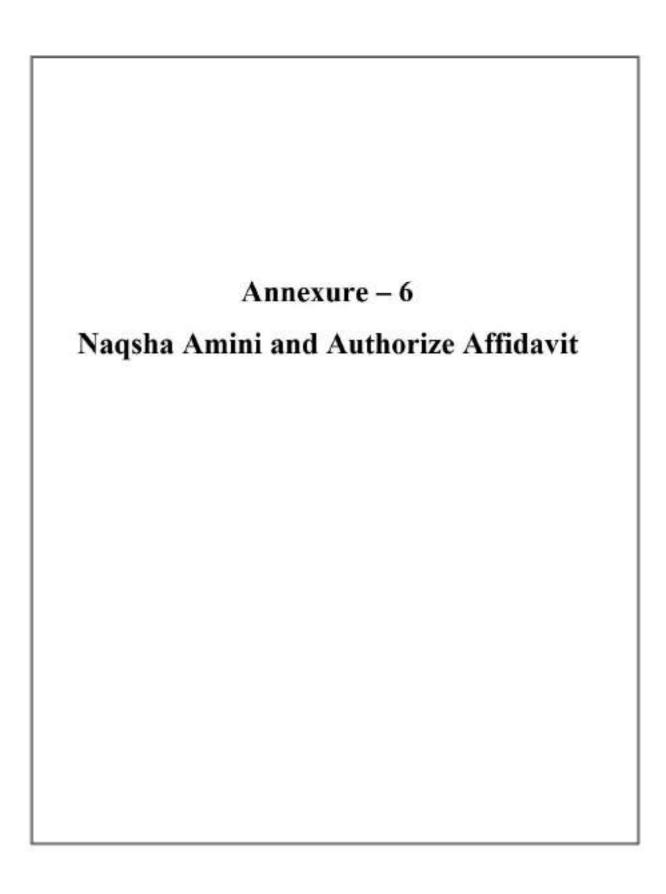
Address DCL Mahe Satron Sheb., ., hear mill school, shorendh chus moholis. Lerem. Sinniger, Lekjan, Jamma, And Washnir, 101101

2190 2303 1432









NAQSHA AMINI



MOUNTAIN / STONE QUARRY

NATION HE NOT THE THE THE THE THE THE THE OPEN LAND! MOUNTAIN: OPEN LAND 3 些 ¥ 0 9 43/ 生 6 10 11 12 44. 15 悟 ΥF. 報 19 20

OPEN LAND

OWNERS

- 1) MR MOHAMMAD AMIN CHOPAN S/O LAT ABOUL AHAD CHOPAN R/O KHONMOH SRINAGAR
- 2) MR. SAMEER AHMAD NAJAR S/O ABDUL KHALIQ NAJAR R/O KHONMOH SRINAGAR
- 3) MR. NISAR AHMAD AHANGER S/O GHULAM HASSAN AHANGER R/O KHONMUH SRINAGAR
- 4) MR. ABDUL GANI BHAT S/O MOHAMMAD RAJAB BHAR R/O KHONMOH SRINAGAR
- 5) MR GHULAM HASSAN WANI 5/0 LATE ABBUL SALAM WANI R/O KHONMOH SRINAGAR
- 6) MR. ABOUL RAHIM DAR S/O LATE MOHAMMAD SIDIO DAR R/O KHONMOH SRINAGAR
- 7) MR. GULZAR AHMAD GANIE 5/0 LATE MOHAMMAD RAMZAN GANIE R/O KHONMOH SRINAGAR
- 8) MR. BASHARAT AHMAD GANIE S/O GHULAM AHMAD GANIE R/O KHONMOH SRINAGAR
- 9) HR ABBUL AHAB GANIE S/O LATE KHAZER MOHAMMAD GANIE R/O KHONMOH SRINAGAR
- 10) MR. MANZOOR AHMAD BHAT S/O MOHAMMAD SUBHAN BHAT R/O KHONMOH SRINAGAR
- 10 MR KHURSHID AHMAD BHAT S/O MOHAMMAD SUBHAN BHAT R/O KHONMOH SRINAGAR
- 12) MR GHULAM AHMAD AHANGER S/O LATE ABOUL RAZAQ AHANGER R/O KHONMOH SRINAGAR
- 13) HR. GHULAM MOHAMMAD AHANGER: S/O LATE ABOUL RAZAQ AHANGER R/O KHONMOH SRINAGAR
- 14) HR ABBUL GANI CHOPAN S/O LATE GHULAM MOHAMMAD CHOPAN R/O KHONMOH SRINAGAR
- 15) HR. MEHRAJ-U-DIN SHEIKH S/O GHULAM MOHAMMAD SHEIKH R/O KHONMOH SRINAGAR
- 16) MR. BILAL AHMAD CHOPAN S/O LATE ABOUL AHAD CHOPAN R/O KHONMOH SRINABAR
- 17) NR INTIYAZ AHMAD CHOPAN S/O MOHAMMAD SHAFI CHOPAN R/O KHONMOH SRINAGAR
- 18) MR MOHAMMAD RAMZAN CHOPAN S/O LATE GHULAM MOHAMMAD CHOPAN R/O KHONMOH SRINAGAR
- 19) MR. MOHAMMAD AKRAM AHANGER S/O LATE ABOUL KHALIQ AHANGER R/O KHONMOH SRINAGAR
- 20) MR MOHAMMAD SHAFI CHOPAN S/O LATE ABOUL AHAD CHOPAN R/O KHONMGH SRINAGAR

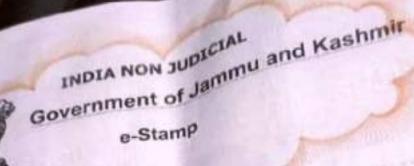
PURPOSE

FOR REGISTRATION OF STONE QUARRIES IN GEOLOGY AND MINING DEPARTMENT

NOTE:-

THE SITE IN QUESTION IS SITUATED: AT SHIV-DAKRI MOUNTAIN KHONMOH TENSIL; PANTHACHOWK DIST. SRINAGAR AND THE MAP DRAWN AT SITE ON THE INSTRUCTIONS OF APPLICANTS. EACH APPLICANT HOLDS EQUAL SHARE LE, 71'-9" FOR EXTRACTING OF STONES (STONE QUARRIES) SHIV-DAKRI MOUNTAIN KHONMOH SRIMAGAR.

Mudžiji Bashir Beigh



Certificate No.

Certificate Issued Date Account Finlerence

Unique Doc. Reference

Purchased by

Description of Document

Property Description Consideration Price (Fis.)

First Party

Second Party

Stamp Duty Paid By

Stamp Duty AmountiRs.)

NEWIMPACC (SV)/ A12526904/ PAMPORE/ JK-PW

SUBIN-JKJK1252690492367569258167U Oh Ahmad Ahanger and Manzoor Ahmad Bhat

Article 4 Attidavit

Not Applicable

Gh Ahmad Ahanger and Manzoor Ahmad Bhat.

Gh Ahmad Ahanger and Manzoor Ahmad Bhat

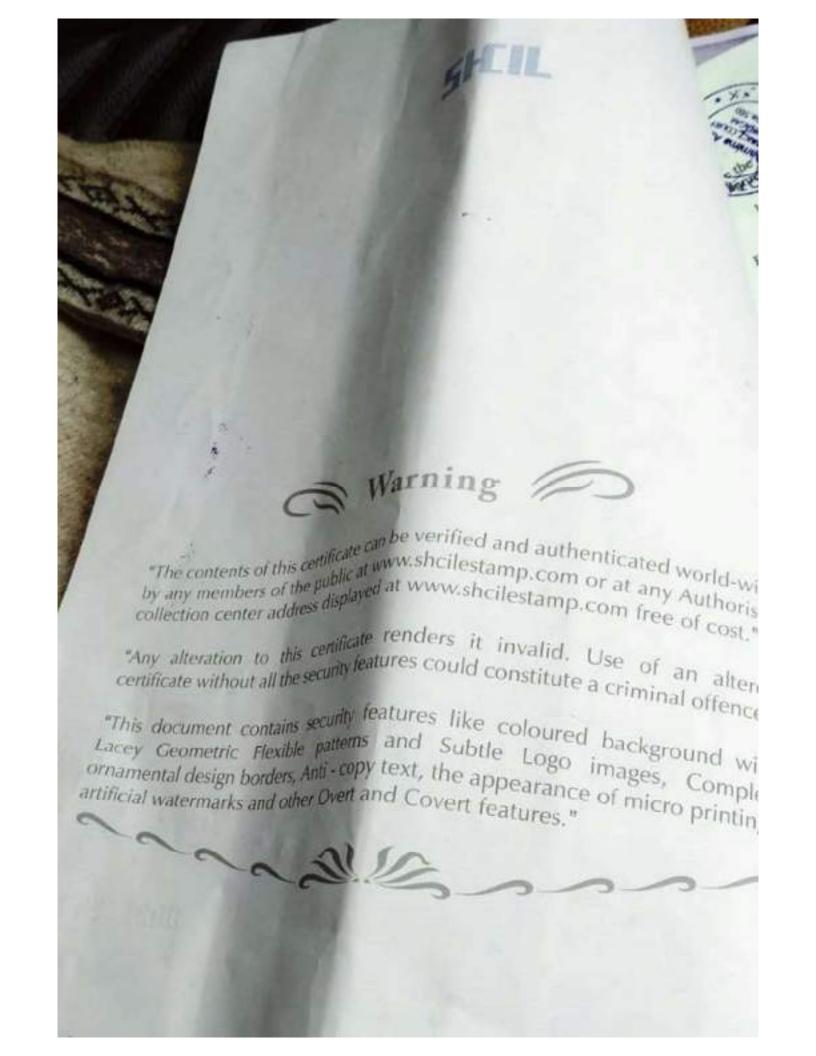
(One Hundred only)



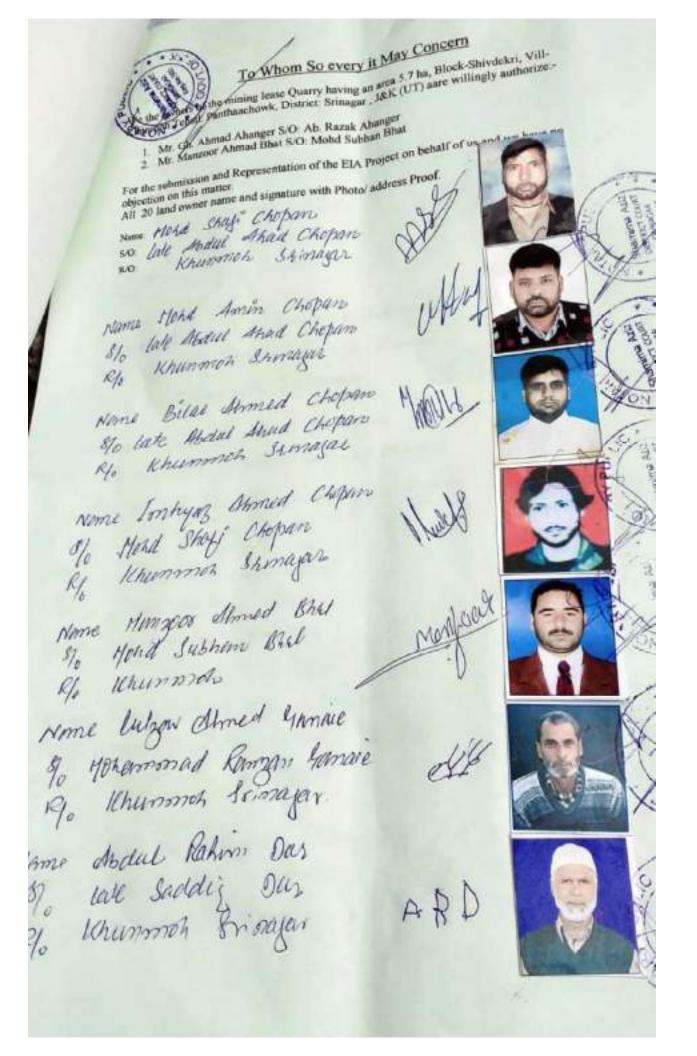
..Please write or type below this line---

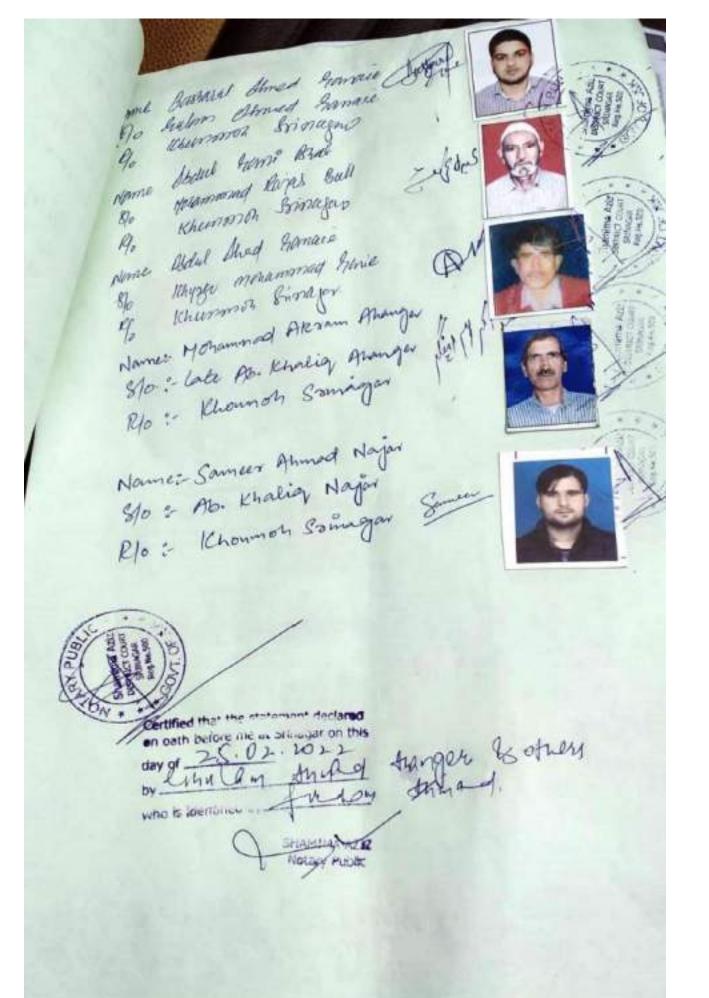
0021128016

schedulty of this Starry defetours around by your and make the mitimate of the widers of the contract of the contract of the contract of the widers of the contract of the con





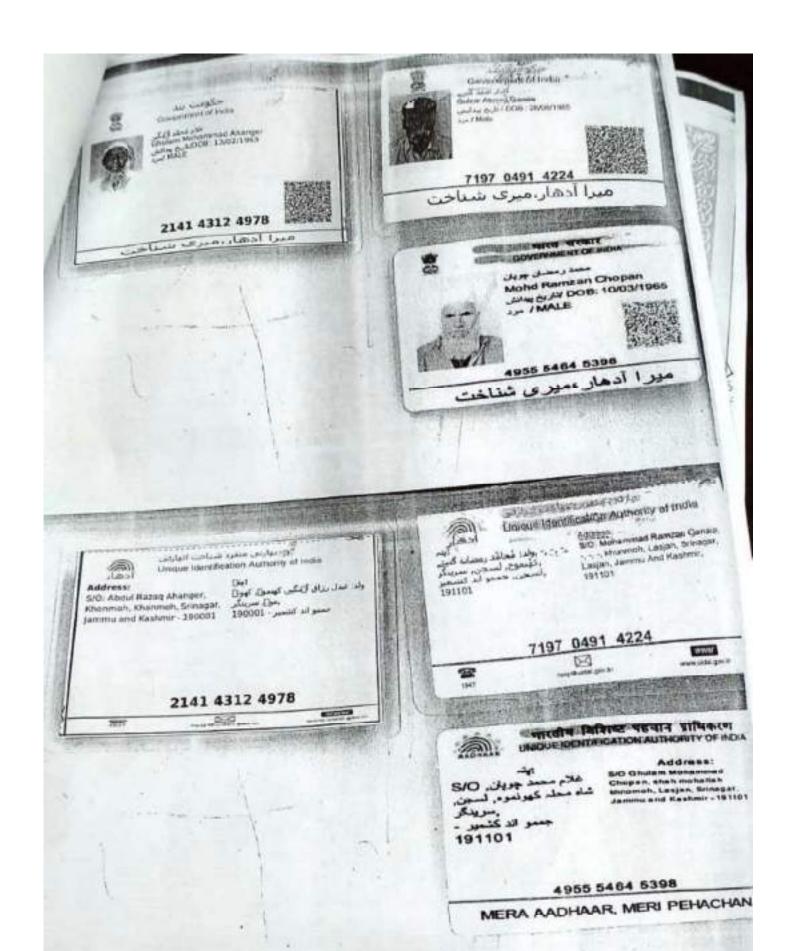
















VID : 9109 7955 0542 1574

ميرا ادهار،ميرڪ شياحت





- area of heart or heat to have be used
- » ميدل (۱۱ تا الدين فال له الأ الأناسية الماسان الماسان الم with Speed of Section
 - برایا دانگرادی عذ سے دو ایا گیا عذ ہے

INFORMATION

- Andhour is a proof of identity, not of citizenship.
- Verify identify using Secure QR Code/ Offline XML/ Online Authentication.
- * This is electronically generated letter.
 - and deal pay like a too 1 to 1
 - نار أو قو محلك مولداره (ق) إند مولدوي منداد. غم المنزد من قبله: الجالس وان مدا كرايا من
 - المنظم المحافظ ا made by him chain
 - این قو ایش معتوی فوی دی رکویی -م ادمار ابد تا استعمال قباد
 - Audituar is valid throughout the country
 - a Andrews helps you avait various Government and non-Government services easily
 - Keep your mobile number & email ID updated in Audhmer.
 - Carry Aadhaar in your smart phone use mAndhaur App.



بهارتي منعود شناعت انهازتي Unique Identification Authority of India



غلام امید گانید در کهنمول سریکی گاگا استور میریک صمو اند کشمیر ۱۱۱۱۱۱۱

Address: 5:0 Ohulam Ahmed Canal, . . . knownoh. Sininger, Laujen, Sinneger, Jamens and Kashinir - 195101

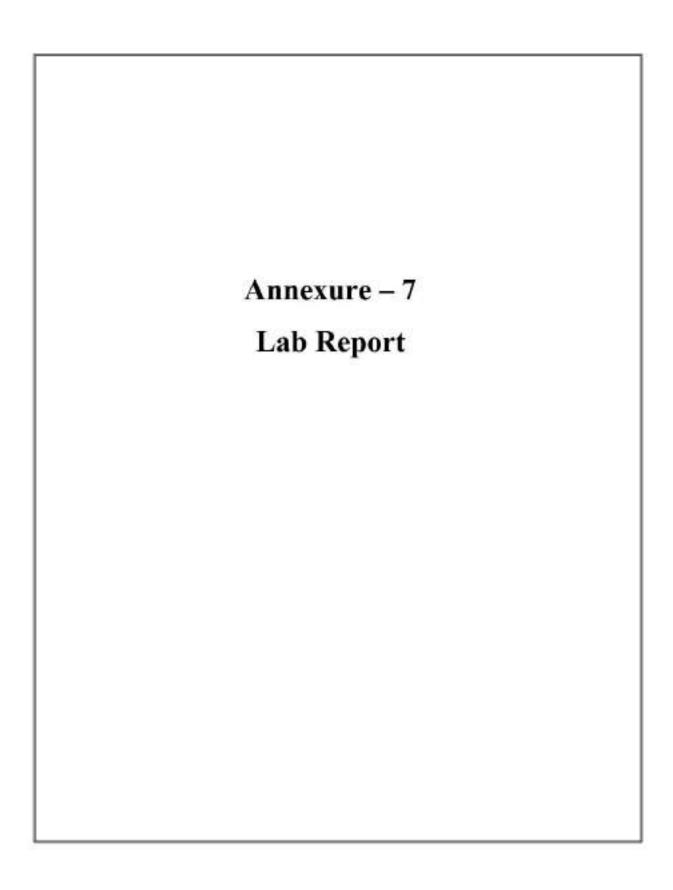


4352 0708 5947 VID: 9109 7955 0542 1574











(An ISO 9001:2015, ISO 45001:2018, ISO 14001:2015 Certified)

Laboratory: C43, Sector-88, Phase-IF, Whida, U.P.

Ph. No.: +91-9971912476, 9350952231 E-mail: ultraresearchlab@gmail.com Website: http://www.ultralabsoida.com



TEST REPORT

Ambient Air Quality Analysis

Report Code: AAQ-31052023-01

Issue Date: 31/05/2023

ISSUED TO

GLOBUS ENVIRONMENT ENGINEERING SERVICES 326-AB,3RD FLOOR, SAHARA SHOPPING CENTER,

FAIZABAD ROAD, LUCKNOW, U.P.-226016, INDIA.

Project Proponent: Mr. Gh Ahmad Ahanger S/o Ab Razak Ahanger

Project Name Minor Mineral Quarry Cluster (Masonry Stone)

Khasta No. 2610 Min., Area: 5.72 Ha, Village: Khanmob., Tehsil.: Panthacbowk, District.

Srinagar, State: J&k.

Sampling Protocol: LITRL/STP/AIR/01

Location : AQ-1 Core Zone.

