

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI
Original Application No: 1034 of 2024**

IN THE MATTER OF

K SANJEEV DOGRA

..... APPLICANT

-VERSUS-

STATE OF HIMACHAL PRADESH AND ORS.

.....RESPONDENT

INDEX

S.NO	PARTICULARS	PG NO
1.	Reply Affidavit on behalf of Respondent No 6	1-7
2.	Copy of Mining lease of the Respondent No.6 is marked as Annexure R-6/1	8-31
3.	Copy of the Mining Plan of the Respondent No.6 is marked as Annexure R-6/2.	32-111
4.	Copy of the Environment Clearance of the Respondent No.6 is marked as Annexure R-6/3.	112
5.	Copy of the Annual Demarcation reports of the Respondent No.6 is marked as Annexure R-6/4.	113-123
6.	Vakalatnama	124-125

RESPONDENT

THROUGH COUNSEL

Place: New Delhi
Date: 03.09.2025



ADVOCATE YASHOVARMAN
1019, Naurang House, K.G Marg, New Delhi-110001
(+91) 97169 11111, 85869 94219
e-mail: officeofyashovarma@gmail.com



ATUL SHUKLA & YASHOVARMAN SINGH CHANDEL

ATUL SHUKLA
Advocate
E.No. UP05469/01
Off: E-7, 15th Floor, Wegmans Business
Park, Knowledge Park III,
Gr. Noida City, U.P - 201308 Mob- 9212738299,
Email- legalconsultants74@gmail.com

Advocates
D-51, Sector 52, Noida
UP, Pin:201301
Mob: (+91) 9212738259

BEFORE THE HONBLE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI
ORIGINAL APPLICATION NO: 1034 OF 2024

IN THE MATTER OF

K SANJEEV DOGRA

..... APPLICANT

-VERSUS-

STATE OF HIMACHAL PRADESH AND ORS.

.....RESPONDENT

**REPLY IN COMPLIANCE OF ORDER DATED 20.03.2025 ON BEHALF
OF RESPONDENTS NO. 6 IN THE MATTER OF K. SANJEEV DOGRA
V. STATE OF HIMACHAL PRADESH AND ORS. (O.A NO. 1034/2024)**

1. The present Affidavit is being filed in terms of the order dated 20.03.2025 passed by this Hon'ble Tribunal in captioned O.A No. 1034 of 2024, wherein the Hon'ble Tribunal held: *"In view of averments made in the original application and the observations made in the reports of the Joint Committee, following 11 mining lease holders and 14 stone crushers are impleaded as respondents no. 5 to 29"*
2. That the Respondents are licensed Mining leaseholders, who are undertaking mining operations in adherence with all the applicable rules and regulations made by regulating authorities.
3. That the Respondents are not undertaking conventional riverbed sand mining wherein natural sand is extracted directly from the banks of the river. They are instead, extracting stone and bajra from the river bed and producing M-SAND (Manufactured Sand) which is a by-product of crushed stone.
4. That the Joint Committee in its Final report dated 18.03.2025, made observations in response to the illegal and unscientific mining alleged by the

Applicants. Majority of the Illegal mining cases detected by mode of illegal extraction/storage and transportation have nothing to do with the Respondents.

5. That the Joint Committee raised the following issues pertaining to the activities of the Respondents:
 - A. Non-demarcation of 6 Mining leases.
 - B. Discharge of waste water containing silt.
 - C. Installation of Dry extraction cum bag filter followed by cyclone in stone crushing units.
 - D. Absence of retaining Structures.

6. **Para wise reply to each of the issues pointed out by the Joint Committee in respect of the activities of the Respondents are as follows:**

A. Non-demarcation of 6 Mining leases.

That the subject of Demarcation of mining leases comes under the purview of mining department. The Mining leases in question are river bed mining leases and therefore demarcation of river bed mining lease is an annual exercise conducted by the Mining Department. The annual demarcation reports of previous years are annexed in the individual replies of the Respondents.

B. Discharge of waste water containing silt

That the Respondents have installed a desilt water treatment plant for waste water discharge and the same has been verified by the Joint Committee in its Final report on page no.10.

2.3.2. "8. *It was observed during 1st inspection that stone crusher were discharging waste water containing silt directly and/or indirectly into the river. However, it was observed during 2nd and 3rd site inspection that out of 14 stone crushers, 13 stone crushers have made arrangements to desilt*

the waste water and also for storage for recycling by constructing earthen ponds. Whereas, one crusher namely M/s Bhandral Stone Crusher is using channels for settling the silt followed by pond to store and recycle the clear water. ”

C. Installation of Dry extraction cum bag filter followed by cyclone in stone crushing units.

The dry extraction cum bag filter and cyclones are installed in dry-stone crushers to control/reduce dust emissions generated from dry-stone crusher. It is pertinent to mention, that the Respondents are undertaking stone crushing by way of wet stone crusher plants and not dry-stone crusher plants. Wet stone crusher plants produce stone aggregate and coarse sand through a water-based system that does not lead to emission of dust and air pollutants. The installation of dry extraction cum bag filter followed by cyclone in a wet stone crusher plant is unnecessary and redundant. The Respondents have also provided water sprinkling systems on the periphery of the stone crusher units to curb dust emissions. The same is an inevitable and integral part of the wet stone crusher plant.

D. Absence of retaining Structures.

That the Respondents are undertaking mining of stones accumulated on the river bed. Such operations do not involve any activity that may result in unintended ejection of rock fragments/ rock projectiles, potentially causing damage to property or injury to people and therefore do not require retaining structures. That the requirement/ need of construction of retaining structures is specific to the location of the mining lease. The construction of retaining structures where it is not imperative, may disturb the river ecology. It is need based and thus the same has not been constructed when there is no specific direction.