Analysis Duration:

05/03/2023 To 31/05/2023

Sample Drawn By: UTR

TEST RESULT

S.No	Date	Particulate Matter PM10 (µg/m²)	Particulate Matter PM2.5 (µg/m ²)	Sulphur Dioxide SO ₂ (ug nm ²)	Nitrogen Diexide	Carbon monoxida
		IS:3182(Part-23	IS:5182(Part-24	IS:5182(Part-2)	NO ₂ (µg/m ²) IS:5182(Part-6)	(O (mg/m²) IS:5182(Part-X)
	01/03/2023	64.26	34.29	9.63		
2	04/03/2023	62.80	32.40	8.30	16.92	<0.5
3	08/03/2023	65.70	35.32	10.68	15.37	<0.5
14	11/03/2023	63.57	33.69	8.30	17.72	< 0.5
2	15/03/2023	66.10	36.39	10.02	16.68	< 0.5
6	18/03/2023	64.52	34,47	11.65		< 0.5
.7	22/03/2021	63.48	33.40	9.91	18.64	<0.5
8	25/03/2023	65.29	34.17	10.76	16.72	< 0.5
y	29/03/2023	62.15	32,34	9.84	17.86	<0.5
10	01/04/2023	64.73	34,56	8.16	15,51	0.5
11	05/04/2023	67.52	37.26	10.74	16.49	< 0.5
1.2	08/04/2023	68.10	38.60	11.60	18.76	< 0.5
13	12/04/2023	63.27	33.79	9.88	19.72	< 0.5
14	15/04/2023	65,45	35.42	10.84	6.54	< 0.5
15	19/04/2023	66.85	36.13	9.31	17.99	<0.5
16	22/04/2023	65.55	35.57	8.80	16,59	< 0.5
17.	26/04/2023	67.51	37.26	11.57	18.22	<0.5
18	29/04/2023	63.70	33,50	10.77	19.36	< 0.5
14	03/05/2023	66.63	36.14		15.84	<0.5
201	06/05/2023	65.77	26.52	9.84	18.63	50,5
21	10/05/2023	62.68	35.52 32.96	10.87	19.73	₹0.5
22	13/05/2023	64.81	24.62	8.12	15.58	<0.5
23	17/05/2023	63.70	34.53 33.31	9.28	18.91	< 0.5
24	20/05/2023	66.46		8.2	16,86	< 0.5
N	linimum	62.15	36.26	10.83	19.10	< 0.5
		The second secon	32.34	8.12	15.37	<0.5
Maximum 68.10		38.60	11.65	19.73	< 0.5	
	Average	65.02	34.93	9.91	17.64	< 0.5
	Percentile	67.84	37.98	11.62	19.73	<0.5
	AQS, For 24 y Monitoring	100.0	60.0	80.0	80.0	4.0

are results given above are related to the tested sample, for various parameters, as observed at the time of sampling the distorrer asked for the above tests only.

that will not be used for any publicity/legal purpose

The test sample. If he disposed off after two weeks from the date of issue of test report, unless until specified by the

n con not be used nce in a court of law without the written approval of the lab

For Ultra Testing & Research Laborago

(Authorized Stell



(An ISO 9001:2015, ISO 45001:2018, ISO 14007:2015 Certified) Laboratory: C-43, Sector-88, Phase-II, Noida, USA Ph.: No.: +91-9971912476, 9350952231 E-mail: ultraresearchlab@gmail.com

Websitz-http://www.ultralabnqida.com

Ambient Air Quality Analysis

Report Code: AAQ-31052023-01 Issue Date:31/0 2023
ISSUED TO : GLOBUS ENVIRONMENT ENGINEERING SERVICES

326-AB, 3RD FLOOR, SAHARA SHOPPING CENTER, FAIZABAD ROAD, LUCKNOW, U.P.-226016, INDIA.

Project Proponent : Mr. Gh Ahmad Ahanger S/o Ab Razak Ahanger

Project Name : Minor Mineral Quarry Cluster (Masonry Stone)

Khasta No: 2610 Min , Area: 5.72 Ha, Village: Khanmoh , Tehsil :

Panthachowk, District: Srinagar, State: J&k.

Sample Description : Ambient Air Sampling Location : AQ- 1Core Zone.

Analysis Duration : 05/03/2023 To 31/05/2023

		TEST RESULT
S.No.	Date	Silica ((µg /m³)
10	01/03/2023	2.57
2	04/03/2023	2.51
3	08/03/2023	2.63
4	11/03/2023	2,54
5	15/03/2023	2.64
6	18/03/2023	2.58
7	22/03/2023	2,54
8	25/03/2023	2.61
9	29/03/2023	2.49
10	01/04/2023	2.59
H	05/04/2023	2.70
12	08/04/2023	2.72
13	12/04/2023	2.53
14	15/04/2023	2.62
15	19/04/2023	2.67
16	22/04/2023	2.62
17	26/04/2023	2.70
18	29/04/2023	2.55
19	03/05/2023	2.67
20	06/05/2023	2.63
21	10/05/2023	2.51
22	13/05/2023	2.59
23	17/05/2023	2.55
24	20/05/2023	2.66
	Minimum	2.49
	Maximum	2.72
	Avenige	2.60
	28 th Percentile	2.71

The results given above are related to the tested sample, for various parameters, as observed at the time of sampling. The customer asked for the above tests only.

This test report will not be used for any publicity/legal purpose

The test samples will be disposed off after two weeks from the date of issue of rest export, unless until specified by the

The coport can not be used as evidence in a court of law without the without approval of the lab.

For Ultra Testing & Research Laboratory

(Authorized Signetory)



(An ISO 9001:2015, ISO 45001:2018, (Anti-t-1001:2015 Certified) Laboratory: C43, Sector-88, Phase-II, Nosla, U.P.

Ph. No.: +91-9971912476, 9350952231 E-mail: ultraresearchlab@gmail.com Website: http://www.ultralabnoida.com



TC-8198

TEST REPORT

Ambient Air Quality Analysis

Report Code: AAQ-31052023-02

Issue Date: 31/05/2023

ISSUED TO

GLOBUS ENVIRONMENT ENGINEERING SERVICES 326-AB,3RD FLOOR, SAHARA SHOPPING CENTER, FAIZABAD ROAD, LUCKNOW, U.P.-226016, INDIA.

Project Proponent: Mr. Gh Ahmad Ahanger S/o Ab Razak Ahanger Project Name Minor Mineral Quarry Cluster (Masonry Stone)

Khasta No: 2610 Min , Aren: 5.72 Ha, Village: Khanmoh , Tehsil : Panthachowk,

District: Srinagar, State: J&k.

Sampling Protocol: UTRL/STP/AIR/01 Location : AQ-2 Sangar. Analysis Duration: 05/03/2023 To 31/05/2023 Sample Drawn By: UTRL

TEST RESULT

			LEST KE	ASSESSED BY		
S.No	Destre	Particulate Matter	Particulate Matter	Sulphur Dioxide	Nitrugen Dioxide	Carbon monoxide
3.140	Date	PM10 (µg/m/)	PM2.5 (µg/m ³)	mentions building to the same of the same	NO ₂ (pg/m ²)	CO (mg/m ²)
		1S:5182(Part-23	15:5182(Part-24	4S:5182(Part-2)	15:5182(Part-6)	15:5182(Part-X)
	01/03/2023	61.29	31.74	8.36	18.11	
2	04/03/2023	63.44	33.55	9.67	19.78	< 0.5
3	08/03/2023	59.48	30,43	7.79	16.41	<0.5
4	11/03/2023	61.54	31.91	8.46	17.72	<0.5
5	5/03/2023	60.75	30.86	7.68	16.92	<0.5
6	18/03/2023	64.39	34.23	10.74	19.80	< 0.5
7	22/03/2023	61.27	31.60	7.37	16.49	<0.5
8	25/03/2023	63.46	33.16	9.81	17.98	<0.5
9	29/03/2023	65.53	35.74	10.40	19.38	<0.5
10	01/04/2023	63.21	33.36	8.19	18.79	<0.5
11	05/04/2023	62.50	32.14	7,26	17.48	<0.5
12	08/04/2023	60.55	30.54	8:13	16.98	<0.5
13	12/04/2023	64.78	34,78	10.06	19.05	<0.5
14	15/04/2023	62.72	32.06	7.06	16.35	<0.5
15	19/04/2023	63.53	33.19	8.04	18.64	
16	22/04/2023	65:45	35.49	10.60	19.43	< 0.5
1.7	26/04/2023	64,34	34.41	9.95	17.91	<0.5
1.8	29/04/2023	61.18	31,74	7.51	6.60	<0.5
19	03/05/2023	65.29	35.40	10.83	19.85	
20	06/05/2023	63.73	33.67	8,58	18.54	<0.5
21	10/05/2023	62.38	32.11	7.71	17.96	<0.5
22 23	13/05/2023	61.60	31.85	8.67	16.66	<0.5
	17/05/2023	62.58	32.34	9.43	17.54	<0.5
24	20/05/2023	64.73	34.41	8.69	19.03	< 0.5
M	linimum	59.48	30.43	7.06	16.35	<0.5
		65,53	35.74	10.83	19.85	
Average 62.91		32.95	8.79	18.06	<0.5	
	Percentile	65.50	35.63			< 0.5
NA	QS,For 24	Market 1	90.03	10.79	19.82	<0.5
	Monitoring	100.0	60.0	80.0	80.0	4.0

agilis given above are related to the tested sample, for various parameters, as observed at the time of sampling. The customers based for the above tests only.

This test report. If not be used for any publicity/legal purpose

The test samples with a disposed off after two weeks from the date of issue of test report, unless introduced by the

n por be used as evidence in a court of law without the written approval of the Vis

For Ultra Testing & Research Lab



(An ISO 9001:2015, ISO 45001:2018, ISO 14001:2015 Certified)

Laboratory: C-43, Sector-88, Phase-II, Noida, USA Ph.: No.: +91-9971912476, 9350952231

E-mail: ultruresearchlab@gmail.com Website: http://www.ultralabnoida.com

TEST REPORT

	Ambient Air Quality Analysis
Report Code: AAQ-31052023-02	Issue Date:31/05/20
ISSUED TO	: GLOBUS ENVIRONMENT ENGINEERING SERVICES 326-AB, 3RD FLOOR, SAHARA SHOPPING CENTER, FAIZABAD ROAD, LUCKNOW, U.P226016, INDIA.
Project Proponent	Mr. Gh Ahmad Alianger S/o Ah Razak Ahanger
Project Name	Minor Mineral Quarry Cluster (Masoney Stone) Khasta No: 2610 Min., Area: 5.72 Ha. Village: Khanmoh., Tehsil: Panthachowk, District: Srinagar, State: J&k.
Sample Description	: Ambient Air
Sampling Location	: AQ-2 Sangar.
Analysis Duration	: 05/03/2023 To 31/05/2023

TEST RESULT				
S.No.	Date	Silica ((µg/m²)		
	01/03/2023	3.45		
2	04/03/2023	2.45 2.54		
3	08/03/2023	2,38		
4	11/03/2023	2.46		
5	15/03/2023	2.46 2.43		
6.	18/03/2023	2,58		
7.	22/03/2023	7.45		
8	25/03/2023	2.45 2.54		
9	29/03/2023	2.62		
10	01/04/2023	2.53		
IJE -	05/04/2023	2.53 2.50		
12	08/04/2023	2.42		
13	12/04/2023	2.59		
14	15/04/2023	3.51		
15	19/04/2023	2.51 2.54		
16	22/04/2023	2.62		
17	26/04/2023	2.62 2.57		
8	29/04/2023	2.45		
9	03/05/2023	3.61		
30	06/05/2023	2.61 2.55		
21	10/05/2023	2.50		
22:	13/05/2023	2.46		
23	17/05/2023	2.50		
24	20/05/2023	2.59		
	Minimum	2.38		
	Maximum	2.62		
	Average	2,52		
	28" Percentile	2.62		

- The results given above are related to the tested sample, for various parameters, as observed at the time of sampling.

 The customer asked for the above tests only.
- This test report will not be used for any publicity/legal purpose
 - The test samples will be disposed off after two weeks from the date of issue of less report, unless until specified by
- 4 Ph. Report can get be used as evidence in a court of law without the worked approval Scrip lab.

For Ultra Testing & Research Laboratory (Authorized Signatury)



(An ISO 9001:2015, ISO 45001:2018, ISO 45001:2015 Certified) Laboratory: C43, Sector-88, Phase-II, Whida, U.P. Ph. No.: +91-9971912476, 9350952231

E-mail: ultraresearchlab@gmail.com Website: http://www.ultralabnoida.com



TEST REPORT

Ambient Air Quality Analysis

Report Code: AAQ-31052023-03

Issue Date: 31/05/2023

ISSUED TO : GLOBUS ENVIRONMENT ENGINEERING SERVICES

326-AB,3RD FLOOR, SAHARA SHOPPING CENTER, FAIZABAD ROAD,LUCKNOW,U.P.-226016,INDIA.

Project Proponent: Mr. Gh Ahmad Ahanger S/o Ab Razak Ahanger Project Name : Minor Mineral Quarry Cluster (Masonry Stone)

Khasta No: 2610 Min , Arca: 5,72 Ha, Village: Khanmoh , Tehsil : Panthachowk,

District: Srinagar, State: J&k.

Sampling Protocol: UTRL/STP/AIR/01 Location: AQ-3 Buba Gulam Din Sahib.

Analysis Duration: 05/03/2023 To 31/05/2023 Sample Drawn By : UTRL

TEST RESULT

S.No	Date	Particulate Matter PM10 (pg/m³)	Particulate Maner PM2.5 (µg/m ³)	Sulphur Dioxide SO ₁ (µg/m ³)	Nitrogen Dioxide NO ₂ (µg/m ³)	Carbon monoxide CO (mg/m ²)
		JS:5182(Part-23	1S:5182(Part-24	18:5182(Part-2)	15:5182(Part-6)	18:5182(Part-X)
1	01/03/2023	60.48	32.40	7.18	15.74	<0.5
12	04/03/2023	58.68	30.62	6.79	14.30	< 0.5
3	08/03/2023	61.53	33.48	8.53	16.38	<0.5
4	11/03/2023	59.73	31.10	6.76	15.74	< 0.5
5	15/03/2023	60.66	32.17	7.27	14.51	<0.5
:6	18/03/2023	62.53	34.52	8,61	16.27	<0.5
7	22/03/2023	59.73	31.22	6.69	14.66	< 0.5
8	25/03/2023	60.46	32.46	8.07	16.12	< 0.5
.9	29/03/2023	64.60	36.56	9.67	17.54	< 0.5
10	01/04/2023	61.31	33.74	7.65	15.56	< 0.5
11	05/04/2023	60.68	32.39	6.53	14.97	< 0.5
12	08/04/2023	62.51	34.82	8.16	16.76	< 0.5
13:	12/04/2023	59,49	31.40	6.45	14,74	<0.5
14	15/04/2023	58.41	30.88	7.27	15.63	< 0.5
15	19/04/2023	60.57	32.55	8.65	14.68	< 0.5
16	22/04/2023	61.54	33.19	9.43	16.43	< 0.5
17	26/04/2023	60.45	32.23	7.05	14.90	< 0.5
18	29/04/2023	62.60	34.76	8.25	16.94	< 0.5
19	03/05/2023	63.40	35.69	9.28	17.51	< 0.5
20	06/05/2023	64.54	36.12	8.17	16.22	< 0.5
21	10/05/2023	60.84	32.34	6.79	14.58	< 0.5
22	13/05/2023	59.50	31.40	7.29	16.23	< 0.5
23	17/05/2023	62,45	34.25	8.82	17.42	<0.5
24	20/05/2023	59.44	31.60	7.65	15.75	< 0.5
D	Linimum	58.41	30.62	6.45	14.39	< 0.5
		64.60	36.56	9.67	17.54	< 0.5
Average 61.09		32.99	7,79	15.82	<0.5	
	Percentile	64.57	36.36	9.56	17.53	< 0.5
NA	AQS,For 24 Monitoring	100.0	60.0	80.0	80.0	4.0

- The college asked for the above tests only.
- This test reposed not be used for any publicity/legal purpose.
- 3 The test samples with a disposed off after two weeks from the date of issue of test report, unless fintil specified by the customer.
- The Remort on not be used as evil- a court of law without the written approval of the hands on

For Ultra Testing & Research Labourton

Assuring you of best our services at all times. (Authorized Signary)



(An ISO 9001:2015, ISO 45001:2018, ISO 14001:2015 Certified) Laboratory: C-43, Sector-88, Phase-II, Noida, E49, Ph.: No.: +91-9971912476, 9350952231

E-mail: ultraresearchlab@gmail.com Website: http://www.ultralabnoida.com

TEST REPORT

	Ambient Air Quality Analysis
Report Code: AAQ-3105	2023-03 Issue Date:31/05/203
ISSUED TO	: GLOBUS ENVIRONMENT ENGINEERING SERVICES 326-AB, 3RD FLOOR, SAHARA SHOPPING CENTER, FAIZABAD ROAD, LUCKNOW, U.P226016, INDIA.
Project Proponent	Mr. Gli Ahmud Ahunger S/o Ab Ruzak Ahanger
Project Name	Minor Mineral Quarry Cluster (Masonry Stone) Khasta No: 2610 Min., Area: 5.72 Ha, Village: Khanmoh., Tehsil: Panthachowk, District: Srinagar, State: J&k.
Sample Description Sampling Location Analysis Duration	: Ambient Air : AQ- 3 Baba Gulam Din Sahib. : 05/03/2023 To 31/05/2023

Charysis 170		TEST RESULT
5.No.	Dute	Silica ((µg /m²)
	01/03/2023	2.42
2	04/03/2023	2.35
3	08/03/2023	2.46
4	11/03/2023	2.39
5	15/03/2023	2.43
6	18/03/2023	2.50 2.39
7	22/03/2023	2.39
8	25/03/2023	2.42
9	29/03/2023	2,58
10	01/04/2023	2.45
J.L.	05/04/2023	2,43
12	08/94/2023	2.50
13	12/04/2023	2,38
14	15/04/2023	2.34
15	19/04/2023	2.42
16	22/04/2023	2,46
17	26/04/2023	2.42
1.8	29/04/2023	2.50
19	03/05/2023	2.54
20	06/05/2023	2.58
21	10/05/2023	2.43
22	13/05/2023	2.38
23	17/05/2023	2.50
24	20/05/2023	2.38
	Minimum	2.34
	Maximum	2.58
	Average	2,44
- 4	98 th Percentile	2.58

- The results given above are related to the tested sample, for various parameters, as observed at the time of sampling. The customer asked for the above tests only.
- This test report will not be used for any publicity/legal purpose
- The test samples will be disposed off after two weeks from the date of issue of test report, unless until specified by the
- 4 The lowert can not be used as evidence in a court of law without the write a approval of the lab.

For Ultra Tessing & Research Laboratory

MANAGEA

(Authorized Signarary



(An ISO 9001:2015, ISO 45001:2018; Fat) 14001:2015 Certified) Laboratory: C43, Sector-88, Phase-II, Mida, U.P.

Ph. No.: +91-9971912476, 9350952231 E-mail: ultraresearchlab@gmail.com Website: http://www.ultralabnoida.com



TEST REPORT

Ambient Air Quality Analysis

Report Code: AAQ-31052023-04

Issue Date: 31/05/2023

: GLOBUS ENVIRONMENT ENGINEERING SERVICES ISSUED TO

326-AB,3RD FLOOR, SAHARA SHOPPING CENTER, FAIZABAD ROAD, LUCKNOW, U.P.-226016, INDIA.

Project Proponent: Mr. Gh Ahmad Ahanger S/o Ab Razak Ahanger Project Name : Minor Mineral Quarry Cluster (Masonry Stone)

Khasta No: 2610 Min , Aren: 5.72 Ha, Village: Khanmoh , Tehsil : Panthachowk,

District: Srinagar, State: J&k.

Sampling Protocol z UTRL/STP/AIR/01 Location: AQ-4 Khanmoh. Analysis Duration: 05/03/2023 To 31/05/2023 Sample Drawn By : UTRL

TEST RESULT

S.No	Date	Particulate Matter PM10 (µg/m²)	Particulate Matter PM2.5 (µg/m ³)	Sulphur Dioxide 50 ₂ (µg/m ³)	Nitrogen Dioxide NO ₂ (µg /m ³)	CO (mg/m²)
20.00		15:5182(Part-23	IS:5182(Part-24	IS:5182(Part-2)	IS:5182(Part-6)	15:5182(Part-X)
T	01/03/2023	63.42	33.36	8.12	17.58	< 0.5
2	04/03/2023	62.31	32.74	7.34	16.79	< 0.5
3	08/03/2023	64.25	34.20	10.59	19.60	< 0.5
4	11/03/2023	62.41	32.52	7.39	16.89	< 0.5
5	15/03/2023	63.47	33.64	9,43	19.76	< 0.5
6	8/03/2023	64.50	34.38	10.78	18.83	< 0.5
T	22/03/2023	63.69	33.19	9.84	17.72	< 0.5
8	25/03/2023	60.96	31.38	7.84	16.59	< 0.5
9	29/03/2023	62.47	32,17	9.78	18.42	< 0.5
10	01/04/2023	63.55	33,72	8.73	17.63	< 0.5
11.	05/04/2023	61.27	31.69	7.81	16.91	< 0.5
12	08/04/2023	64.22	34.66	10.88	19.12	<0.5
13	12/04/2023	62,44	32.88	8.77	18.34	<0.5
14	15/04/2023	63.55	33.45	9.92	19.16	<0.5
15	19/04/2023	60.72	31.47	7.76	17,52	<0.5
16	22/04/2023	62.52	32.77	10.68	16.80	< 0.5
17	26/04/2023	64.47	34.23	9.91	19.25	<0.5
18	29/04/2023	62.24	32.29	7.95	17.23	< 0.5
19	03/05/2023	63.47	33.43	10.89	18.54	< 0.5
20	06/05/2023	61.58	31.82	8.16	16.75	< 0.5
21	10/05/2023	63.24	33.38	9.36	18.88	< 0.3
22	13/05/2023	62,70	32.51	7,57	17.58	< 0.5
23	17/05/2023	64.60	34.41	10.65	19.78	<0.5
24	20/03/2023	63.52	33.50	8.43	18.58	< 0.5
N	linimum	60.72	31.38	7.34	16.59	<0.5
	laximum	64.60	34,66	10.89	19.78	<0.5
	tverage	62.98	33.07	9.11	18.09	< 0.5
	Percentile	64.55	34.55	10.88	19.77	<0.5
NA	AQS,For 24 y Monitoring	100.0	60,0	80.0	80.0	4.0

sults given above are related to the tested sample, for various parameters, as observed at the time of sampling asked for the above tests only.

This test it passed in not be used for any publicity/legal purpose.

The test complex with a disposed off after two weeks from the date of issue of test report, unless wait specified by

he Reput can not be used as evaluate in a court of law without the written approval of the his

For Ultra Testing & Research Laborat (Authorized Signal



(An ISO 9001:2015, ISO 45001:2018, ISO 14001:2015 ('ertified) Laboratory: C-43, Sector-88, Phase-II, Noida, Laboratory: C-43, Sector-88, Phase-III, Noida, Phase-III, Noida, Phase-III, Phase-I Ph.: No.: +91-9971912476, 9350952231

E-mail: ultraresearchlab@gmail.com Website: http://www.ultralabnoida.com

TEST REPORT

Ambient Air Quality Analysis

Report Code: AAQ-3105	2023-04	Issue Date:31/05/2023
ISSUED TO	: GLOBUS ENVIRONMENT ENGI 326-AB, 3RD FLOOR, SAHARA FAIZABAD ROAD, LUCKNOW, I	SHOPPING CENTER,
Project Proponent	: Mr. Gh Ahmad Ahanger S/o Ab Razal	k Ahanger

Project Name Minor Mineral Quarry Cluster (Masonry Stone) Khasta No: 2610 Min , Area: 5.72 Ha, Village: Khanmoh , Tehsil ::

Panthachowk, District: Srinagar, State: J&k.

Sample Description : Ambient Air Sampling Location : AQ-4 Khanmoh.

Analysis Duration 05/03/2023 To 31/05/2023

TEST RESULT				
S.No.	Date	Silica ((µg/m³)		
	01/03/2023	2,54 2,49		
2	04/03/2023	2.49		
3	08/03/2023	2,57		
4	11/03/2023	2.50 2.54		
5	15/03/2023	2.54		
6	18/03/2023	2.58 2.55		
7	22/03/2023	2.55		
8	25/03/2023	2,44		
9	29/03/2023	2.50		
10:	01/04/2023	2.54		
11	05/04/2023	2.45		
12	08/04/2023	2.54 2.45 2.57		
13	12/04/2023	2.50		
14:	15/04/2023	2.54		
13	19/04/2023	2.43 2.50		
16	22/04/2023	2.50		
17	26/04/2023	2.58		
8	29/04/2023	2.49		
19	03/03/2023	2.54		
20	06/05/2023	2,46		
21	10/05/2023	2,53		
22	13/05/2023	2.51		
23	17/05/2023	2.58		
24	20/05/2023	2,54		
11	Minimum	2,43		
	Maximum	2.58		
	Average	2.52		
10	98 th Percentile	2.58		

- The results given above are related to the tested sample, for various parameters, as observed at the time of sampling The contomer asked for the above tests only.
- This test report will not be used for any publicity/legal purpose
- est samples will be disposed off after two weeks from the date of issue of pattreport, unless until specified by the
- canyot be used as evidence in a court of law without the written approval of the lab.

For Ultra Testing & Research Laboratory (Authorized Stanatory)



(An ISO 9001:2015, ISO 45001:2018, F80-14001:2015 Certified). Laboratory: C43, Sector-88, Phase-II, Norda, U.P.

Ph. No.: +91-9971912476, 9350952231 E-mail: ultraresearchlab@gmail.com Website: http://www.ultralabnoida.com



TEST REPORT

Ambient Air Quality Analysis

Report Code: AAQ-31052023-05

Issue Date: 31/05/2023

ISSUED TO : GLOBUS EN

GLOBUS ENVIRONMENT ENGINEERING SERVICES 326-AB,3RD FLOOR, SAHARA SHOPPING CENTER, FAIZABAD ROAD,LUCKNOW,U.P.-226016,INDIA.

Project Proposest: Mr. Gh Ahmad Ahanger S/o Ab Razak Ahanger Project Name : Minor Mineral Quarry Cluster (Masonry Stone)

Khasta No: 2610 Min , Aren: 5.72 Ha, Village: Khanmoh , Tehsil : Panthachowk,

District: Srinagar, State: J&k.

Sampling Protocol: UTRL/STP/AIR/01 Location: AQ+5 Bathan.

Analysis Duration: 05/03/2023 To 31/05/2023 Sample Drawn By: UTRL

TEST RESULT

	1E31 K630/1/1						
		Particulate Matter	Particulate Matter	Sulphur Dioxide	Nitrogen Dioxide	Carbon monexid	
S.No	Date	PM10 (µg/m²)	PM2.5 (pg/m ⁻)	50; (ng/m')	NO ₂ (ng/m ²)	CO (mg :m)	
		IS:5182(Pam-23 IS:518	IS:5182(Part-24	15:5182(Part-2)	15:5182(Part-6)	15:5182(Part-X	
1/	02/03/2023	62.32	32.69	9.53	19.78	<0.5	
2	05/03/2023	65.63	35.72	11.91	22.50	<0.5	
3	09/03/2023	64.67	34.64	10.73	20.78	< 0.5	
4	12/03/2023	62.67	32.29	8.58	18.25	<0.5	
5	16/03/2023	65.05	33.74	10.71	20.75	< 0.5	
6	19/03/2023	63.60	33.50	11.74	22.81	< 0.5	
7	23/03/2023	64.70	34.16	10.30	21.49	<0.5	
8	26/03/2023	62.65	32.50	9.89	19.85	<0.5	
9	30/03/2023	61.56	31.89	8.73	18.63	<0.5	
10	02/04/2023	64.35	34.35	10.64	21.52	< 0.5	
11	06/04/2023	65.84	35.29	11.78	22.50	< 0.5	
12	09/04/2023	63.69	33.24	9.86	19.78	< 0.5	
13	13/04/2023	64.62	34.62	10.73	20.51	< 0.5	
14	16/04/2023	62.65	32.74	8.87	18.63	< 0.5	
15.1	26/04/2023	63.45	33.40	10.61	20.54	< 0.5	
16	23/04/2023	61.71	31.69	8.93	18.95	< 0.5	
17	27/04/2023	64.43	34.49	11.79	21.24	< 0.5	
18	30/04/2023	62.69	32.72	9.97	19.91	< 0.5	
19	04/05/2023	61.59	31.62	8.89	18,60	< 0.5	
20	07/05/2023	63.68	33.36	10.73	20.70	<0.5	
21	11/05/2023	65.79	35.75	11.93	22.61	< 0.5	
22	14/05/2023	63.44	33.43	9.93	19.82	< 0.5	
23	18/05/2023	64.69	34.53	10.84	21.55	< 0.5	
24	21/95/2023	62.87	32.17	8.94	18.79	< 0.5	
A	linimum	61.56	31.62	8.58	18.25	< 0.5	
Maximum		65.84	35.75	11,93	22.81	< 0.5	
Average		63.68	33.52	10.27	20.44	<0.5	
	Percentile	65.81	35,74	11.92	22.72	< 0.5	
NA	AQS,For 24 y Monitoring	100.0	60.0	80.0	80.0	4.0	

1 The cults given above are related to the tested sample, for various parameters, as observed at the time of sampling. The customer asked for the above tests only.

2 This test repeat 11 not be used for any publicity/legal purpose

3 The sent samples will be disposed off after two weeks from the date of issue of text report, unless that by the customer.

4 The Reportion not be used as every in a court of law without the written approval of the lab.

For Ultra Testing & Research Laborator

Assuring you of best our services at all times. (Authorized Signato



(Au ISO 9001:2015, ISO 45001:2018, ISO 14007:2015 Certified) Laboratory: C-43, Sector-88, Phase-II, Noida, L29 Ph.: No.: +91-9971912476, 9350952231

E-mail: ultraresearchlab@gmail.com Website: http://www.ultralabnoida.com

TEST REPORT

	ILDI KLI OKI	
	Ambient Air Quality Analysis	1
Report Code: AAQ-31052	023-05	ssue Date:31/05/202
SSUED TO : GLOBUS ENVIRONMENT ENGINEERING SERVICES 326-AB, 3RD FLOOR, SAHARA SHOPPING CENTER, FAIZABAD ROAD, LUCKNOW, U.P226016, INDIA.		ER,
Project Proponent	: Mr. Gb Ahmad Ahanger S/o Ab Razak Ahanger	
Project Name	: Minor Mineral Quarry Cluster (Masonry Stone) Khasta No: 2610 Min., Area: 5.72 Ha, Village: Khanra Panthachowk, District: Srinagar, State: J&k.	oh , Tehsil :
Sample Description	: Ambient Air	
Sampling Location	: AQ-5 Bathan.	
Analysis Duration	: 05/03/2023 To 31/05/2023	

tuniysis Di	ration = 95/93/	2923 10 31/05/2923
17/		TEST RESULT
S.No.	Date	Silica ((µg/m²)
	02/03/2023	2.49
2	05/03/2023	2.63
3	09/03/2023	2.59
4	12/03/2023	2,51
5	16/03/2023	2.60
6	19/03/2023	2.54
7	23/03/2023	2.59 2.51
8	26/03/2023	2.51
9	30/03/2023	2.46 2.57
10	02/04/2023	2,57
Diam'r	06/04/2023	2.63
12	09/04/2023	2.55
13	13/04/2023	2.58
14	16/04/2023	2.51 2.54
15	20/04/2023	2.54
16	23/04/2023	2.47
17	27/04/2023	2,58
8	30/04/2023	2.51
9	04/05/2023	2.46
20	07/05/2023	2.55
21	11/05/2023	2.63
22	14/05/2023	2.54
23	18/05/2023	2.54 2.59
24	21/05/2023	2.51
	Minimum	2.46
	Maximum	2.63
	Average	2.55
- 5	8 th Percentile	2.63

The results given above are related to the tested sample, for various parameters, as observed at the time of sampling. The customer asked for the above tests only.

- 2 Pris test report will not be used for any publicity/legal purpose
- 3 The assamples will be disposed off after two weeks from the date of issue of teat propert, unless until specified by the
- The Report can not be used as evidence in a court of law without the written approval of the lab.

For Ultra Testing & Research Laboratory
(Authorized Standard)

Assuring you of Best-our services at all timeso + >



(An ISO 9001:2015, ISO 45001:2018, ISO 44001:2015 Certified) Laboratory: C43, Sector-88, Phase-II, Maids, U.P. Ph. No.: +91-9971912476, 9350952231

E-mail: ultraresearchtab@gmail.com Website: http://www.ultralabnolda.com



TEST REPORT

Ambient Air Quality Analysis

Report Code: AAQ-31052023-06

Issue Date: 31/05/2023

ISSUED TO : GLOBUS ENVIRONMENT ENGINEERING SERVICES

> 326-ABJRD FLOOR, SAHARA SHOPPING CENTER. FAIZABAD ROAD, LUCKNOW, U.P.-226016, INDIA.

Project Proponent: Mr. Gh Ahmad Ahanger S/o Ab Razak Ahanger Project Name : Minor Mineral Quarry Cluster (Masonry Stone)

Khasta No: 2610 Min., Area: 5.72 Ha, Village: Khanmoh , Tehsii : Panthachowk,

District: Semagar, State: J&k.

UTRL/STP/AIR/01 Sampling Protocol: Location : AQ-6 Mulanur. 05/03/2023 To 31/05/2023 Analysis Duration : Sample Drawn By: UTRL

TEST RESULT

		Particulate Matter	Particulate Matter	Sulphur Dioxide	Nitrogen Dioxide	Carbon monoxide
S.No	Date	PM10 (μg/m ³)	PM2.5 (µg/m²)	SO ₂ (μg/m ²)	NO ₂ (ug/m ²)	CO (mg/m²)
		15:5182(Part-23	1S:5182(Part-24	IS:5182(Part-2)	IS:5182(Part-6)	15:5182(Part-X)
18	02/03/2023	62.63	32.74	8.59	18.63	< 0.5
2	05/03/2023	65,31	35,44	9.74	19.64	< 0.5
3	09/03/2023	66.56	36.51	10.77	20,68	< 0.5
4	12/03/2023	65,67	35.49	7.71	17.41	<0.5
5	16/03/2023	62.76	32.14	6.70	16.92	< 0.5
6	19/03/2023	63.35	33.80	8.40	18.51	<0.5
7	23/03/2023	65.46	35.14	0.01	19.71	< 0.5
8	26/03/2023	64.25	34.22	10.87	18.04	<0.5
9	30/03/2023	61.60	31.91	7.76	17.72	< 0.5
10	02/04/2023	63.49	33.36	9,74	18.60	< 0.5
11	06/04/2023	64.84	34,89	8.18	16.43	< 0.5
12	09/04/2023	66.28	36,65	10:24	20.63	< 0.5
13	13/04/2023	64.55	34,53	7,73	17.79	< 0.5
14	16/04/2023	60.53	30.64	6.65	16.43	< 0.5
15	20/04/2023	62.68	32.77	7,07	18.83	< 0.5
16	23/04/2023	65.83	35.65	9.35	19.24	< 0.5
17	27/04/2023	63.73	33,24	8.30	18.35	< 0.5
18	30/04/2023	65.76	35.70	10.79	20.71	<0.5
19	04/05/2023	64.32	34.78	7.79	17,73	< 0.5
20.	07/05/2023	62.59	32.54	6.88	16.50	< 0.5
21	11/05/2023	64.46	34.66	8.33	18,42	< 0.5
22	14/05/2023	66.31	36.17	10.81	20.49	< 0.5
23	18/05/2023	64:66	34.47	8.60	18.83	< 0.5
24	21/05/2023	61.82	31.69	7.71	17.60	< 0.5
A	linimum	60.53	30.64	6.65	16.43	< 0.5
N	Laximum	66,56	36.65	10.87	20.71	< 0.5
	Average	64,14	34.13	8.69	18.49	< 0.5
9811	Percentile	66.45	36.59	10.84	20,70	<0.5
NA	AQS,For 24 ly Monitoring	100.0	60.0	80.0	80.0	4.0

sults given above are related to the tested sample, for various parameters, as observed at the time of sampling

The purpose asked for the above tests only.

This test few a will not be used for any publicity/legal purpose.

The test namely will be disposed off after two weeks from the date of issue of test report, unless tasts appearing the disposed off after two weeks from the date of issue of test report, unless tasts appearing the disposed off after two weeks from the date of issue of test report, unless tasts appearing the disposed off after two weeks from the date of issue of test report.

not be used as expance in a court of law without the written approval of the lab

For Ultra Testing & Resembly Laborato

(Authorized Signator



(An ISO 9001:2015, ISO 45001:2018, ISO 140012015 Certified) Laboratory: C-43, Sector-88, Phase-II, Noida, C40, Ph.: No.: +91-9971912476, 9350952231

E-mail: ultrarescarchlab@gmail.com Website: http://www.ultralabnoida.com

TEST REPORT

	Ambient Air Quanty Analysis
Report Code: AAQ-31052023-06	Issue Date:31/05/202
ISSUED TO	GLOBUS ENVIRONMENT ENGINEERING SERVICES 326-AB, 3RD FLOOR, SAHARA SHOPPING CENTER, FAIZABAD ROAD, LUCKNOW, U.P226016, INDIA.
Project Proponent	: Mr. Gh Ahmad Ahanger S/o Ab Razak Ahanger
Project Name	Minor Mineral Quarry Cluster (Masonry Stone)

Khasta No: 2610 Min , Area: 5.72 Ha, Village: Khanmoh , Tehsil :

Panthachowk, District: Srinagar, State: J&k.

Sample Description : Ambient Air Sampling Location : AQ-6 Mulanar.

Analysis Duration : 05/03/2023 To 31/05/2023

		TEST RESULT
S.No.	Date	Silien ((ng/m ³)
	02/03/2023	2,51
2	05/03/2023	2.61
3	09/03/2023	2.66
4	12/03/2023	2.63
5	16/03/2023	2.51
.6	19/03/2023	2.53
7	23/03/2023	2.62
8	26/03/2023	2.57
9	30/03/2023	2.46
10	02/04/2023	2.54
11	06/04/2023	2.59
12	09/04/2023	2.65
13	13/04/2023	2.58
14	16/04/2023	2.42
15	20/04/2023	2.51 2.63
10.	23/04/2023	2.63
17.	27/04/2023	2,55
18	30/04/2023	2.63
19	04/05/2023	2,57
20	07/05/2023	2.50
21	11/05/2023	2.58
22	14/05/2023	2.65
23	18/05/2023	2.59
24	21/05/2023	2.47
	Minimum	2.42
	Maximum	2.66
	Average	2.57
3	98 th Percentile	2.66

The results given above are related to the tested sample, for various parameters, as observed at the time of sampling. The customer asked for the above tests only.

- This test report will not be used for any publicity/legal purpose
- 3 The est samples will be disposed off after two weeks from the date of issue of a geopet, unless until specified by the
- 4 The Report can not be used as evidence in a court of law without the written approval of the lab.

For Ultra Testing & Research Laboratory



(An ISO 9001:2015, ISO 45001:2018, 48004; 1001:2015 Certified) Laboratory: C43, Sector-88, Phase-II, Norda, U.P. Ph. No.: +91-9971912476, 9358952231

E-mail: ultraresearchlab@gmail.com Website: http://www.ultralabnoida.com



TC-8198

TEST REPORT

Ambient Air Quality Analysis

Report Code: AAQ-31052023-07 Issue Date: 31/05/2023

GLOBUS ENVIRONMENT ENGINEERING SERVICES ISSUED TO

326-AB,3RD FLOOR, SAHARA SHOPPING CENTER. FAIZABAD ROAD, LUCKNOW, U.P.-226016, INDIA.

Project Proponent: Mr. Gh Ahmad Ahanger S/o Ah Razak Ahanger Project Name 2 Minor Mineral Quarry Cluster (Masonry Stone)

Khasta No: 2610 Min , Area: 5.72 Ha, Village: Khanmoh , Tehsil : Panthachowk,

District: Srinagar, State: J&k.

UTRL/STP/AIR/01 Sampling Protocol: Location : AQ-7 Khrew. 05/03/2023 To 31/05/2023 Analysis Duration: Sample Drawn By: UTRL

TEST RESULT

			1 E 5 1 E E	SULI		
		Particulate Matter	Particulate Matter	Sulphur Dioxide	Nitrogen Dinaide	Curbon monoxide
S.No	Date	PM10 (µg/m³)	PM2.5 (µg/m ³)	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	CO (mg/m²)
		IS:5182(Part-23	IS:5182(Part-24	IS:5182(Part-2)	15:5182(Part-6)	IS:5182(Part-X)
1	02/03/2023	64.68	34,26	10.74	20.62	< 0.5
2	05/03/2023	62.65	32,74	8.59	18.26	<0.5
30	09/03/2023	65.78	35.50	11.29	21.33	< 0.5
4	12/03/2023	64.46	34.24	10.88	20.61	< 0.5
5:	16/03/2023	63.38	33.52	9.94	18.83	< 0.5
6	19/03/2023	61.90	32.23	8.70	17.84	< 0.5
7	23/03/2023	63.76	33.59	9.84	19.37	< 0.5
8.	26/03/2023	65.20	35.72	10.80	20.35	< 0.5
9	30/03/2023	63.90	33.50	9.81	19.68	<0.5
1.0	02/04/2023	62.52	32.72	8.58	17.14	< 0.5
11	06/04/2023	64.71	34.39	10.79	20.63	< 0.5
12	09/04/2023	66.63	36.27	11.54	21.47	< 0.5
13	13/04/2023	62.47	32.93	8.67	17,30	< 0.5
14.	16/04/2023	65.56	35.29	18.01	19.92	<0.5
15	20/04/2023	63.53	33.59	9.71	18.58	<0.5
16	23/04/2023	65.78	35.92	11.84	21.52	< 0.5
17	27/04/2023	62.81	32.74	9.84	20.47	< 0.5
18	30/04/2023	64.13	34.39	10.65	19.89	< 0.5
19.	04/05/2023	65.29	35.60	11.74	21,39	< 0.5
20	07/05/2023	64.52	34.62	10.32	20,33	<0.5
21	11/05/2023	62,57	32.34	8.73	17,72	< 0.5
22	14/05/2023	64.38	34.21	9.61	19.11	<0.5
22 23	18/05/2023	61.93	32.27	8.44	18.60	50.5
24	21/05/2023	63.49	33,59	11.36	21.03	<0.5
N	Iinimum.	61.90	32.23	5.44	17.14	< 0.5
	laximum	66.63	36.27	11.84	21.52	<0.5
	Average	64.00	34.01	10.13	19.67	<0.5
	Percentile	66.24	36.11	11.79	21.50	<0.5
NA	AQS, For 24 by Monitoring	100.0	60.0	80.0	80.0	4.0

- alts given above are related to the tested sample, for various parameters, as observed at the time of sampling realiser asked for the above tests only.
- not be used for any publicity/legal purpose
- The best samples with a disposed off after two weeks from the date of issue of test report, upleasure is specified by

he Repog On not be used us o in a court of law without the written approval of the lab.

For Ultra Testing & Research Lab

(Authorized Sign



(An ISO 9001:2015, ISO 45001:2018, ISO 14007:2015 Certified) Laboratory: C-43, Sector-88, Phase-II, Noida, C99, Ph.: No.: +91-9971912476, 9350952231

E-mail: ultraresearchlab@gmail.com Website: http://www.ultralabnoida.com

TEST REPORT

	Ambient Air Quality Analysis	1
Report Code: AAQ-3105.	23-07 Issue Date:31/	05/2023
ISSUED TO	: GLOBUS ENVIRONMENT ENGINEERING SERVICES 326-AB, 3RD FLOOR, SAHARA SHOPPING CENTER, FAIZABAD ROAD, LUCKNOW, U.P226016, INDIA.	
Project Proponent	: Mr. Gh Ahmad Ahanger S/o Ab Razak Ahanger	
Project Name	: Minor Mineral Quarry Cluster (Masonry Stone) Khasta No: 2610 Min , Area: 5,72 Ha, Village: Khanrnoh , Tehsil : Panthachowk, District: Srinagar, State: J&k.	
Sample Description	Ambient Air	
Sampling Location	: AQ-7 Khrew.	
Analysis Duration	05/03/2023 To 31/05/2023	

		TEST RESULT
S.No.	Date	Silien ((ag /m³)
	02/03/2023	2.49
2	05/03/2023	2.63
3	09/03/2023	2,59
4	12/03/2023	2.51
5	16/03/2023	2.60
6	19/03/2023	2.54
7	23/03/2023	2.59
8	26/03/2023	2.59 2.51
9	30/03/2023	2.46 2.57
10	02/04/2023	2.57
11	06/04/2023	2.63
12	09/04/2023	2.55
13	13/04/2023	2,58
14	16/04/2023	2.51
15	20/04/2023	2.54 2.47
6	23/04/2023	2.47
17	27/04/2023	2.58
18	30/04/2023	2,51
19	04/05/2023	2.46
20	07/05/2023	2.55
21	11/05/2023	2.63 2.54 2.59
22	14/05/2023	2.54
23	18/05/2023	2.59
24	21/05/2023	2.51
	Minimum	2.46
	Maximum	2.63
	Average	2.55
- 1	8 th Percentile	2.63

The results given above are related to the tested sample, for various parameters, as observed at the time of sampling. The customer asked for the above tests only.

- 2 Lis test report will not be used for any publicity/legal purpose.
- 3 The set samples will be disposed off after two weeks from the date of issue of 282 peport, unless until specified by the
- 4 The Report can not be used as evidence in a court of law without the written approval of the lab.

For Ultra Testing & Research Laboratory
(Authorized Stranding)



(An ISO 9001:2015, 15O 45001:2018, 180-L4001:2015 Certified)

Laboratory: C43, Sector-88, Phase-II, Vonta, L.P. Ph. No.: +91-9971912476, 9350952231

E-mail: ultraresearchlah@gmail.com Website: http://www.ultralabnoida.com



TEST REPORT

Ambient Air Quality Analysis

Report Code: AAQ-31052023-08

Issue Date: 31/05/2023

ISSUED TO GLOBUS ENVIRONMENT ENGINEERING SERVICES

326-ABJRD FLOOR, SAHARA SHOPPING CENTER. FAIZABAD ROAD, LUCKNOW, U.P.-226016, INDIA.

Project Proponent: Mr. Gh Ahmad Ahanger S/o Ab Razak Ahanger Project Name : Minor Mineral Quarry Cluster (Masonry Stone)

Khasta No: 2610 Min , Area: 5.72 Ha, Village: Khanmoh , Tehsil : Panthachowk,

District: Srinagar, State: J&k.

Sampling Protocol: UTRL/STP/AIR/01 Location : AQ-8 Bodami Bagh Cantoment.

Analysis Duration: 05/03/2023 To 31/05/2023 Sample Drawn By : UTRL

TEST RESULT

	**	Particulate Matter	Particulate Matter	Sulphur Dioxide	Nitrogen Dioxide	Carbon monoxide
S.No	Date	PM10 (µg/m²) 1S:5182(Part-23	PM2.5 (µg/m ³)	SO ₂ (μg/m²)	NO ₃ (μg/m ²)	CO (mg/m³)
	and the second	177	18:5182(Part-24	IS:5182(Part-2)	IS:5182(Part-6)	JS:5182(Part-X)
1	02/03/2023	65.38	35.17	8.52	18.79	< 0.5
2	05/03/2023	63.69	33.62	9.20	17.54	< 0.5
-3	09/03/2023	66.89	36.30	11,69	19.27	< 0.5
4	12/03/2023	63.48	33.31	9.60	17.41	< 0.5
5	6/03/2023	64.60	34.49	11.79	18.84	< 0.5
6	19/03/2023	67.50	37.61	12:53	20.53	<0.5
7	23/03/2023	64:61	34.94	7.91	17.38	< 0.5
8	26/03/2023	66.26	36.39	9.88	19.73	< 0.5
9	30/03/2023	65:04	35.44	10,43	18.89	<0.5
10	02/04/2023	63.61	33.98	0.95	17.91	<0.5
11.1	06/04/2023	62.56	31.91	7.90	16.98	< 0.5
12	09/04/2023	65.31	35.62	11.05	18.80	< 0.5
13	13/04/2023	63.68	33.80	8.95	17.96	<0.5
14	16/04/2023	67.39	37.45	12.20	20.67	<0.5
15	20/04/2023	62.73	32.40	8.73	17.24	<0.5
16	23/04/2023	65:33	35.44	9.88	18.71	<0.5
17	27/04/2023	63.37	33.40	10.33	19.51	< 0.5
18	30/04/2023	66.65	36.47	12.30	20.78	<0.5
19	04/05/2023	62.30	33.12	8.69	17.16	< 0.5
20	07/05/2023	65.61	35.72	11.91	10.37	<0.5
21	11/05/2023	63.90	33.67	10.83	18.91	< 0.5
22	14/05/2023	62.48	31.96	7.91	16.82	< 0.5
23	18/05/2023	64.75	34.35	9,53	17.47	< 0.5
24	21/05/2023	67.76	37,42	12.47	20.90	< 0.5
1	linimum	62.30	31.91	7.90	16.82	< 0.5
	Laximum	67.76	37.61	12.53	20.90	< 0.5
	Average	64.79	34.75	10.18	18.65	< 0.5
	Percentile	67.64	37.53	12.50	20.84	< 0.5
NA	AQS,For 24 ly Monitoring	100.0	60.0	80.0	80.0	4.0

sults given above are related to the tested sample, for various parameters, as observed at the time of sampling

The charge asked for the above tests only.

This true report will not be used for any publicity/legal purpose.

The sest samples will be disposed off after two weeks from the date of issue of test report, we ask antik positive by

on not be used as eventure in a court of low without the written approval of the laboration

For Ultra Testing & Research Laboratory (Authorized Signatory)



(An ISO 9001:2015, ISO 45001:2018, ISO 14001:2015 Certified) Laboratory: C-43, Sector-88, Phase-II, Noida, 190, Ph.: No.: +91-9971912476, 9350952231

E-mail: ultruresearchlab@gmail.com Website: http://www.ultralabnoida.com

TEST REPORT

	Ambient	Air Quality Analysis	
Report Code: AAQ-3105	023-08		Issue Date:31/05/2036
ISSUED TO	326-AB, 3RD	NVIRONMENT ENGINEERING SERVI FLOOR, SAHARA SHOPPING CENT ROAD, LUCKNOW, U.P226016, INDI/	ER,
Project Proponent	: Mr. Gh Aluna	d Ahanger S/o Ab Razak Ahanger	
Project Name	Khasta No: 2	al Quarry Cluster (Masonry Stone) 610 Min , Area: 5.72 Ha, Village: Khann , District: Srimagar, State: J&k.	noh , Tehsil :
Sample Description	: Ambient Air		
Sampling Location	= AQ- 8 Badan	ni Bagh Cantoment.	
Analysis Duration	05/03/202	23 To 31/05/2023	

Stilligala De		TEST RESULT
S.No.	Date	Silien ((pg/m²)
	02/03/2023	2.62
2	05/03/2023	2.55
3	09/03/2023	2.68
4	12/03/2023	2.54
5	16/03/2023	2.58
6	19/03/2023	2.58 2.70
7	23/03/2023	2.58
8	26/03/2023	2.65
9	30/03/2023	2.60
10	02/04/2023	2.54
11	06/04/2023	2.50
12	09/04/2023	2.61 2.55
13	13/04/2023	2.55
14	16/04/2023	2.70 2.51 2.61 2.53
1.5	20/04/2023	2.51
16	23/04/2023	2.6)
17	27/04/2023	2.53
18	30/04/2023	2.67
19	04/05/2023	2.49
20	07/05/2023	2.62
21	11/05/2023	2.56
22	14/05/2023	2.50
23	18/05/2023	2.59
24	21/05/2023	2.71
	Minimum	2.49
	Maximum	2.71
	Average	2.59
	98 th Percentile	2.71

- The results given above are related to the tested sample, for various parameters, as observed at the time of sampling. The customer asked for the above tests only.
- This test report will not be used for any publicity/legal purpose
- 3 De test samples will be disposed off after two weeks from the date of issue of the drougt, unless until specified by the
- 4 The proof can pot be used as evidence in a court of law without the written deproval of the lab

For Ultra Testing & Research Laboratory
(Authorized Signatory)



(An ISO 9001:2015, ISO 45001:2018, ISO-L1001:2015 Certified)

Laboratory: C43, Sector-88, Phase-II, August 1. P. Ph. No.: +91-9971912476, 9350952231

E-mail: ultraresearchlab@gmail.com Website: http://www.ultralabnoida.com



TEST REPORT

	Noise Report
Report Code: N-17042023-01 ISSUED TO	Issue Date: 21/04/2023 GLOBUS ENVIRONMENT ENGINEERING SERVICES 326-AB,3RD FLOOR, SAHARA SHOPPING CENTER, FAIZABAD ROAD,LUCKNOW,U.P226016,INDIA
Project Proponent	: Mr. Gh Ahmad Ahanger S/o Ab Razak Ahanger
Project Name	 Minor Mineral Quarry Cluster (Masonry Stone) Khasta No: 2610 Min., Area: 5.72 Ha, Village: Khanmoh., Tehsil Panthachowk, District: Srinagar, State: J&k.
Monitoring Date	: 13/04/2023 To 14/04/2023
Sample Drawn By	: UTRL
Sample Description	: Ambient Noise
Weather Condition	: Clear
Monitoring Duration	; 24 hrs

				TEST RES	ULT		
S:No	Location	Observed Value Leq dB(A)			Limit as per CPCB Guidelines Leq. dB(A)		Zone
		Day*	Night*	Day/Night	Day*	Night*	
1	Core zone	53.2	41.8	52.8	65.0	55.0	Commercial
2	Sangar	51.3	42.7	51.8	55.0	45.0	Residential
3	Baba Gulam Din Sahib	50.6	42.2	51.2	55.0	45.0	Residential
4	Khanmoh	50.7	41.3	50.9	55.0	45.0	Residential
Day	Time		Leq(6.00A	M TO 10.00	PM)		
"Nig	of Time		Leg(10.00	PM TO 6.00	AM)		

Note:-

End Of Report

- 1 The results given above are related to the tested sample, for various parameters, as observed at the time of sampling. The customer asked for the above tests only.
- 2 This test report will not be used for any publicity/legal purpose.
- 3 The test samples will be disposed off after two weeks from the date of issue of test report, unless until specified by the customer.
- 4 The Report can not be used as evidence in a court of law without the written approval of the letters.

For Ultra Testing & Kesearch Laborator

(Authorized Signatory)

Anomika



(An ISO 9001:2015, ISO 45001:2018, ISO 14001:2015 Certified) Laboratory: C43, Sector-88, Phase-II, Wilds, U.P.

Ph. No.: +91-9971912476, 9350952231 E-mail: ultraresearchlab@gmail.com Website: http://www.ultralabnoida.com



TEST REPORT

	Noise Report
Report Code: N-17042023-02 ISSUED TO	Issue Date: 21/04/2023 : GLOBUS ENVIRONMENT ENGINEERING SERVICES 326-AB,3RD FLOOR, SAHARA SHOPPING CENTER, FAIZABAD ROAD,LUCKNOW,U.P226016,INDIA.
Project Proponent Project Name	 Mr. Gh. Hassan Wani S/o Gh. Nabi Wani Minor Mineral Quarry Cluster (Masonry Stone) Khasta No: 2610 Min., Area: 5.72 Ha, Village: Khanmoh., Tehsil Panthachowk, District: Srinagar, State: J&k.
Monitoring Date	: 14/04/2023 To 15/04/2023
Sample Drawn By	: UTRL
Sample Description	: Ambient Noise
Weather Condition	: Clenr
Monitoring Duration	: 24 hrs

S.No	Location	Observed Value Loq dB(A)			Limit as per CPCB Guidelines Leg. dB(A)		Zone
	1.556500 on Cali	Day*	Night*	Duy/Night	Day*	Night*	O-MARKET.
5	Bathan	51.4	41.2	51.3	55.0	45.0	Residential
6	Mulanar	52.2	42.3	52.3	55.0	45.0	Residential
7	Khrew	51.0	41.2	51.1	55.0	45.0	Residential
8	Badami Bagh Cantoment	51.9	42.7	52.2	55.0	45.0	Residential
*Day	Time		Leq(6.00A	M TO 10.00	PM)		
*Nij	ht Time		Leg(10.00	PM TO 6.00	AM)		

Note:-

End Of Report

- 1 The results given above are related to the tested sample, for various parameters, as observed at the time of sampling. The customer asked for the above tests only.
- This test report will not be used for any publicity/legal purpose
- 3 The test samples will be disposed off after two weeks from the date of issue of test report, unless until specified by the customer.
- 4 The Report can not be used as evidence in a court of law without the written approval of the Jacquese.

For Ultra Testing & Research Laboratory

(Authorized Signatory

keeked By



(An ISO 9001:2015, ISO 45001:2018, ISO 4.001:2015 Certified) Laboratory: C43, Sector-88, Phase-II, Studia 1.19.

Ph. No.: +91-9971912476, 9350952231 E-mail: ultraresearchlab@gmail.com Website: http://www.ultralabnoida.com



TC-8198

TEST REPORT

Soil Sample Analysis

Discipline/Group-Chemical/ Pollution & Environment

Report Code: 8S-10042023-01

3-01 Issue Date: 15/04/2023
GLOBUS ENVIRONMENT ENGINEERING SERVICES

326-AB.3RD FLOOR, SAHARA SHOPPING CENTER. FAIZABAD ROAD, LUCKNOW, U.P.-226016, INDIA

Proponent Name

ISSUED TO

Mr. Gh Ahmad Ahanger S/o Ab Razak Ahanger

Project Name & Location

: Minor Mineral Quarry Cluster (Masonry Stone)

Khasra No: 2610 Min, Area: 5.72 Ha, Village-Khanmoh Tehsil -Panthachowk, District-Srinagar, State-J&K.

Sample Drawn On : 07/04/2023 Sample Drawn By : UTRL Sample Description : Soil Sample Location : SQ-1

SQ-2 Baha Gulam Din Sahib

Sangar : 2.0 kg

Sample Quantity Analysis Duration

: 10/04/2023 To 15/04/2023

			RESUL	TS	
		Result			
5.No	Parameter	Units	Locat	tion	Test Method
			SQ-1	SQ-2	
1	Texture	-	Sandy Clay	Loam	UTRL/LAB/SOIL/SOP/05
2	Sand	96	48.12	41.76	UTRL/LAB/SOIL/SOP/05
1	Clay	76	36.49	23.80	UTRL/LAB/SOIL/SOP/05
4	Silt	%	15:39	34,44	UTRL/LAB/SOIL/SOP/05
5	pH(1:2.5 Suspension)	-	7.75	7.58	IS: 2720 (Part-26):1987
6	Electrical Conductivity	µmbos/cm	785.3	416.2	IS: 14767:2000
7	Potassium (as K)	mg/kg	191,73	178.94	UTRL/LAB/SOIL/SOP/07
8	Sodium (as Na)	mg/kg	278.50	296.84	UTRL/LAB/SOIL/SOP/06
.9.	Culcium (as Ca)	mg/kg	4711.69	4142.92	LITRL/LAB/SOIL/SOP/08
10	Magnesium (as Mg)	mg/kg	545.57	475,19	UTRL/LAB/SOIL/SOP/08
11	Sodium Absorption Ratio	-	1.02	1.16	UTRL/LAB/SOIL/SOP/14
12	Water Holding Capacity	96	31.93	34,25	UTRL/LAB/SOIL/SOP/11
13	Total Kjeldahl Nitrogen	94	0.085	0.11	UTRL/LAB/SOIL/SOP/15
14	Phosphorous	mu/kar	52,37	74.26	L/TRL/LAB/SOIL/SOP/09
13	Bulk Density	gin/cc	1.28	1.30	UTRL/LAB/SOIL/SOP/10
16	Organic Carbon	96	0.79	0.57	IS: 2720 (Part-22):1972
17	Organic Matter	96	1.41	1.02	IS: 2720 (Part-22):1972
18	Perosity	94	41.71	39.38	UTRL/LAB/SOIL/SOP/17

Note:

End Of Report

1 The results given above are related to the firsted sample, for various parameters, as observed at the time of sampling. The customer asked for the above tests only.

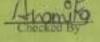
has nest report will not be used for any publicity/legal purpose.

samples will be disposed off after two weeks from the date of issue of top point stress until specified by the costomer.

The flat on the used as evidence in a court of law without the written account of the b

For Ultra Testing & Research Laboratory

(Authorized Signators)







ISSUED TO

ULTRA TESTING & RESEARCH LABORATORY

(An ISO 9001:2015, ISO 45001:2018, ISO 4001:2015 Certified) Laboratory: C43, Sector-88, Phase-II, Mida, U.P.

> Ph. No.: +91-9971912476, 9350952231 E-mail: ultraresearchlab@gmail.com Website: http://www.ultralabnoidu.com



TC-8198

TEST REPORT

Soil Sample Analysis

Discipline/Group-Chemical/ Pollution & Environment

Report Code: SS-10042023-02

Issue Date: 15/04/2023
: GLOBUS ENVIRONMENT ENGINEERING SERVICES

326-AB,3RD FLOOR, SAHARA SHOPPING CENTER, FAIZABAD ROAD,LUCKNOW,U.P.-226016,INDIA

Proponent Name : Mr. Gh Ahmad Ahanger S/o Ab Razak Ahanger

Project Name & Location : Minor Mineral Quarry Cluster (Masonry Stone)

Khasra No: 2610 Min, Area: 5.72 Ha, Village- Khanmoh Tehsil -Panthuchowk, District- Srinagar, State- J&K.

Sample Drawn On : 07/04/2023 Sample Drawn By : UTRL Sample Description : Soil

Sample Location : SQ-3 Bathan

Sample Quantity : 2.0 kg

Analysis Duration : 10/04/2023 To 15/04/2023

		RESU	1.18	
		Re	suit	
Parameter	Units	Loc	setion	Test Method
		SQ-3	SQ-4	
Testure	- 5	Clay Loam	Sandy Clay Loan	UTRL/LAB/SOIL/SOP/05
Sand	96	45.69	48.82	UTRL/LAB/SOIL/SOP/05
Clay	10/s	33.98	32.58	UTRL/LAB/SOIL/SOP/05
Silt	9%	20.33	18,60	UTRL/LAB/SOIL/SOP/05
pH(1:2.5 Suspension)	-	6.93	7.79	IS: 2720 (Part-26), 1987
A transfer for the contract of	amhos/em	415.3	695,4	IS: 14767;2000
	mg/kg	233.81	172.51	UTRL/LAB/SOIL/SOP/07
Sodium (ns Nn)	mg/kg	286.92	285.99	UTRL/LAB/SOIL/SOP/06
Calcium (as Ca)	mg/kg	4001.36	3757.00	UTRL/LAB/SOIL/SOP/08
Magnesium (as Mg)	mg/kg	729.73	614.89	UTRL/LAB/SOIL/SOP/08
Sodium Absorption Ratio	-	1.09	1.14	UTRL/LAB/SOIL/SOP/14
Water Holding Capacity	9%	33.42	28,30	UTRL/LAB/SOIL/SOP/11
Total Kjeldahl Nitrogen	9.6	0.128	0.09	UTRL/LAB/SOIL/SOP/15
Phosphorous	mg/kg	65.19	41.76	UTRE/LAB/SOIL/SOP/09
Bulk Density	gm/ec	1,28	1.30	UTRL/LAB/SOIL/SOP/10
Organic Carbon	46	0.97	0.68	IS: 2720 (Part-22):1972
	Texture Sand Clay Silt pH(1:2.5 Suspension) Electrical Conductivity Potassium (as K) Sodium (as Na) Calcium (as Ca) Magnesium (as Mg) Sodium Absorption Ratio Water Holding Capacity Total Kjeldahl Nitropen Phosphorous Bulk Density	Texture - Sand % Clay % Silt % pH(1:2,5 Suspension) - Electrical Conductivity µmhos/em Potassium (as K) mg/kg Sodium (as Na) mg/kg Calcium (as Ca) mg/kg Magnesium (as Mg) mg/kg Magnesium (as Mg) mg/kg Sodium Absorption Ratio - Water Holding Capacity % Total Kjeldahl Nitrogen % Phosphorous mg/kg Bulk Density gm/cc	Parameter Units Log	SQ-3 SQ-4

Note:

Organic Matter

Poresity

End Of Report

IS: 2720 (Part-22):1972

UTRL/LAB/SOIL/SOP/17

SQ-4

Khanmoh

The results given above are related to the tested sample, for various permetters, as observed at the time of sampling. The customer asked for the above rests only.

42.77

is ten report will not be used for any publicity/legal purpose.

the complex will be disposed off after two weeks from the date of issue of the large makes amil specified by the conformer.

the used as evidence in a court of law without the written approval or security.

For Ultra Testing & Research Laboratory

41.85

(Authorized Signalory)



(An ISO 9001:2015, ISO 45001:2018, ISO 44001:2015 (crtified) Laboratory: C43, Sector-88, Phase-II; Winds, 1 .P.

Ph. No.: +91-9971912476, 9350952231 E-mail: ultraresearchlab@gmail.com Website: http://www.ultralabnoida.com



TC-8198

TEST REPORT

Soil Sample Analysis

Discipline/Group-Chemical/ Pollution & Environment

Report Code: SS-10042023-03

Issue Date: 15/04/2023

ISSUED TO

- CLOBUS ENVIRONMENT ENGINEERING SERVICES 326-AB,3RD FLOOR, SAHARA SHOPPING CENTER, FAIZABAD ROAD, LUCKNOW, U.F.-226016, INDIA

Proponent Name

: Mr. Gh Ahmad Ahanger S/o Ab Razak Ahanger : Minor Mineral Quarry Cluster (Masonry Stone)

Project Name & Location

Khasra No. 2610 Min, Arca: 5.72 Ha, Village-Khammoh

Tehsil-Panthachowk, District-Srinagar, State-J&K.

Sample Drawn On Sample Drawn By

: 08/04/2023 : UTRL

Sample Description

: Soil

SO-6

Sample Location

: SQ-5 Khrew

Badami Bagh Cantoment

Sample Quantity

: 2.0 kg

Analysis Duration

: 10/04/2023 To 15/04/2023

			RESUL	TS	
		Result			
S.No	Parameter	Units	Locat	ion	Test Method
			SQ-5	SQ-6	
1	Texture	-	Sandy Clay Loam	Sandy Clay	UTRL/LAB/SOIL/SOP/05
2	Sand	36	48.82	48.12	UTRE/LAB/SOIL/SOP/05
3	Clay.	16	32.58	36.49	UTRL/LAB/SOIL/SOP/05
4	Silt	No.	18.60	15.39	UTRE/LAB/SOIL/SOP/05
5	pH(1:2.5 Suspension)		7.87	0.98	IS: 2720 (Part-26),1987
6	Electrical Conductivity	umhos/cm	675.4	767.5	IS: 14767:2000
7	Potassium (as K)	mg/kg	174.71	183.84	UTRL/LAB/SOIL/SOP/07
8	Sodium (as Na)	mg/kg	289.62	267.04	UTRL/LAB/SOIL/SOP/06
9	Calcium (as Ca)	mg/kg	3804.74	4517.79	UTRL/LAB/SOIL/SOP/08
10.	Magnesium (as Mg)	mg/kg	622.71	523.12	UTRL/LAB/SOIL/SOP/08
11	Sodium Absorption Ratio		1.15	1.00	UTRL/LAB/SOIL/SOP/14
12.	Water Holding Capacity	5%	28.30	31.93	UTRL/LAB/SOIL/SOP/11
13	Total Kjeldahl Nitrogen	56	0.086	0.11	UTRL/LAB/SOIL/SOP/15
14	Phosphorous	mg/kg	41.76	52.37	UTRL/LAB/SOIL/SOP/09
15	Bulk Density	gm/cc	1.30	1.28	L/TRL/LAB/SOIL/SOP/10
16	Organic Carbon	56	0.68	0.79	IS: 2720 (Part-22):1972
17	Organic Matter	56	1.22	1.41	IS: 2720 (Part-22):1972
18	Poresity	96	41.85	42.76	UTRL/LAB/SOIL/SOP/17

End Of Report

The results given above are related to the tested sample, for various parameters, as observed at the time of sampling. The customer asked for the above tests only

is test report will not be used for any publicity/legal purpose.

samples will be disposed off after two weeks from the date of issue of test expert, goless until specified by the customer

not be used as evidence in a court of law without the written apply

For Ultra Testing & Research Laboratory

(Authorized Signator



(An ISO 9001:2015, ISO 45001:2018, ISO 44001:2015 Certified) Laboratory: C43, Sector-88, Phase-11, Stridg, U.P.

Ph. No.: +91-9971912476, 9358952231 E-mail: oltraresearchlab@gmail.com Website: http://www.ultralabnoida.com



TC-8198

TEST REPORT

Water Sample Analysis Discipline/Group-Chemical/Water

Report Code: W-10042023-01

Issue Date: 15/04/2023

ISSUED TO

· GLOBUS ENVIRONMENT ENGINEERING SERVICES 326-AB,3RD FLOOR, SAHARA SHOPPING CENTER, FAIZABAD ROAD, LUCKNOW, U.P. - 226016, INDIA

Proponent Name

: Mr. Gh Ahmad Ahanger S/o Ab Razak Ahanger

Project Name & Location

: Minor Minoral Quarry Cluster (Masonry Stone)

Khasra No. 2610 Min, Area: 5.72 Ha, Village-Khanmoh Tehsil -Panthachowk, District- Srinagar, State-J&K

: 07/04/2023

Sample Drawn On Sample Drawn By

LITEL

Sample Description

: Ground Water

Sampling Location

: GW-I

GW-2

Baba Gulam Din Sahib

Sangar

Sampling Procedure Sample Quantity

: IS 3025(Part-01) : 2.0 Litre

Analysis Duration

: 10/04/2023 to 15/04/2023

	RESULTS As per IS 10500:2012									
	Parameter		Res	ults		Acceptable	Permissible Limit in			
S.No		Test Method	Location		Units	Limit	the Absence of			
			GW-1	GW-2		1120000	Alternate Source			
1	p∃	IS:3025(Part-11):2022	7,41	7.24		6.5-8.5	-			
2	Colour	IS:3025(Part-04):2021	<5.0	<5.0	Hacen	5	15			
1	Odour	IS-3025(Part-05):2018	Agreeable	Agreeable		Agreeable	Agrecable			
4	Tisse	IS:3025(Part-07):2017	Agreeable	Agreeable		Agreenble	Agreeable			
5	Turbidity	IS-3025(Part-10):1984	< 0.5	< 0.5	NTU	1	5			
Б	Total Hardness (iss CaCO ₃)	IS:3025(Part-21):2009	184	192	mg/l	200	600			
7	Calcium(as Ca)	IS:3025(Part-40):1991	36.80	34.56	mg/l	75	200			
8	Magnesium(as Mg)	IS:3025(Part-46):1994	22.36	25.66	Pam	30	100			
9.	Chloride(as Cl)	IS:3025(Part-32):1988	21.53	31,31	mg/l	250	1000			
10	tron(as Fe)	fS:3025(Part-53):2003	0.088	< 0.05	mg/l	1	No Relaxation			
11	Fluoride(as F)	APHA 4500 F(D) 23rd Ed: 2017	0.39	0.22	mg/l	9	1.5			
Si.	Free Residual chlorine	IS:3025(Part-26):2021	<0.1	<0.1	mg/l	0.3	1			
Da	al Dissolved Solid	IS:3025(Part-16):1984	291	278	mg/l	500	2000			
	Phonol Compound (as C ₂ H ₂ OI)	IS: 3025 (Part-43):2022	<0.001	<0.001	mg/l	0.001max	0.002 Max uESF-q			
12	Anionic Detergents (at MBAS)	APHA 5540 (B)/(C) 2370 1 2017	<0.1	<0.1	mg/l	0.2	1.00			

Cound. To report N-10042023-D thage Aref 21



(An ISO 9001:2015, ISO 45001:2018, ISO 41001:2015 Certified) Laboratory: C43, Sector-88, Phase-II, Shida, L. P.

Ph. No.: +91-9971912476, 9350952231 E-mail: ultraresearchlab@gmail.com Website: http://www.ultralabnoida.com



TC-8198

	0042023-4		

				C00	HE TO CEDUCE	M - 1 (100-4/00/23-4	CEARLY OF AT
16	Sulphate (as SO ₁)	IS:3025(Part-24):2022	7.46	11.01	mg/l	200	400
12	Nitrate (as NO ₃)	IS:3025(Part-34);1988	4.22	5.27	Pam	45	No Relaxation
18	Alkalinity(as CaCOs)	IS:3025(Part-23):1986	172	152	mg/l	200	600
19	Nickel(as Ni)	IS 3025 (Part-54):2003	<0.1	<0.1	mg/t	0.02	No Relaxation
20	Cadmium (as Cd)	IS-3025(Part-41):1992	<0.001	<0.00.1	mg/I	0.003	No Relaxation
21	Lead (as Pb)	IS:3025(Part-47):1994	< 0.005	=0.005	mg/l	0.01	No Relaxation
22	Total Chromium(asCr)	IS:3025(Part-52):2021	< 0.01	< 0.01	mg/I	0.05	No Reluxation
23	Copper (as Cu)	(S:3025(Part-42):2004	<0.01	<0.01	mg/l	0.65	1.5
24	Total Ammonia	1S:3025(Part-34):1988	< 0.3	<0.5	mg/l	0.5	No Relaxation
25	Sulphide (as H2S)	IS:3025(Part-29):1986	10.05	<0.05	med.	0.05	No Relaxation
26	Zinc (us Zn)	IS:3025(Part-49):1944	<0.1	<0.1	mg/l	3	15
27	Manganese (as Mn)	15:3025(Part-59):2006	<0.1	<0.1	mg/I	0,1	0.3
28	Boron (us B)	IS:3025(Part-57):2021	<8.1	<0.1	mg/I	0.5	1
29	Selenium (Se)	IS:3025(Part-56):2003	<0.01	<0.01	ing/l	0.01	No Relaxation
30	Arsenic (as As)	IS:3025(Part-37):2022	<0.01	< 0.01	mg/l	0.01	No Relaxation

** End Of Report **

Note:-

- The results given above are related to the tested sample, for various parameters, as observed at the time of sampling. The customer asked for the above tests only.
- 2 This test report will not be used for any publicity/legal purpose.
- 3 The test samples will be disposed off after two weeks from the date of issue of test report, unless until specified by the customer.
- 4 The Report can not be used as evidence in a court of law without the write properties of the lab.

Anamika Checked By



FOR ULTRA TESTING & RESEARCH LABORATORY

(Authorized Signatory)



(An ISO 9001:2015, ISO 45001:2018, ISO 14001:2015 Certified) Laboratory: C-43, Sector-88, Phase-II, Noida, 540, Ph.: No.: +91-9971912476, 9350952231

E-mail: ultrarescarchlab@gmail.com Website: http://www.ultralabnoida.com

	Bacteriological Quality of Drinking Water	
Report Code: W-10042023-01		Issue Date: 15/04/2023
Issued To	GLOBUS ENVIRONMENT ENGINEERING SERVICES	
	326-AB,3RD FLOOR, SAHARA SHOPPING CENTER,	
	FAIZABAD ROAD, LUCKNOW, U.P226016, INDIA	
Proponent Name	: Mr. Gh Ahmad Ahanger S/o Ab Razak Ahanger	

Project Name & Location : Minor Mineral Quarry Cluster (Masonry Stone)
Khasra No. 2610 Min, Area: 5.72 Ha, Village-Khanmoh
Tehail -Pamhachowk, District- Srinagar, State- J& K.

Sample Drawn On : 07/04/2023 Sample Drawn By : UTRL Sample Description : Ground Water

Sampling Location : GW-1 GW-2

Sangar Baba Gulam Din Sahib

Analysis Duration : 10/04/2023 to 15/04/2023

	RESULTS As per IS 10500;2012									
S.No	Parameter	Test Method	Results		Units	Requirements				
197025	P9408844435550	The state of the s	GW-1	GW-2	1	1000 Forest Care				
1	E.coli	IS-1622	Absent	Absent	E.Coli/100m	Shall not be detectable in 100 ml sample				
2	Total Celiform	IS-1622	Absent	Absent	MPN/100mi	Shall not be detectable in 100 ml sample				

End Of Report

Note:-

- The results given above are related to the texted sample, for various parameters, as observed at the time of sampling.
 The customer asked for the above tests only.
- This test report will not be used for any publicity/legal purpose.
- 3. The test samples will be disposed off after two weeks from the date of issue of test report, unless until specified by the customer.
- The Report can not be used as evidence in a court of law without the written approval of the lab.

omika

FOR ULTRA TESTING & RESEARCH LABORATORY

(Authorized Signatory)



(An ISO 9001;2015, ISO 45001;2018, ISO 43001;2015 Certified) Laboratory: C43, Sector-88, Phase-II, Minta U.P.

Ph. No.: +91-9971912476, 9350952231 E-mail: ultraresearchlab@gmail.com Website: http://www.ultralabuoida.com



TC-8198

TEST REPORT

Water Sample Analysis Discipline/Group-Chemical/Water

Report Code: W-10042023-02

ISSUED TO

Issue Date: 15/04/2023 GLOBUS ENVIRONMENT ENGINEERING SERVICES 326-ABJRD FLOOR, SAHARA SHOPPING CENTER,

FAIZABAD ROAD, LUCKNOW, U.P. 226016, INDIA

Proponent Name

: Mr. Gh Ahmad Ahanger S/o Ab Razak Ahanger

Project Name & Location

: Minor Mineral Quarry Cluster (Masonry Stone)

Khasra No: 2610 Min, Area: 5.72 Ha, Village-Khanmoh Tehsil -Panthuchowk, District- Srinagar, State-J&K

: 07/04/2023

Sample Drawn On Sample Drawn By

: UTRL

Sample Description

: Ground Water

Sampling Location

: GW-3 Bathan GW-4 Khanmoh

Sampling Procedure

: 1S 3025(Part-01) : 2.0 Litre

Sample Quantity Analysis Duration

: 10/04/2023 to 15/04/2023

		As	per IS 1050					
			Results Location			American Chr	Permissible Limit in the Absence of	
S.No	Parameter	Test Method			Units	Acceptable Limit		
				GW-3	GW-4		4,31311	Alternate Source
1	pH	IS:3025(Part-11):2022	7.34	7,42	-	6.5-8.5		
2	Colour	IS:3025(Part-04):2021	<5.0	<5.0	Hazen	5	15	
3	Odour	IS-3025(Part-05):2018	Agrecable	Agreeable	>:	Agreeable	Agreeable	
4	Taxte	IS:3025(Part-07):2017	Agreeable	Agrecable	-	Agrocable	Agreeable	
5	Turbidity	(S-3025(Part-10):1984	-0.5	< 0.5	NTU	1:	5	
6	Total Hardness (as CaCO ₃)	IS:3025(Part-21):2009	152	232	mg/l	200	600	
7	Calcium(as Ca)	IS:3025(Part-40):1991	30.40	41.76	mg/T	75	200	
8	Magnesium(as Mg)	IS:3025(Part-46):1994	18.47	-31.01	mg/l	30	100	
9	Chloride(as Cl)	IS:3025(Part-32):1988	19.57	23.48	mg/T	250	1000	
10	troo(as Fc)	(S:3025(Part-53):2003	<0.05	0.07	mg/l	T.	No Relaxation	
11	Fluoride(as F)	APHA 4500 F(D) 23rd Ed.: 2017	0.34	0.28	ing/l	10	1.5	
700	Free Residual chlorine	IS:3025(Part-26):2021	<0,1	<0.1	mg/l	0.2		
13	Town Rissolved Solid	IS:3025(Part-16):1984	245	326	mg/I	500	2000	
54	Phenois ocund (as C.H.OH)	IS: 3025 (Part-43):2022	<0.001	<0.001	mgd	0.001max	RESERVE MAN	
15	Anionic Detergents (in MISAS)	23rd Ed. 2017	<0.1	<0.1	mg/l	0.2	TECHNICAL	

RESULTS

Could To report N-10042023-0 (Page 1 of 2



(An ISO 9001;2015, ISO 45001;2018, ISBN 1,0001;2015 Certified)

Laboratory: C43, Sector-88, Phase-II, Woods, U.P.

Ph. No.: +91-9971912476, 9350952231 E-mail: ultraresearchlab@gmail.com Website: http://www.ultralabnoida.com



Contd. To report. W-10042023-((Page 2 of 2)

				CDH	d. To report	W+10042023+	(Page 2 of 2):
16	Sulphate (as SO ₁)	1S:3025(Part-24):2022	5,97	13.31	mgd	200	400
17	Nitrate (as NO ₃)	IS:3025(Part-34);1988	4.30	6.70	mg/I	45	No Relaxation
18	Alkalinity(av CaCO3)	IS:3025(Part-23):1986	144	192	rng/f	200	600
19	Nickel(as Ni)	IS 3025 (Part-54):2003	<0.1	< 0.1	mg/T	0.02	No Relaxation
20	Cadmium (as Cd)	15-3025(Part-41):1992	< 0.001	<0.001	mg/I	0.003	No Relaxation
21	Lead (as Pb)	IS:3025(Part-47):1994	< 0.005	< 0.005	mg/I	0.01	No Relaxation
22	Total Chromium(asCr)	IS:3025(Part-52):2021	< 0.01	<0.01	mg/l	0.05	No Relaxation
23	Copper (as Cu)	IS:3025(Part-42):2004	<0.01	< 0.01	mg/T	0.05	1.5
24	Total Ammonia	(S:3025(Part-34):1988	< 0.5	< 0.5	Tom	0.5	No Relaxation
25	Sulphide (xs-H2S)	IS:3025(Part-29):1986	< 0.05	<0.05	mg/I	0.05	No Relaxation
26	Zinc (as Zn)	IS:3025(Part-49):1944	<0.1	<0.1	mg/I	- 5	15
27	Manganese (as Mn)	1S:3025(Part-59):2006	<0.1	<0.1	mg/t	0.1	0.3
28	Boron (us B)	1S:3025(Part-57):2021	<0.1	<0.1	mg/I	0.5	
29	Selemmi (Se)	(S:3025(Part-56):2003	<0.01	<0.01	mg/T	0.01	No Relaxation
30-	Americ (as As)	(S.3025(Part-37):2022	-0.01	=0.01	mg1	10.0	No Relaxation

End Of Report

Note:-

- 1 The results given above are related to the tested sample, for various parameters, as observed at the time of sampling. The customer asked for the above tests only.
- This test report will not be used for any publicity/legal purpose.
- 3 The test samples will be disposed off after two weeks from the date of issue of test report, unless until specified by the customer.
- 4 The Report can not be used as evidence in a court of law without the written appropriate of the lab.

Ananika Checked By



FOR ULTRA CESTING A RESEARCH LABORATORY

(Authorized Signatory)



(An ISO 9001:2015, ISO 45001:2018, ISO 1400):3015 (ertified)

Laboratory: C-43, Sector-88, Phase-II, Noida, Utia, Ph.: No.: +91-9971912476, 9350952231

E-mail: ultraresearchlab@gmail.com Website: http://www.ultralabnoida.com

	Bacteriological Quality of Drinking Water	
Report Code : W-10042023-02 Issued To	: GLOBUS ENVIRONMENT ENGINEERING SERVICES 326-ABJRD FLOOR, SAHARA SHOPPING CENTER, FAIZABAD ROAD, LUCKNOW, U.P 226016, INDIA	Issue Date: 15/04/2023
Proponent Name	: Mr. Gh Ahmad Ahanger São Ab Razak Ahanger	
Project Name & Location	; Minor Mineral Quarry Cluster (Masonry Stone) Khasra No: 2610 Min, Area; 5.72 Ha, Village-Khanmon Tehsil -Panthachowk, District- Srinagar, State-J&K	

Sample Drawn On : 07/04/2023
Sample Drawn By : UTRL
Sample Description : Ground Water

Sampling Location ± GW+3

Bathan Khanmoh

Analysis Duration : 10/04/2023 to 15/04/2023

			RESULT as per IS 1050				
S.No	Parameter	Test Method	Res	sults	Units	Requirements	
			GW-3	GW-4			
1	E.coli	IS-1622	Absent	Absent	E.Coli/100m	Shall not be detectable in 100 ml sample	
2	Total Coliform	IS-1622	Absent	Absent	MPN/100ml	Shall not be detectable in 100 ml sample	

End Of Report

Note:

- The results given above are related to the tested sample, for various parameters, as observed at the time of sampling.
 The customer askert for the above tests only.
- 2 This test report will not be used for any publicity/legal purpose.
- 3 The test samples will be disposed off after two weeks from the date of issue of test report, unless until specified by the customer.
- 4 The Report can not be used as evidence in a court of law without the written approval (I) he lab

FOR ULTRA TESTING & RESEARCH

RESEARCHTABORATOR

(Authorized Signator

GW-4

Monuka



(An ISO 9001:2015, ISO 45001:2018; ISO 43001:2015 Certified) Laboratory: C43, Sector-88, Phase-II, Shinta, U.P.

Ph. No.: +91-9971912476, 9350952231 E-mail: ultraresearchlab@gmail.com Website: http://www.ultralabnoida.com



TC-8198

TEST REPORT

Water Sample Analysis

Report Code: W-10042023-03

ISSUED TO

Discipline/Group-Chemical/Water

: GLOBUS ENVIRONMENT ENGINEERING SERVICES 326-AB,3RD FLOOR, SAHARA SHOPPING CENTER,

FAIZABAD ROAD, LUCKNOW, U.P.-226016, INDIA

Proponent Name

: Mr. Gh Ahmad Ahmger S/o Ab Razak Ahanger

Project Name & Location

: Minor Mineral Quarry Cluster (Masonry Stone) Block Khasra No: 2610 Min, Area: 5.72 Ha, Village-Khanmoh Tehsil -Panthachowk, District- Srinagar, State- J&K

Sample Drawn On Sample Drawn By

: 08/04/2023 : UTRL

Sample Description

: Ground Water

Sampling Location

: GW-5 Khrew GW-6 Badami Bagh Contoment

Issue Date: 15/04/2023

Sampling Procedure

: IS 3025(Part-01)

Sample Quantity

: 2.0 Litre

Analysis Duration

: 10/04/2023 to 15/04/2023

		As	RESULT per IS 1050					
	99/00	Table 200 (1970)	Res	olts		Acceptable	Permissible Limit in	
S,No	Parameter	Test Method	Loc	ation	Units	Limit	the Absence of	
			GW-5	GW-6		DESTRUCTION OF	Alternate Source	
1	pH	IS:3025(Part-11):2022	7,42	7.51		6.5-8.5		
2	Colour	IS:3025(Part-04):2021	<5.0	<5.0	Hazen	. 5	15	
3	Odour	IS-3025(Part-05):2018	Agreeable	Agreeable	-	Agreeable	Agrevable	
4	Taste	IS:3025(Part-07):2017	Agreeable	Agrecable		Agreenble	Agreeable	
5	Turbidity	IS-3025(Part-10):1984	< 0.5	=0.5	NTU	1	5	
6	Total Hurdness (as CaCO ₃)	IS:3025(Part-21):2009	252	84	rig/1	200	600	
7	Calcium(as Ca)	IS:3025(Part-40):1991	50,40	15.12	mg/l	75	200	
8	Magaesiom(as Mg)	1S:3025(Part-46):1994	30.62	11.23	mg/l	30	100	
9	Chloride(as Cl)	IS:3025(Part-32):1988	25,44	19.57	mg/l	250	1000	
10	Iron(as Fe)	IS:3025(Part-53):2003	<0.05	< 0.05	mg/T	1	No Relaxation	
11	Fluoride(as F)	APHA 4500 F(D) 23rd Ed.: 2017	0.33	<0.1	mg/l	(1	13	
1	Free Residual chloring	IS:3025(Part-26):2021	<0.1	<0.1	Fam	0.2	1	
13	Ton Dissolved Solid	1S:3025(Part-16):1984	380	133	mg/l	500	2000	
	Phenotic wound (as C ₁ H ₂ OH)	IS: 3025 (Part-43):2022	<0.001	<0.001	mg/l	0.001max	B THEREOF MAY	
15	Anionic Detergents (as MBAS)	23rd Ed. 917	<0.1	<0.1	mg/l	0.2	TECHNOLO.	

Count. Vo report A-10042023-4 Char 1-6/2:



(An ISO 9001:2015, ISO 45001:2018, ISIO 14001:2015 Certified) Laboratory: C43, Sector-88, Phase-II, Anida, 1, P.

Ph. No.: +91-9971912476, 9350952231 E-mail: ultraresearchlab@gmail.com Website: http://www.ultralabnoida.com



TC-8198

Contd. To report. W-10042623-t (Page 2 of 2)

				Lon	ut. His report	W+100426234	(Fape 2 03 2)
16	Sulphate (as SO ₄)	IS:3025(Part-24):2022	7.46	3.67	mg/f	200	400
17	Nitrate (as NO ₃)	1S:3025(Part-34):1988	8.13	2.15	me/t	45.	No Reinsution
18:	Alkalinity(as CaCO))	IS:3025(Part-23):1986	232	72	mg/l	200	600
19	Nickel(as N/)	IS 3025 (Part-54):2003	<0.1	<0.1	mg/l	0.02	No Relaxation
20.	Cadmium (as Cd)	IS-3025(Part-41):1992	<0.001	< 0.001	mg/l	0.003	No Relaxation
21	Lend (as Pb)	1S:3025(Part-47):1994	<0.005	< 0.005	melt	0.01	No Relusation
22	Total Chromium(asCr)	TS:3025(Part-52):2021	< 0.01	< 0.01	mg/l	0.05	No Relicution
27	Copper (as Cu)	IS:3025(Part-f2):2004	<0.01	(0.0)	mg/l	0.05	1.5
24	Total Ammonia	IS:3025(Part-34):1988	<0.5	<0.5	ma/I	0.5	No Relaximon
25	Sulphide (as H2S)	IS:3025(Part-29):1986	< 0.05	<0.05	mg/l	0.05	No Relocation
26	Zinc (as Zn)	1S:3025(Part-49):1944	<0.1	< 0.1	mg/l	- 5	15
27	Manganese (as Mn)	15:3025(Part-59):2006	<0.1	< 0.1	mg/I	0.1	0.3
28	Boron (as B)	IS:3025(Part-57):2021	<0.1	<0.1	mg/t	0.5	1
24	Selenium (Se)	IS:3025(Part-56):2003	< 0.01	10.07	mp/l	0.01	No Relaxation
30	Arienic (in: Aa)	1S:3025(Part-37):2022	< 0.01	< 0.01	mg/l	0.01	No Relaxation

End Of Report

Note:

- The results given above are related to the tested sample, for various parameters, as observed at the time of sampling. The customer asked for the above tests only.
- This test report will not be used for any publicity/legal purpose;
- 3 The test samples will be disposed off after two weeks from the date of issue of test report, unless until specified by the customer.
- 4 The Report can not be used as evidence in a court of law without the written entering of the lab.

Anomila



For ULTRA TESTING & RESEARCH LABORATORY

(Authorized Signatury



Sampling Location

Analysis Duration

ULTRA TESTING & RESEARCH LABORATORY

(An ISO 9001:2015, ISO 45001:2018, ISO 14001:2015 Certified)

Laboratory: C-43, Sector-88, Phase-II, Noida, USR,

Ph.: No.: +91-9971912476, 9350952231 E-mail: ultraresearchlah@gmail.com Website: http://www.ultralabnoida.com

	Bacteriological Quality of Drinking Water	
Report Code : W-10042023-03 Issued To	: GLOBUS ENVIRONMENT ENGINEERING SERVICES 326-ABJRD FLOOR, SAHARA SHOPPING CENTER, FAIZABAD ROAD, LUCKNOW, U.P226016, INDIA	Issue Date: 15/04/2023
Proponent Name	: Mr. Gh Ahmad Ahanger S/o Ab Razak Ahanger	
Project Name & Location	Minor Mineral Quarry Cluster (Masonry Stone) Block Khasra No: 2610 Min, Area: 5.72 Ha, Village-Khanmoh Tehsil-Panthachowk, District-Srinagar, State-J&K	
Sample Drawn On Sample Drawn By Sample Description	: 08/04/2023 : UTRL : Ground Water	

	RESULTS As per IS 10500:2012										
S.No	Parameter	Test Method	Res	sults	Units	Requirements					
			GW-5	GW-6							
1	E.coli	IS-1622	Absent	Absent	E.Coli/100m	Shall not be detectable in 100 ml sample					
2	Total Coliform	IS-1622	Absent	Absent	MPN/100ml	Shall not be detectable in 100 ml					

sample **End Of Report**

Note:-

- The results given above are related to the tested sample, for various parameters, as observed at the time of sampling, The customer asked for the above tests only
- This test report will not be used for any publicity/legal purpose.
- The test samples will be disposed off after two weeks from the date of issue of test report, unless until specified by the customer.
- The Report can not be used as evidence in a court of law without the written approval at the led

: GW-5

Kbrew

: 10/04/2023 to 15/04/2023

FOR ULTRA TESTING & RESEARCE

(Authorized Signate

GW-6

Badami Bagh Contoment



(An ISO 9001:2015, ISO 45001:2018, ISO 4.1001:2015 Certified) Laboratory: C43, Sector-88, Phase-II, Shida, U.P.

Ph. No.: +91-9971912476, 9350952231 E-mail: ultraresearchlab@gmail.com Website: http://www.ultralabnoida.com



TC-8198

Issue Date: 15/04/2023

TEST REPORT

Surface Water Sample Analysis Discipline/Group-Chemical/Water

Report Code: WW-10042023-01

ISSUED TO : GLOBUS ENVIRONMENT ENGINEERING SERVICES

326-AB, 3RD FLOOR, SAHARA SHOPPING CENTER, FAIZABAD ROAD, LUCKNOW, U.P.-226816, INDIA

Proponent Name Mr. Gh Ahmad Ahanger S/o Ab Razak Ahanger

Project Name : Minor Mineral Quarry Cluster (Masonry Stone)

Khasra No: 2610 Min, Area: 5.72 Ha, Village-Khanmoh

Tehsil -Panthachowk, District- Srinagar, State-J&K

: 08/04/2023 Sample Drawn On Sample Drawn By UTRL

Sample Description : Surface Water

Sampling Location : Sample Collected from Upstream (Jhelum River)Pantha chowk

Sampling Procedure : IS 3025(Part-01)

Sample Quantity = 2.0 Litre

Analysis Duration : 10/04/2023 To 15/04/2023

			RESUL	TS						
	ASSAURATIONS.			n beau are	Tolerance Limit as per IS:2296					
S.No	Parameter	Test Method	Results	Units	Class A	Class B	Class C	Class D	Class E	
1	pH	IS:3025(Part-11):2022	7.23	-	6.5-8.5	6.5-8.5	6.5-8.5	6.5-8.5	6.5-8.5	
2	Temperature	IS:3025(Part-09):1984	22.3	°C		-	(+)	(A)	-	
3	Turbidity	15:3025(Part-10):1984	3.1	NTU	-	-		-		
4	Conductivity @25°C	IS:3025(Part-14):2013	259.9	µs/cm.		-	-	1000	2350	
5	Total Suspended Solid	1S:3025(Part-17):2022	15	mg/l		-	-	-	- 1	
.6	Total Alkalinity (as CaCO ₃)	IS:3025(Part-23):1986	64	mg/l	-	- Sec	-	74	-	
7	Biological Oxygen Demand (Max.) (at 27°C for 3 days)	IS:3025(Part-44):1993	2.3	mg/l	2	3	3			
	Dissolved Oxygen (as O ₂) Min.	IS:3025(Part-38):1989	8.1	Pgm .	6	5.	4	- 4		
9	Calcium(as Ca)	IS:3025(Part-40):1991	17.60	mg/I	80	+		- 0.0	-	
-	Magnesium(as Mg)	APHA 3500-Mg-B 23rd Ed 2017	11.66	Pgm	24	-	84	13 II	1	
11	Charles (as C1), Max	IS:3025(Part-32):1988	19.57	mg/l	250		-	58	600	
12	Iron(as Fe)	1S:3025(Part-53):2003	0.18	mg/l	0.3		50	- THE		
13	Fluoride(as F),Max	APHA 4500 F(D) LEA 2017	0.23	mg/l	1.5	1.5	1,5/8	NEGEN	1/3	
14	Total Dissolved Solid	IS:3025(Pin 16):1984	169	mg/l	500	- 04	150DE	MANAGE	2,000	

Contd. To report Code: WW-10042823-01



(An ISO 9001:2015, ISO 45001:2018, ISO 4,1001:2015 Certified) Laboratory: C43, Sector-88, Phase-II, Minta, U.P.

Ph. No.: +91-9971912476, 9350952231 E-mail: ultraresearchiab@gmail.com Website: http://www.ultrafabnoida.com



TC-8199

Conid. To report Code: WW-18842823-01

15	Total Hardness (as CaCO ₃)	IS:3025(Part-21):2009	92.00	mg/l	300	8.	-	-	-2
16	Sulphate (as SO ₄)Max	IS:3025(Part-24):2022	27.54	mg/l	400	-	400	- ,	1000
17.	Phosphate (as P)	IS:3025(Part-31):2022	1.19	mg/l	-	+	+	-	-
18	Sodium (as Na)	IS:3025(Part-45):1993	13,70	mg/l	- 27	#2	41	141	- 32
19	Manganese (as Mn)	APHA 3500- Mn-B 23rd Ed 2017	< 0.1	mg/l	0.5	10		4	12
20	Total Chromiun(as Cr)	IS:3025(Part-52):2021	<0.05	mg/l	0.05	0.05	0.05	100	100
21	Zinc (as Zn)	IS:3025(Part-49):1994	< 0.1	mg/l	15		15	-	-
22	Potassium (as K)	IS:3025(Part-45):1993	3.42	mu/I	25	- 2		-	-
23	Nitrate (as NO ₃),Max	APHA 4500-NO3-B 23rd Ed 2017	4.90	mg/l	20	-	50	1741	-
24	Cadmium (as Cd)	IS-3025(Part-41):1992	< 0.01	mg/l	0.01	-	0.01	4	- 2
25	Lead (as Pb)	IS:3025(Part-47):1994	< 0.01	mg/l	0.1	-	0.1		
26	Copper (as Cu)	IS:3025(Part-42):2004	< 0.01	mg/l	1.5		1.5	-	1.0
27	Chemical Oxygen Demand (asO ₂)	IS-3025(Part-58):2006	16.00	mg/I	-	185	(e)	-	125
28	Arsenic (as As)	IS:3025(Part-37):2022	< 0.01	mg/I	0.05	0.2	0.2		

End Of Report

Remarks:

Class A-Drinking water without conventional treatment but after disinfection.

Class B-Water for outdoor bathing.

Class C-Drinking water with conventional treatment followed by disinefection.

Class D-Water for fish culture and wild life propagation.

Class E-Water for irrigation, industrial cooling and control waste disposal.

Note:-

- The results given above are related to the tested sample, for various parameters, as observed at the time of sampling.
 The customer asked for the above tests only.
- 2 This test report will not be used for any publicity/legal purpose.
- 3 The test samples will be disposed of after two weeks from the date of issue of test report, unless until specified by the customer.
- 4 The Report can not be used as evidence in a court of law without the written approval of the lab.

Anamily



FOR ULTRA TESTING & RESEARCH LABORATOR

MANAGEA

(Authorized Signatory)



(An ISO 9001;2015, ISO 45001;2018, ISO 140079015 Certified) Laboratory: C-43, Sector-88, Phase-II, Noida, USA Ph.; No.; +91-9971912476, 9350952231

E-mail: ultraresearchlab@gmail.com Website: http://www.ultralabnoida.com

TEST REPORT

	Surface Water Sample Analysis
Report Code: WW-10042023-01 ISSUED TO	Issue Date: 15/04/2023 ; GLOBUS ENVIRONMENT ENGINEERING SERVICES 326-AB, 3RD FLOOR, SAHARA SHOPPING CENTER, FAIZABAD ROAD, LUCKNOW, U.F226016, INDIA
Proponent Name	: Mr. Gh Ahmad Ahanger S/o Ab Razak Ahanger
Project Name	; Minor Mineral Quarry Cluster (Masonry Stone) Khasra No: 2610 Min, Area: 5.72 Ha, Village- Khanmoh Tehsil -Panthachowk, District- Srinagar, State- J&K
Sample Drawn On	: 08/04/2023
Sample Drawn By	; UTRL
Sample Description	: Surface Water
Sampling Location	: Sample Collected from Upstream (Jhelum River)Pantha chowk
Analysis Duration	: 10/04/2023 To 15/04/2023

			RESU	LTS						
37057	Parameter	Test Method	Transver!	Units	Tolerance Limit as per IS:2296					
S.No			Results		Class A	Class B	Class C	Class D	Class E	
1	Total Coliform	IS:1622	180	dPN/100m		500	5000		(+	

End Of Report

Remarks:-

Class A-Drinking water without conventional treatment but after disinfection.

Class B-Water for outdoor bathing.

Class C-Drinking water with conventional treatment followed by disinefection.

Class D-Water for fish culture and wild life propagation.

Class E-Water for irrigation, industrial cooling and control waste disposal,

Note:-

- The results given above are related to the tested sample, for various parameters, as observed at the time of sampling.
 The customer asked for the above tests only.
- 2 This test report will not be used for any publicity/legal purpose.
 - The test samples will be disposed off after two weeks from the date of issue of test report, unless until specified by the customer.
- Report can not be used as evidence in a court of law without the written approval of the tab.

FOR ULTRA TESTING & BESEARCH LABORATORY

(Authorized Signatury)

Ahoming Checked By



(An ISO 9001:2015, ISO 45001:2018, ISB 43001:2015 Certified) Laboratory: C43, Sector-88, Phase-II, Nhala, U.P.

Ph. No.: +91-9971912476, 9350952231 E-mail: ultraresearchlab@gmail.com Website: http://www.ultralabnoida.com



TC-8198

TEST REPORT

Surface Water Sample Analysis

Report Code: WW-19042023-02

ISSUED TO

Discipline/Group-Chemical/Water

Issue Date: 15/04/2023 : GLOBUS ENVIRONMENT ENGINEERING SERVICES

326-AB,3RD FLOOR, SAHARA SHOPPING CENTER, FAIZABAD ROAD, LUCKNOW, U.P.-226016, INDIA

Proponent Name

Mr. Gh Ahmad Ahanger S/o Ab Razak Ahanger

Project Name

: Minor Mineral Quarry Cluster (Masonry Stone) Block Khasri No: 2610 Min. Aren: 5.72 Ha, Village- Khanmoh Tehsil -Panthachowk, District- Srinagur, State- J&K.

Sample Drawn On

: 08/04/2023

Sample Drawn By

: UTRL

Sample Description

: Surface Water

Sampling Location

: Sample Collected from Downstream (Jhelum River)

Near Zaffron Colony Pantha chowk

Sampling Procedure

: IS 3025(Part-01)

Sample Quantity

: 2.0 Litre

Analysis Duration

: 10/04/2023 To 15/04/2023

			RESUL	LTS						
					Tolerance Limit as per IS:2296					
S.No	Parameter	Test Method	Results	Units	Class A	Class B	Class C	Class D	Class E	
1	pH	IS:3025(Part-11):2022	7.29		6.5-8.5	6.5-8.5	6.5-8.5	6.5-8.5	6.5-8.5	
2	Temperature	JS:3025(Part-09):1984	22.6	n _C	7	-			-	
3	Turbidity	15:3025(Part-10):1984	3.9	NTU	-	-	- 1	-	- 2	
4	Conductivity @25°C	IS:3025(Part-14):2013	268.7	ды/ст.	14	- 2	- 20	1000	2250	
15	Total Suspended Solid	IS:3025(Part-17):2022	20	mg/l		-		-	+1	
6	Total Alkalinity (as CaCO ₃)	IS:3025(Part-23):1986	72	mg/l	-		*	6	2	
:9	Biological Oxygen Demand (Max.) (at 27 °C for 3 days)	IS:3025(Part-44):1993	3.0	mg/l	2	3	3	-	*	
	Dissolved Oxygen (as O ₂) Min	IS:3025(Part-38):1989	7.8	mg/l	6	5	4	4	2	
0	Calcium(as Ca)	IS:3025(Part-40):1991	30,40	mg/I	80	0	22	4.1	23	
TO S	lagnesium(as Mg)	APHA 3500-Mg-B 23rd Ed 2017	6.80	mg/l	24	*	3		5	
41	Chlora & Cl).Max	IS:3025(Part-32):1988	25,44	mg/L	250		-		600	
12	Iron(as Fe M	IS:3025(Part-53):2003	0.26	-mg/l	0.3	-	50 /	RESEA	6.0	
13	Fluoride(as F),Max	APHA 4500 F(D) 23m + 2017	0.14	mg/l	1.5	1.5	1.5	TECROSICA	1	
14	Total Dissolved Solid	18:3025(Pairs 1984	175	mg/l	500	-	1500	- Indiana	V2100	

Contd. To report Code: WW-10042022-02



ULTRA TESTING & RESEARCH LABORATORY

(An ISO 9001:2015, ISO 45001:2018, ISO 45001:2015 Certified) Laboratory: C43, Sector-88, Phase-II, Minta, U.P.

Ph. No.: +91-9971912476, 9350952237 E-mail: ultraresearchlab@gmail.com Website: http://www.ultralabnoida.com



TC-8198

Contd. To report Code: WW-10042023-02

15	Total Hardness (as CaCO ₃)	IS:3023(Part-21):2009	104.00	mg/I	300	-	9		
16	Sulphate (as SO ₄)Max	IS:3025(Part-24):2022	13.19	mg/L	400	14	400	-	1000
17	Phosphate (as P)	IS:3025(Part-31):2022	1.05	mg/l	1	-		-	-
18	Sodium (as Na)	IS:3025(Part-45):1993	12.72	mg/l	7+		-04	. + :	-
19	Manganese (as Mn)	APHA 3500- Mn-B 23rd Ed 2017	<0.1	mg/l	0.5	-	-2	2	3
20	Total Chromiun(as Cr)	15:3025(Part-52):2021	< 0.05	mg/l	0.05	0.05	0.05	100	· .
21	Zinc (iis Zn)	1S:3025(Part-49):1994	<0.1	mg/l	15		15	-	
22	Potassium (as K)	1S:3025(Part-45):1993	3.18	mg/l		12	12.00		-
23	Nitrate (as NO ₃),Max	APHA 4500-NO3-B 23rd Ed 2017	5.27	mg/I	20	-	50		-
24	Cadmium (as Cd)	IS-3025(Part-41):1992	< 0.01	mg/l	0.01		0.01		1-1
25	Lead (as Pb)	IS:3025(Part-47):1994	< 0.(1)	mg/l	0.1		0.1		
26	Copper (as Cu)	IS:3025(Part-42):2004	<0.01	mg/I	1.5	-	1.5	-	-
27	Chemical Oxygen Demand (asO ₂)	IS-3025(Part-58),2006	20.00	mg/l	-	-	4	8	-
28	Arsenic (as As)	IS:3025(Part-37):2022	<0.01	rng/l	0.05	0.2	0.2	-	
		The absolute is a final fact that the state of the state	The second secon	and the same of th					

End.Of Report

Remarks:-

Class A-Drinking water without conventional treatment but after disinfection.

Class B-Water for outdoor bathing.

Class C-Drinking water with conventional treatment followed by disinefection.

Class D-Water for fish culture and wild life propagation.

Class E-Water for irrigation, industrial cooling and control waste disposal.

Note:-

- 1 The results given above are related to the tested sample, for various parameters, as observed at the time of sampling. The customer asked for the above tests only.
- This test report will not be used for any publicity/legal purpose.
- The test samples will be disposed off after two weeks from the date of issue of test report, unless until specified by the customer.
- The Report can not be used as evidence in a court of law without the written approval of the lab.



For ULTRA TESTING & RESEARCH LABORATORY

(Authorized Signatory)



ULTRA TESTING & RESEARCH LABORATORY

(An ISO 9001:2015, ISO 45001:2018, ISO 14001:3015 Certified)

Laboratory: C-43, Sector-88, Phase-II, Noida, Cal.

Ph.: No.: +91-9971912476, 9350952231 E-mail: ultraresearchlab@gmail.com Website: http://www.ultralabnoida.com

TEST REPORT

	Surface Water Sample Analysis				
Report Code: WW-10042023-02	Issue Date: 15/04/2023				
ISSUED TO	GLOBUS ENVIRONMENT ENGINEERING SERVICES 326-ABJRD FLOOR, SAHARA SHOPPING CENTER. FAIZABAD ROAD, LUCKNOW, U.P226016, INDIA				
Proponent Name	: Mr. Gh Ahmad Ahanger S/o Ah Razak Ahanger				
Project Name	Minor Mineral Quarry Cluster (Masonry Stone) Block Khasra No. 2610 Min, Area: 5.72 Ha, Village-Khanmoh Telisti -Panthachowk, District- Srinagar, State- J&K				
Sample Drawn On	: 08/04/2023				
Sample Drawn By	: UTRL				
Sample Description	: Surface Water				
Sampling Location	: Sample Collected from Downstream (Jhelum River)Near Zaffron Colony Par				
Analysis Duration	: 10/04/2023 To 15/04/2023				

			RESU	ETS					
- 33		TES AND T	1	1000	Tolerance Limit as per 18:2296				6
S.No	Parameter	Test Method	Results	Units	Class A	Class B	Class C	Class D	Class E
1	Total Coliform	IS:1622	220	PN/100	50	500	5000		

End Of Report

Remarks:-

Class A-Drinking water without conventional treatment but after disinfection.

Class B-Water for outdoor bathing,

Class C-Drinking water with conventional treatment followed by disinefection.

Class D-Water for fish culture and wild life propagation.

Class E-Water for irrigation, industrial cooling and control waste disposal.

Note:-

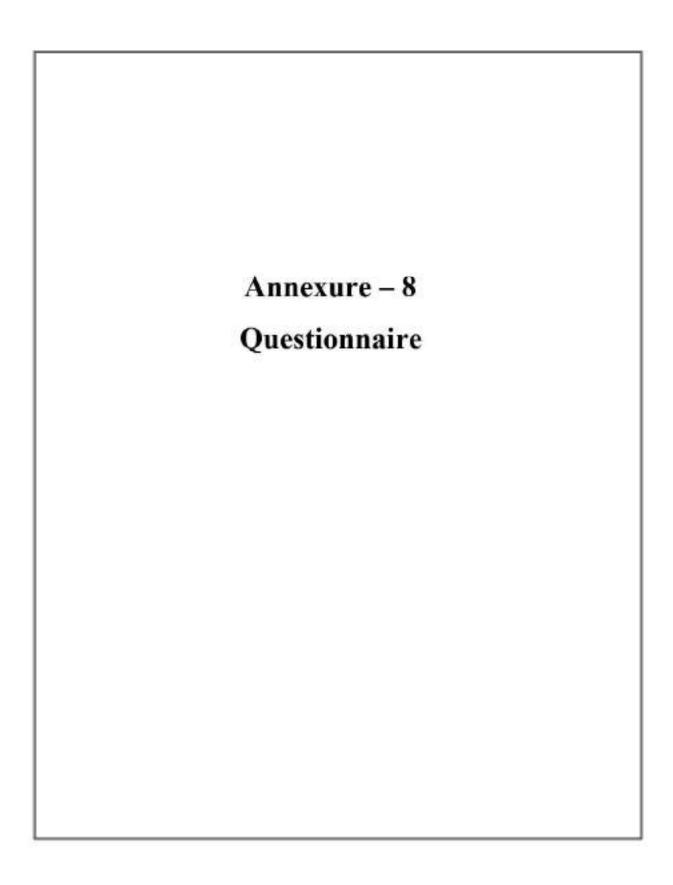
- 1 The results given above are related to the tested sample, for various parameters, as observed at the time of sampling. The customer asked for the above tests only.
- This test report will not be used for any publicity/legal purpose.
- 3 The test samples will be disposed off after two weeks from the date of issue of test report, unless until specified by the customer.
- 4 The Report can not be used as evidence in a court of law without the written approval of the Re-

For ULTRA TESTING A RESEARCH LABORATOR'S

(Authorized Signatory)

13

1



QUESTIONNAIRE FOR ENVIRONMENTAL APPRAISAL OF STONE MINING PROJECTS J&K

Note 1: Please enter v in appropriate box where answer is Yes / No

Note 2: No abbreviation to be used - Not available or Not applicable should be clearly mentioned.

Note 3: Core zone is the mining lease area.

Buffer zone is to be considered as 10 km all around the periphery of the core zone

Note 4: Please indicate source of data.

1. General Information

(a) Name of the project : Minor Mineral Quarry Cluster (Masonry Stone) Block

Mine

b) Name of the proponent : Mr. Gh Ahmad Ahanger S/o Ab Rajak Ahanger

(Partner: - Manjoor Ahmad Bhat S/o Mohd Subhan Bhat)

Mailing Address : Village-Khanmoh, Tehsil- Panthachowk

District- Srinagar, State- J&K

E-mail : No Telephone : None

Fax No. : No

c) Objective of the project : Minor Mineral Quarry Cluster (Masonry Stone) Block

Mine

d) Location of mine (s)

Khasra/Gata No./Plot No.	Village	Tehsil	District
Khasra no 2610 Min	Khanmoh	Panthachowk	Srinagar

(e	1 1	Does t	he r	nece	lezon	relia	ite !	to

(i) New mine Yes V No ...

(ii) Expansion Yes _ No ✓

(iii) Renewal of ML Yes − No ✓

(iv) Modemization Yes No 🗸

(f) Site Information

(i)	Geographical Lo	eation		
	 Latitude 	34°04'1	1.98"N to 34°04'19.22"N	i i
	• Longitude	74°57″	26.38"E to 74°57'28.19"E	
	 Survey of In 	dia Topo sheet munber	43	J/16
	Elevation ab	ove Mean Sea Level	1875m	RL
	Total mining	(lease area (în ha.)	5.72 1	ła
(ii) Dominant nature	of terrain		
	• Flat	Yes	- No	1
	 Undulated 	Yes	✓ No	**
	 Hilly 	Yes	✓ No	**
2. La	and usage of the mini	ng lease area (in ha.)		
(a) A	gricultural		No	
(b) Fo	rest		No	
(c) W	aste land		5.72 Ha	
(d) G:	razing		No]
(e) Su	rface water bodies		None]
(f) Of	thers (Specify)		No	
	Total		5.72 Ha]
3. Indica	ate the seismic zone in	which ML area falls.	Seismic Zone-V]
4. Break	ι-up of mining lease a	rea (in ha.) as per conceptu	al plan:	
	Purpose	Mining Le	ase Area	Total
		Government	Private	

Purpose		Total			
		riment	Pn		
	Forest	Others	Agri.	Others	
Area to be excavated	No	5.72 Ha	No	No	5.72Ha
2. Storage for top soil	No	121	No	No	70

3. Overburden / Dumps	No	(0 0 0)	No	No	*
4. Mineral storage	No	23472	No	No	23
5. Infrastructure (Workshop, Administrative Building)	No	0.00	No	No	0.00
6. Roads	No	959	No	No	*
7. Parking for trucks/tippers	No		No	No	*
8.Other (Balance undisturbed land)	No	0.00	No	No	0.00
TOTAL		5.72 Ha	\$	337	5.72 Ha

5. Distance of water bodies (in km/Meters)

Distance from	River Bank *	Other Water bodies * lake / Nalla etc. (specify)
Mining lease boundary	*	River: Jhelum River, 6.64 Km, SW Water body: Lokut Dal, 8.43km, NW, Dal Lake, 8.80km, NW, sardal Lake, 6.10km, S
Ancillary facilities	Not Applicable	Not Applicable

^{[*} From highest flood line / high tide line]

Indicate aerial distance from the periphery of core zone (up to 10 km):

S. No.	Areas	Name	Aerial distance from (in km.)		
			Core *	Buffer* Zone	
1.	National Park / Sanctuary	No	No	No	
2.	Biosphere Reserve / Tiger Reserve / Elephant Reserve / any other Reserve	No	No	No	
3.	Forest (RF / PF / unclassified)	No	No	No	
4.	Habitat for migratory birds	No	No	No	
5.	Corridor for animals of schedule I & II of the Wildlife (Protection) Act, 1972	No	No	No	
6.	Archaeological sites ,* Notified	No	No	No	
7.	Defense Installation	No	No	No	
8.	Industries / Thermal Power Plants	No	No	No	

9.	Other Mines	Yes	- 1	I - 8
10.	Airport	No	12	18
11.	Railway Lines		-	
12.	National / State Highways	NH 1A		- 6.52 Km, SW
13.	Critically polluted area	Nil		
14.	Inter-state boundary	Nil	-	*

^{[*} Buffer zone is to be considered as 10 km all around the periphery of the core zone].

7. Description of flora & fauna separately in the core and buffer zones.*

[*Consult the Wildlife (Protection) Act, 1972 as amended subsequently and list species with (1) Common name (2) Scientific name and (3) under which schedule of the Wildlife (Protection) Act the identified species fall. Get the list authenticated by an Expert in the field / credible scientific institute / University / Chief Wildlife Warden Office. Information to be based on field survey.]

A.	Flora	Core Zone	Buffer Zone
1.	Agricultural crops	Not Applicable	None
2.	Commercial crops	Not Applicable	~
3.	Plantation	Not Applicable	12
4.	Natural vegetation / forest type	Not Applicable	-
5.	Grass lands	Not Applicable	*
6.	Endangered species	Not Applicable	Nil
7.	Endemic species	Not Applicable	Nil
8.	Others (Specify)	5225	Nil
В.	Fauna	Not Applicable	Nil
1	Total listing of faunal elements	Not Applicable	Nil
2.	Endangered species	Not Applicable	Nil
3,	Endemic species	Not Applicable	Nil
4.	Migratory species	Not Applicable	Nil
5.	Details of aquatic fauna, if applicable	Not Applicable	A46.

8. Production of mineral(s) and life of mine

(a) Rated capacity of mine (Tonnes/annum)

200000 TPA

(b) Lease period (Years)

5 year

- 9	c)			ise (DD /MM/YY			
(6	d)		e in case of exis			4	
		(i)	Date of open	ning of mine			
		(ii)	Production is	in the last 3 years			
		(iii)		oduction for the i			
			3 years from In MTPA.	year to y	year 4 th year	5th year 6th y	
		(iv)		ning was suspend	ed after Yes	- No	
			opening of the	he mine?			
			If yes, detail	s thereof includir	ng last production	Not Applicable	
			figure and re	eason for the sam	e.	197	
(4	e)	Whet	her plans & sec	tions provided?	Yes	y No	
			thod of mining				
	Tpc	anti 100	mou or mannig	5 operations		NECESTRALES ENVIRON	
	TY			E		METHOD	
		Openc	east	-	Manual	No	
			387.57	- EX	176/1009-1007	7 8220	
	3	Undergr	ound	No	Semi-mechan	ized 🗸	
		Botl	67	No	Mechanize	d No	
		15722				E	
0. N	line	details				Opt.	
(:	a)	Open	cast mine				
6	i)	Stripp	oing ratio (mine	eral in tons to ove	er burden in m³)	1:16	
6	ii)	Ultim	ate working de	pth (in m bgl)		8-12(average	
v.	iii)	Indias	sta measant social	king depth in cas	a of		
T)	122)		ng mine (in m	CU - CO III	eor	NA	
	vi)	Minin	ng Pian				
(• H	eight and widtl	h of the bench in		Not Applicable	
6		aste.		3707144791500			
(
(1			eight & width	of the bench in o	re body	6m & 12m	

closure of the mine.

11.	Surf	ace drainage pattern at	mine site			
(a)		ther the pre-mining surfa	ce drainage pla	n Y	es	No 🗸
(b)	Do yo in the stage indic diver route	ou propose any modifica- existing natural drainag? If yes, when Provide ating contours, dimension ted, direction of flow of changes, if any i.e. real other water body falling	e pattern at any location map ns of water bod f water and pro lignment of rive	y to be posed er /nollah/		No 🗸
12.	Vehi	cular traffic density(ou		ea) e of vehicles	No. of v	ehicles per da
(a)	Exist	ing	Yes	+	No	
(b)	After	the proposed activity	Yes		No	-
(c)	Netw	her the existing road ork is adequate? provide details of altern	Yes ative Proposal?	v	No	
13.	Load	ling, transportation and	unloading of	mineral and	over burden o	n surface:
(a)	Manu	ial	Yes [- 8		1
b)	Tubs	etc. Yes	No	±		1
c)	Scrap	er, shovels, dumpers / tr	ucks Yes	1	Γ	
d)	Conv	eyors (belt, chain, etc.)	Yes No		Ī	1
(e)	Other	rs (specify).Yes N	io [= 1	Ì	- T
14.	Mine	ral(s) transportation o	itside the ML	area		
	W.W.		Qty. (in TPI	O) Percen	tage (%) Len	gth (in km)
	(a)	Road	-	- -		
	(b)	Water ways	*		•	888
	(c)	Others (Specify)	25			
	(d)	Rope way	-		8]	[G
	(e)	Pipeline			5.1	[S#8
		Lotal	NO	T =	7.0	T 100

15. Water Requirement (per day)

Purpose	Avg. Demand	Peak Demand
A. Mine site		
Mine operation	1.0 KLD	
Land reclamation	0.0 KLD	
 Dust suppression 	5.67 KLD	_
4. Drinking	0.51KLD	2
5. Others (Plantation)	2.85 KLD	-
Total	10.03 KLD	-

16. Source of Water Supply*

S. No.	Source	m³/day
1	River (name)	None
2	Ground water	0.0
3	Other surface water bodies (specify)	Potable water tankers will be purchased

^{[*}Annex a copy of sanction letter / permission from the concerned authority (Central Ground Water Authority in case of ground water abstraction is from notified area / State Ground Water Board in case of non-notified area / State Irrigation Department for surface water pumping) for drawing water.]

17. Ground water potential of the study area: Ground Water Availability

(Concerned development block)

(a) F	Range of	water	table	(m	ngi)
-------	----------	-------	-------	----	------

Pre-monsoon (April/May)

Core Zone

Buffer zone

30

(ii) Post-monsoon (November)

35

Core Zone

40

Buffer zone

(b)	Net	t annual ground water availability (million m'/ year, from Secondary	y source)
	*	By ground water table fluctuation method	NA
	7	By rainfall infiltration factor method.	NA
(¢)		Stage of ground water development in %	NA
(d)		Estimated draft through mine discharge (million m3/ year)	NA
(c)		Net annual ground water availability (million m3/year)	NA
(f)		Stage of ground water development in %	NA

17.1 Water Demand - Competing Users of the Water Source

S.No. Usage		o. Usage Present Consumption (m²/day)		as per l	al proposed ocal plan /day)	Total (M³/Day)	
		Surface	Ground	Surface	Ground	Surface	Ground
1	Drinking	-	-	-8	**	-	
2.	Irrigation	•	-	- 8	*	1000	*
3.	Industry	823	24	±8	**	-	-
4.	Mining		100	20	(2.1)	2002	201
5.	Others (Domestic purpose)	San		22	-	-	
	Total			-			-

17.2 Waste Water Management

Mine

(a)

(ii) (iii)

(i)	Mine water discharge during	
	Lean period	Nil

Daily average discharge (m³/day) from different sources

 Lean period 	
Monsoon period	Nil
Workshop	Nil
Domestic (mine site)	Nil
Others (Specify)	Nil
	-

Total

(c)		for treatment process a tity of water recycled/re		recycled	in				
*CF.)	575000	(i) Percentage	. 33 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	1000 P. 2000	000000	Not App	licable		
		(ii) M³/day				+			
(d)	Doint	of final discharge		Yes	No			v	1
(u)	roun	or man machinge		1 0				*	
		T-15	212	-1		and the second		Seams	
		Final Po	mt		Qua	ntity discha		r/day)	
		1. Surface	2757 377			Zero D	ischarge		
		(i) Agricultura				Y	_		
		(ii) Waste land				10	-		
		(iii) Forest land	ı.			3.5	-		
		2. River/nallah							
		3. Lake				99	-		
		4. Others (specify)	K)			3	-		
		Total	1				21		
(e)	Users	of discharge water				-			
	(i)	Human	Yes	- 8		No L	Ä.		
	(ii)	Livestock	Yes	12		No [V.		
	(iii)	Irrigation	Ves	1.4		No.	¥		
	(iv)	Industry	Yes	=	7	No [v.		
	(v)	Others (specify)		-			-		
					Not A	pplicable			
(f)	Detai	ls of the river /nalah, if	final efflue	ent is / wil	I be disc	harged (cus	ecs)		
1000	(i)	Average flow rate		Not A	pplicable		ACCE OF		
	(ii)	Lean season flow rat	e	Not A	pplicable				
	(iii)	Aquatic life	-		Yes [No		
	(iv)	Analysis of river wat	ter 100 met	ers	Yes [No	-	(#)
	30370	Upstream and 100 m of discharge point su	eters down		2000	-			¥

19. Human Settlement:

	Core Zone	Buffer Zone
Population*	Nil	126989
No. of villages	Nil	35
Number of households village-wise	Nil	389

^{[*} As per latest census record or actual survey]

20. Environmental health and safety

(a) What major health and safety hazards are anticipated?

N	'n	ne	
+2	w	***	

(b) What provisions have been made/proposed to be Made to conform to health and safety requirements? First aid kits will be made available on the site for any unforescen mishappening + a standby vehicle to carry the injured person (if any) has been proposed as a safety measure.

PPE (Personal protective equipment) such as dust mask, ear plug, muffler, safety dress, safety shoes regular health checkup of the mine worker will be carried out.

- (c) In case of an existing mine
 - (i) Comprehensive report on health status of the workers as under the Mines Act.

Vac	
1 08	

No v

(ii) Ambient air quality- (PM₁₀ PM_{2.5}, SO₂&NO₂).

2000	
Vine	-
4.50	0 00

No -

21. Environmental Management Plan

Salient features of environmental protection measures.

S. No.	Environmental issues*	Already practiced, if applicable	Proposed
1	Air pollution	Nil	Water will be sprinkled on service roads, Over loading of tippers will be avoided and consequent spillage. Air quality shall be regularly monitored. Wet drilling operation will be practiced if and when required to control dust.
2	Water pollution	Nil	Check-dams will be provided, as required, Monitoring of water quality of mine discharge to local natural slope and

			domestic water will be conducted.
3	Water conservation	Nil	Water will be stored in the mining pit is utilized in sprinkling, drilling and blasting
4	Noise pollution	Nil	 Hearing protection devices (Ear plugs and ear muffs) is being provided to the drill machine operators and dumper drivers. Noise level is maintained below 90dB.
5	Solid waste / Tailings	Nil	There is no solid waste because Minor Mineral Quarry Cluster (Masonry Stone) 100% use in crusher
6	Land degradation	Nil	Check-dams will be provided to prevent land degradation.
7	Erosion & Sediment	Nil	Check-dams will be provided to prevent soil erosion.
8	Top soil	Nii	Only small quantity of Top soil will be generated so stacked carefully and used for plantation purpose
9	Ground vibration	Nil	Suitable blast design will be developed with the help of experts, to minimize effect of vibration on surrounding community.
10	Wildlife conservation	-	-
-	Forest protection	-	le:
12	Others (specify)	+	

[* As applicable]

22.	Comment of the second state of the second se	
A	Compliance with environmental safeguards (For existing in	CHIEF P

(a)	Status of the compliance of conditions of Environmental Clearance, issued earlier By MoEF, if any, enclose.	Yes [-88	No	*
(p)	Status of the compliance of 'Consent to Operate' issued by SPCB, if any, enclosed.	Yes	+:	No	4
	Operate 18sted by SPCB, 11 any, enclosed.	1.63		1 280 [
(c)	Latest environmental statement enclosed.	Yes	- 55	No	4
23.	Mine closure	7/2			=3
(a)	Have you planned mine closure?	Yes	**	No	1
(b)	Submit a conceptual Mine Closure Plan.	Yes	+	No	1
(c)	If yes, indicate estimated amount for impleme same (in Rs. lakhs)	enting the		5	

Executive Summary of Draft EIA Report

at

Minor Mineral Quarry Cluster (Masonry Stone) Block At

> Khasra no.- 2610 Min, Area- 5.72 Ha. Village- Khanmoh, Tehsil- Panthachowk, District- Srinagar, State- J&K.

Schedule,	1(a) i,
Category	BI
Land/Plot Area/Revised Area	5.72 Ha
Production Capacity	2,00,000 MT/ annion
ToR Letter No.	JKEIAA/2021/410/8096-99, Dated 19.06.2023
Lab Used	Ultra Testing & Research Laboratory
Approved By	NABL
Monitoring Period	March to May 2023 (Summer Season)

Submitted by

Mr. Gh Ahmad Ahanger S/o Ab Rajak Ahanger (Partner:- Manjoor Ahmad Bhat S/o Mohd Subhan Bhat) Address-Village-Khanmoh, Tehsil- Panthachowck District- Srinagar, State- J&K.

Prepared by



ENGINEERING SERVICES

Excellence in Environmental Sustainability

326-AB, 3rd Floor, Sahara Shopping Center, Faizabad Road, Lucknow-226016 Contact: 0522-4037540,+91-7398540583 Certificate No. NABET/ELA/1821/LA0034, Extension of Validity Till September 29/2021

EIA NOTIFICATION 2006 APPENDIX III A (See Paragraphs 7)

EXECUTIVE SUMMARY OF EIA REPORT

S. No.	CONTENTS	Page No.
	EXECUTIVE SUMMARY OF EIA REPORT	11/1-11/10
11.1	PROJECT DESCRIPTION	
11.2	DESCRIPTION OF THE ENVIRONMENT	
11.3	ANTICIPATED ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES	
11.4	ENVIRONMENTAL MONITORING PROGRAMME	

Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khammoh, Tehsil: Panthachowk District: Srinagar, State: J & K. Executive Summary

EXECUTIVE SUMMARY

11.1 PROJECT DESCRIPTION

11.1.1 Introduction of the Project & Proponent

The proposed project is Minor mineral (River bed material) Mining Project which is proposed by Mr. Gh Ahmad Ahanger. The proponent has applied for mining lease of Minor Mineral Quarry Cluster (Masonry Stone) Block at Khasra no.- 2610 Min, Area- 5.72 Ha. Village- Khanmoh, Tehsil-Panthachowk, District- Srinagar, State- J&K as per the provisions of EIA Notification 2006. It has been proposed to collect 2,00,000 MT per annum of Minor Mineral Quarry Cluster (Masonry Stone) Block.

Therefore, as per MoEF&CC, GoI O.M. No. L-11011/175/2018-IA-II (M) Dated: 12/12/2018 if a cluster or an individual lease exceeds 5.0 Ha the project is classified as Category – B since the project does not attracts the General Condition.

The mining lease area falls under cluster (if periphery of one lease is within 500 meters of the other lease) which is ≥ 5.0 ha therefore as per MoEF&CC GoI O.M. No. L-11011/175/2018-IA-II (M) Dated: 12/12/2018. It is applied under Cat-B1 and Cluster Certificate is attached as Annexure.

Table No.11.1: Project Details

On-line Proposal No.	SIA/JK/MIN/573			
File No. allotted by SEIAA, JK	SEAC/JK/20/385			
Name of Proponent	Mr. Gh Ahmad Ahanger S/o Ab Razak Ahanger (Partner:- Manjoor Ahmad Bhat S/o Mohd Subhan Bhat			
Full correspondence address of proponent	Village-Khanmoh, Tehsil- Panthachowk District- Srinagar, State- J&K			
Name of Project	Minor Mineral Qu	arry Cluster (Masonry S	Stone) Block	
Project location (Plot/Khasra/Gate No.)		Min. Area: 5.72 Ha, Vill owk, District: Scinagar, S		
Name of Minor Mineral	Minor Mineral Qu	narry Cluster (Masonry S	Stone) Block	
Type of Land	State Government Land			
Land utilization Pattern	The area is barren land.			
Sanctioned Lease Area (in Ha)	5.72 Ha			
Schedule (as per EIA notification 2006)	1(a)i			
Category of Project	B(1)			
Proposed Production	2,00,000 MT/Annum (Average Annual Production)			
Method of Mining	Open Cast, Semi-mechanized			
Sanctioned Period of Mine lease	New Mine, The applicant being the highest bidder was issued with Letter of Intent (LOI) by DGM office vide letter No. 373/MCC/DGM/CQK/16/3520-22 Dated: 22-08-2017 for the exploitation for 5 Years.			
Pillar Coordinates	Pillar	Latitude	Longitude	
	RP	34°04'11.67"N	74°57'41.03"E	
	A	34°04'13.26"N	74°57'44.07"E	

Project: Minor Mineral Quarry Cluster (Masonry Stone) Block

Project Proponent: Mr. Gh Ahmad Ahanger & Manjoor Ahmad Bhat Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khamnoh, Tehsil: Panthachowk District: Srinagar, State: J & K.

Executive Summary

	В	34°0	4"15.05"N	74°57'39.44"E
	c	34°0	4'13.29"N	74°57'36.34"E
	D	100000	114.19"N	74°57'33.35"E
	Ē	100000000000000000000000000000000000000	4"11.98"N	74°57'28.19"E
	F	34°0	4'14.72"N	74°57'26.38"E
	G	U 2 - 113 20000	19.22"N	74°57°33.18"E
	н		4'18.21"N	74°57'42.61"E
Toposheet No	43 J/16	1 2500	15000000	
Total Geological Reserves	22,16,738 N	TT .		
Total Mineable Reserves	20.81.877 N			
Proposed Production/year in Mining Plan Approval Letter		T/Annum (Avera	ige Annual Pro	duction)
Production of mine/day	666.66 T/da	y		
No. of Working days	300 Days			
Working hours/day	8 hours/day			
No. of Workers	34 Manpow	er		
No. of vehicles movement/day	67 Units (A	ssumed Loading	Capacity: 10 7	Connes/Unit)
Altitude of the Area	The Highest Point: 1875 mRL The Lowest Point: 1737 mRL			
Depth of Mining	8-12 (average Depth) (Source: Approved Mining Pion)			
Ground Water Level	1.50 − 2.50 Source:http://cg	mbgl wbgov.w.Dimiri Pro	fle ladk irwagar	pið
Nearest metalled road from site	Metalled Ro	oad 0.35 km awa	y from the min	e site.
Water Requirement	Source	Purpose	Detail	Avg. Demand Day
	Portable Tankers	Drinking @15lpcd/wor ker	34 workers x 15 lpcd = 510 Lit/day	0.510 KLD
		Land reclamation / plantation @5 Lit/Tree (@ 100 trees/ Ha)	570 Trees x 5 1/day = 2850 Lit/day	2.85 KLD
		Mine		1.0 KLD
		Operation		- 32 - 22 - 2
		Dust suppression @1 Lit/Sq.m	Haul Road Area - (810 m Length x	5.67 KLD

Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachowk District: Sringgar, State: J & K. Executive Summary

		lit/Sq.m = 5670 Lit/day	
	Total		10.03 KLD
Name of QCI Accredited Consultant with QCI No. and period of validity.	GLOBUS Environment Er Certificate No. NABET/EL/ Valid Till August 24/2024		
Any liftgation pending against the project or land in any court	No		
Total Proposed Project Cost	Rs. 106.53 Lakhs		
Proposed CER cost	Rs. 2.13 Lakhs (2% of the to	otal Project Co	ost)
Proposed EMP cost	Rs. 28.11 Lakhs (Haulage Plantation & Environmental		
Length and breadth of Haul Road	Haul Road Length 810 m L	ength & Widt	h7m
No. of Trees to be Planted	570 trees will be planted		
The second secon			

11.2 DESCRIPTION OF ENVIRONMENT

11.2.1 BASE LINE DATA: This section contains the description of baseline studies of the 10 km radius of the area (Core Zone and Buffer Zone) surrounding the mine lease area located at Minor Mineral Quarry Cluster (Masonry Stone) Block at Khasra no.- 2610 Min, Area- 5.72 Ha. Village-Khanmoh, Tehsil- Panthachowk, District- Srinagar, State- J&K. The data collected has been used to understand the existing environment scenario around the proposed mining project against which the potential impacts of the project can be assessed.

Environmental data has been collected in relation to proposed mining for:-

(a) Air

(b) Noise

(c) Water

(d) Soil

(e) Ecology and Biodiversity

(f) Socio-economy

Table 11.2: Baseline Environmental Status

Attribute	Baseline status
Ambient Air Quality	Ambient Air Quality Monitoring reveals that the maximum & minimum concentrations of PM ₁₀ & PM ₂₃ for all the 8 AQ monitoring stations were found to be within the prescribed limit of CPCB. As far as the gaseous pollutants SO ₂ and NO ₂ are concerned, the prescribed CPCB limit of 80µg/m ³ for residential and rural areas has never been surpassed at any station.
Noise Levels	Noise monitoring was carried out at 8 locations. The results of the monitoring program indicated that both the daytime and night time levels of noise were well within the prescribed limits of NAAQS, at all the four locations monitored.
Water Quality	8 Groundwater samples and 2 surface water samples were analyzed and concluded that: The ground water from all sources remains suitable for drinking purposes as all the constituents are within the limits prescribed by

Project: Minor Mineral Quarry Cluster (Masonry Stone) Block

Project Proponent: Mr. Gh Ahmad Ahanger & Manjoor Ahmad Bhat Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khamnoh, Tehsil: Panthachowk District: Srinagar, State: J & K.

Executive Summary

3	drinking water standards by Indian Standards IS: 10500.	
Soil Quality	Samples collected from identified locations indicate the soil is sandy Clay. Sandy Clay Loam type and Clay loam type.	
Ecology and Bio There are no Ecologically Sensitive Areas present in the study a liversity		
Socio-economy	The implementation of the mining project in the district will throw opportunities to local people for both direct and indirect employment. The study area is still lacking in education, health, housing, water, electricity etc. It is expected that same will improve to a great extent due to propose mining project and associated industrial and business activities.	

Table 11.3 ENVIRONMENTAL MONITORING

PARAMETERS	DESCRIPTION PM10−58.41 (Min.) at AQ-3 to 68.1 μg/m3 (Max.) at AQ-1 PM2.5 − 30.43 (Min.) at AQ-2 to 38.6 μg/m3 (Max.) at AQ-1 SO2 − 6.45(Min.) at AQ-3 to 12.53 μg/m3 (Max.) at AQ-8 NOx − 14.39(Min.) at AQ-3 to 22.81 μg/m3 (Max.) at AQ-5 CO -<0.5 (Min.) to <0.5 μg/m3 (Max.) Noise level during day time − 50.6 dB (A) (Min.) at AQ-4 to 53.2 dB (A) (Max.) at AQ-1		
Ambient Air Quality Monitoring Noise Quality Monitoring			
		s during night time - 41.2 dB (A) (Min.) at AQ-5.6 to 42.7 dB (A)	
Water Quality Sampling & Analysis	Ground Water	Analysis results of ground water in the study area reveal the following: • pH 7.24(Min.) at GW-2 to 7.51(Max.) at GW-6, • Total Hardness 84 (Min.) mg/l at GW-6 to 252 mg/l (Max.) at GW-5, • TDS 133 (Min) mg/l at GW-6 to 380 mg/l (Max) at GW-5, • Sulphate 3.67 (Min.) mg/l at GW-6 to 13.31 mg/l (Max.) at GW-4, • Chloride 19.57(Min.) at GW-6 to 31.31 mg/l (Max.) at GW-2	
	Surface Water	The parameters results are as follows: PH value is 7.23 to 7.29 TDS was observed as 169 mg/l to 175 mg/l Chlorides were found as 19.57 to 25.44 mg/l Sulphates were found as 13.19to 27.54 mg/l Total hardness was observed 92 to 104 mg/l.	
Soil Quality	◆ Total Kjele ◆ Phosphoro		

Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachowk District: Srinagar, State: J & K. Executive Summary

11.3 ANTICIPATED ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES 11.3.1 BIOLOGICAL ENVIRONMENT

The biological environment mainly consists of flora and fauna and its relationship with surroundings. Biological environment includes species of native plants and animals and one may measures the degradation of environment by noting the decrease in the commonly occurring species. As regards to fauna, the activity will have negative impact on them. At the beginning the animal will recede to distances due to noise generated from Transportation. They will trace back to an optimum distance after some time, on being habituated by disturbances. After the mining activity and growth of forest local fauna will again be reinstated even in a better way due to the generated forest cover in lieu of the existing denuded tract of land. There is no rare and endangered fauna species close to the mining area. Considering the small area of mining, insignificant impact is envisaged on biological environment.

11.3.2 Direct Impact:

The Minor Mineral Quarry Cluster (Masonry Stone) Block which proposes production of 2,00,000 MT/Annum of minor mineral. No direct impact is anticipated from the project on biodiversity.

Indirect Impact:

The major indirect impact include following.

- Mining activity is likely to affect the movement of the animal and birds.
- Increase in noise may affect the feeding, breeding and movement of animals.
- Likely settling of dust to be generated by movement of vehicles on leaves may results in to stunted growth of vegetation and may also affect the capacity of production.
- Large numbers of labor population will influx the area during mining operation.
- The major threat to surrounding flora is through collection of fuel wood by labor for cooking purposes and thereby loss of trees.

Cumulative Impact:

- Indirect and cumulative impacts are associated with various mining activities such as clearing of vegetation for establishment of various project units, movement of vehicles, Mining equipment s& machineries etc, interferences due to influx of labours etc.
- The losses of land for various project units will also not adversity affect the fauna as similar habitat is present throughout the project immediate influenced area. Therefore, impact due to loss of habitat for birds, reptiles and mammals of the project area is not expected.

11. 3.2: LAND ENVIRONMENT

The sanctioned MLA is a virgin land and the mining for the extraction of granted quantity of minor mineral will be started after the grant of environment clearance. At present, there is no any type of pit is present in the mining lease area. However, at the end of the first year period of mining lease granted period the impact on land use will be limited.

11.3.3: AIR ENVIRONMENT

Anticipated impacts and evaluation:

In mining operations, loading, transportation and unloading operations may cause deterioration in air quality due to handling dry materials. In the present case, only wet materials will be handled, thus climinating problems of fugitive dust.

Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khammoh, Tehsil: Panthachowk District: Srinagar, State: J & K. Executive Summary

MITIGATION MEASURES:

The collection and lifting of minerals will be done manually. Therefore the dust generated is likely to be insignificant as there will be no drilling. The only air pollution sources are the road transport network of the trucks. The mitigation measures like the following will be resorted.

- Water sprinkling will be done on the roads regularly. This will reduce dust emission further by 75%.
- Care will be taken to prevent spillage by covering the carrying vehicles with tarpaulin and sprinkling of water, if dry.
- Fortnightly scraping of road in order to keep the roads almost leveled. This will ensure smooth flow of vehicles and also prevent spillage.
- Overloading will be kept under check by giving prior awareness.
- Proper Tuning of vehicles to keep the gas emissions under check.
- Plantation of trees along the roads to help reduce the impact of dust in the nearby villages.
- Care will be taken to use PUC certified trucks.

11.3.4: WATER ENVIRONMENT

- Various surface and ground water samples are collected and analyzed in the reputed laboratory. The report indicated that the water available in the area is potable and all values are within the permissible limit.
- Hand pumps and dug wells are situated within 500 m Core Zone in which drinking water facilities are available.
- No pumping of water will be done in any surface body directly. The mine water will be pump out during rainy seasons. The pumped out water will be stored and utilized for sprinkling of water on haul roads, watering of plants, drilling and other dust suppression measures.
- Post-monsoon and Pre-monsoon groundwater level will be monitored regularly through nearby hand pumps and dug wells.
- Awareness programs will be taken up to educate public for conservation of water.
- Mobile toilets will be used at site.
- ML area under reference is water scarce and water reservoir will be a source of water to villagers. It will also attract birds and will improve aquatic environment.

11.3.5 NOISE ENVIRONMENT

Anticipated impacts and evaluation:

The mining methodology is done in semi mechanized process so there will not be any major impact on noise level due to the mining. The only impact will be due to transportation of materials by trucks.

- Mental disturbance, stress & impaired hearing.
- Decrease in speech reception & communication.
- Distraction and diminished concentration affecting job performance efficiency.

Mitigation measures

- Well maintained vehicle will be used which will reduced the noise level.
- Plantation: Plantation of trees along the road will be done to dampen the noise, if possible.
- The vehicles will be maintained in good running condition so that noise will be reduced to minimum possible level.

Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khammoh, Tehsil: Panthachowk District: Srinagar, State: J & K. **Executive Summary**

- Awareness will be imparted prior to mining operations that smoke silencers remain in a good conditions not to generate noise.
- In addition, truck drivers will be instructed to make minimum use of homs at the village area.
- Where ever space is made available by the authorities' plantation will be done and also post Plantation care will be provided.

11.4 ENVIRONMENT MONITORING PROGRAME

Regular Monitoring of all the environmental parameters vic., air, water, noise and soil as per the formulated program based on CPCB and MoEF&CC guidelines will be carried out every year in order to detect any changes from the baseline status.

Table 11.4: Monitoring Schedule & Parameters

S.No.	Attributes	Parameters for monitoring	Frequency	Locations		
1.	Meteorology	Wind speed, Wind direction, Dry bulb temperature, Wet bulb temperature, Relative humidity, Rainfall	Minimum 1 site in the project impact area	Regularly in one season by Weather Monitoring Station		
2,	Ambient Air	mbient Air PM ₁₆ , PM ₂₅ , SO ₂ , As per CPCB/ NOx, Free Silica MoEF&CC requirement i.e. 24 hourly monitoring for one month in each season except monsoon.		wind direction /impac zone (core Zone) & seven locations in Buffe zone.		
3.	Noise	Noise level at Day and Night - Leq dB (A), Day Time: Leq (6.00 AM to 10.00 PM), Night Time: Leq (10.00 PM) To 6.00 AM)	Periodic/ As per CPCB norms	One location in core Zone (Mine Boundary) & High noise generating areas within buffer Zone		
4.	Water Quality & Surface Water Quality	TDS, Total Hardness, Calcium hardness, Magnesium hardness, Chloride, Fluoride, Sulphate, Nitrates, pH ,Alkalinity, Iron. Odour, Zinc, Cyanide, Taste, Copper & Microbiological Parameter As per IS	Diumal and Season wise As per IS 10500-2012	Set of grab samples during pre monsoon for ground and surface water for 10 km distance.		

Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachowk District: Srinagar, State: J & K.

Executive Summary

		10500:2012		
5.	Soil quality Monitoring	pH, Bulk Density, Soil texture, Nitrogen, Available Phosphorus, Potassium, Calcium, Magnesium, Sodium, Electrical Conductivity, Organic Matter, Chloride	Yearly	8 location in the Project impact area
6.	Socioecono mic Status	Demographic structure Infrastructure resource base Economic resource base Health status: Morbidity pattern Cultural and aesthetic attributes Education	Yearly	Socio -economic survey is based or proportionate, stratified and random sampling Method. Secondary data from census records statistical hard books. Topo-sheets, health records and relevant official records available with Govt. Agencies.
7.	Ecological Impact	Green Belt Development Conservation of Wild Life	Yearly	Survey Secondary data from statistical hard books, toposheets and relevant official records available with Govt. agencies

Table 11.5: Budget Allocation for Environment Monitoring Programme

	TOTAL		5,36,000
6	Socio Economic Survey	£6	80,000
5	Biodiversity Survey	5-7-7-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	1,00,000
4	Soil Quality	@10000 x 8	80,000
3	Ambient Noise Level	@2000 x 8	16,000
2	Water Quality	@10000 x 10	1,00,000
1	Air Quality:	@20000 x 8	1,60,000

Corporate Environment Responsibility (CER)

- Total Cost of the Project = 106.53 Lakhs
- > 2 % of the total Project Cost will be expended towards CER i.e. 2.13 Lakhs

As Per The G.O.I Notification, File No. 22-65/2017-I A, III dated on 1st May, 2018

Khasra No: 2610 Min , Area: 5.72 Ha, Village: Khanmoh, Tehsil: Panthachowk District: Srinagar, State: J & K. Executive Summary

Table 11.6: The Proposed Cost for CER Plan

This is the Proposed cost CER Plan, Activities and actual cost will be Finalized as per the Actual need of the area. (ON THE BASIS OF NEED BASE ASSESSMENT SURVEY)				
S. No.	Activity	Cost per Unit (Rs)	Quantity	Total (Rs)
1.	Solar street light Installation in rural areas	15,000	8	1,20,000
2.	Toilets for women nearby primary school	60,000	1	60,000
3.	Awareness Program on Personal Hygiene (COVID 19) and distribution of Mask and Sanitizers	33,000	•	33,000
	Total Proposed CER Cost			2,13,000 (2.13 Lakhs)

Conclusion:

In general, socio-economic environment will have positive impact due to the mining project in the area. The lessee has already allocated Rs 2.13 Lakhs (As per demand) for Socio-Economic measures.

Capital cost of the project (in Rs. Lac) (Based on latest estimate)

26. Amount earmarked for socio-economic

106.53

25. Cost of Environmental Protection Measures

S. No.		Capital cost		Annual recurring cost	
		Existing	Proposed	Existing	Proposed
1	Pollution Control(Separately provide break-up) It includes mitigation measures, like water sprinkling, retaining walls etc.		12.00 Lakhs		1.0 Lakhs
2	Pollution Monitoring (Separately provide break-up)		5.40 Lakhs		0.5 Lakhs
3	Occupational Health		3.72 Lakhs		0.25
4	Green Belt Mine Roadside/Settlements		5.04 Lakhs		0.25
5	Reclamation / Rehabilitation of mined out area				
6	Others (specify)				
	Total		26.16 Lakhs		2.0 Lakhs

,	Welfare measures for the nearby villages	2.13 La	kh		
	Other than R&R plans	19 7975	7.2905		
27.	Whether the following approvals* (wherever applicable) have	e been obtair	red?		
	(i)Mining plan approval from Directorate of Geology & Mining	Yes [1	No L	*
	(ii) 'Consent for Establishment' from the State Pollution Control	Board Yes	2/1	No	¥
	(iii)Mining plan approval from IBM/Ministry of Coal	Yes	20	No [*
	(iv) In case of existing mines, mining scheme approval from Directorate of Geology & Mining	Yes	無	No [~
	(v) Forestry clearance under FCA, 1980	Yes	23.	No	V
	(vi) NOC from Chief Controller of Explosives	Yes	27.5	No	٧
	(vii)Commitment regarding availability /pumping of waste	Yes	- B	No	, v
	from the concerned Authorities	10			
	(iv)In case of ML area falling in notified areas	Yes		No	1
	of the Central Ground Water Authority NOC from them.				
	* Annex copies of approvals and number them				

status,	
	Yes No [
Verification: The data and	information given above are true to the best of my knowledge and belief &
am aware	that if any part of the data & information submitted is found to be false
misleadin	g at any stage, the project will be rejected & clearance given, if any to t
project wi	ll be revoked at our risk & cost.
Date:	Signature of the applicant
220	
Place:	Mr. Gh Ahmad Ahanger S/o Ab Rajak Ahanger (Partner - Manjoor Ahmad Bhat S/o Mohd Subhan Bhat)
	Village-Khanmoh, Tehsil- Panthachowk District- Srinagar, State- J&K