REPLY ON BEHALF OF RESPONDENT NO 6

1. That the **Respondent No. 6, New Nurpur Mining lease area** was granted mining lease for an area of **04-99-19 Hectares** situated at **Khasra No. 154/1/1 Village Mohal Maira Batrah, Mauza Maira Doomal, Tehsil Nurpur, District Kangra, Himachal Pradesh** for excavation of building stone, by way of the duly registered lease **dated 14.10.2022** executed by the government of the state of Himachal Pradesh **valid up to 13.10.2027**. A copy of the lease deed of Respondent No. 6, is hereby annexed as **ANNEXURE R-6/1**.
2. That the **Respondent No 20: M/s New Nurpur Stone Crusher VPO Kandwal Tehsil Nurpur Distt Kangra H.P.** is operating a Wet Stone Crusher that produces Stone Aggregate and Coarse Sand using building stones/ Bajra from the licensed mining leases.
3. The said lease dated 14.10.2022 was executed in favour of the Respondent after due approval of the mining plan approved by the Govt. of Himachal Pradesh.
The **mining plan** of Respondent No.6 is annexed as **ANNEXURE R-6/2**.
4. The Respondent obtained **Environment Clearance** from the State level impact assessment authority (SEIAA) issued on 04.07.2023 under EC File No/ identification No: **HPSEIAA/2015/365/1655-62**.
The EC of Respondent No. 6 is hereby annexed as **ANNEXURE R-6/3**.
5. That the Respondent obtained the Consent to Operate (C.T.O.) dated **13.06.25** from the Himachal Pradesh Pollution Control Board which is valid till **05.07.2025**.
The CTO of Respondent No.20 is hereby annexed as **ANNEXURE R-20/1**.
6. That the aforementioned facts with respect to the permissions obtained by the Respondent also stand duly confirmed by the report of the Joint

Committee constituted by this Hon'ble Tribunal in the present O.A vide order dated 07.11.2024.

7. That the Respondent is carrying out operations of mining /excavation at the allotted mining lease site as per the terms and conditions listed in the required permissions and clearances.
The annual demarcation reports of Respondent No 6 are hereby annexed as **ANNEXURE R-6/4**.
8. That the Respondent does not indulge in any illegal, unscientific mining/crushing or transportation of illegally excavated mining material. The Respondent is undertaking mining/stone crushing operations in compliance with requisite standards provided by the regulating authorities.
9. That the Respondent is carrying out operations of stone crushing using excavated stones from the allotted mining lease site as per the terms and conditions listed in the required permissions and clearances.
10. That the Respondent has installed a desilt treatment plant for waste water discharge and the same has been verified by the Joint Committee in its Final report on page 10.
11. That the Respondent is not undertaking any action resulting in diversion of river flow or causing any harm to the environment.
12. That the Respondent is undertaking stone crushing by way of wet stone crusher plants and not dry-stone crusher plants. Wet stone crusher plants produce stone aggregate and coarse sand through a water-based system that does not involve emission of dust and air pollutants. The unnecessary installation of dry extraction cum bag filter followed by cyclone in a wet stone crusher plant will choke the filter and result in improper functioning.
13. That the Respondent has provided water sprinkling systems on the periphery of the stone crusher units and is using a wet process for the production of Stone Aggregate and Coarse Sand due to which no dust emission is caused.

14. That the Mining operations of the Respondent do not involve any such activities that may result in unintended ejection of rock fragments, potentially causing damage to property or injury to people and therefore do not require retaining structures.



RESPONDENT NO.6

THROUGH COUNSEL

Place: New Delhi
Date: 03.09.2025



ADVOCATE YASHOVARMAN
1019, Naurang House, K.G Marg, New Delhi-110001
(+91) 97169 11111, 85869 94219
e-mail: officeofyashovarma@gmail.com



ATUL SHUKLA & YASHOVARMAN SINGH CHANDEL

Advocates

D-51, Sector 52, Noida

UP, Pin:201301

Mob: (+91) 9212738259

ATUL SHUKLA
Advocate
E.No. UP05469/01
Off: E-7, 15th Floor, Wegmans Business
Park, Knowledge Park III,
Gr. Noida City, U.P - 201308 Mob- 9212738299,
Email-legalconsultants74@gmail.com

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI
Original Application No: 1034 of 2024

IN THE MATTER OF

K SANJEEV DOGRA

..... APPLICANT

-VERSUS-

STATE OF HIMACHAL PRADESH AND ORS.

.....RESPONDENT

AFFIDAVIT

I, Prahlad Singh, Partner M/s New Nurpur Stone Crusher, Village & P.O. Kandwal, Tehsil Nurpur, Distt. Kangra H. P. hereby solemnly affirm and declare as under:

1. I am the authorised representative on behalf of the Respondent No.6 in the aforesaid matter and am well conversant with the facts and circumstances of the case and competent to swear the present affidavit.
2. That the contents of the accompanying reply have read over to me ,which I understood and I state that the contents of the accompanying reply is based on the records.
3. That the documents filed along with the Reply are true copies of their respective originals.

[Signature]
DEPONENT

[Signature]
VERIFICATION
I identify the Deponent who has signed in my Presence

Verified at New Delhi on 03 day of SEP 2025, 2025 that the contents of para 1 of 3 of the above affidavit are true and correct to the best of my knowledge and belief and no part of it is false and nothing material has been concealed therefrom.



03 SEP 2025
CERTIFIED THAT DEPONENT
Shri/Smt./Kti.....
S/o W/o D/o.....
identified by me.....
has solemnly affirmed before me at Delhi
on.....
that the contents of the affidavit which
have been read & explained to me are
true and correct to his knowledge
[Signature]
DEPONENT
[Signature]
No. 34A

Annexure R-6/1



हिमाचल प्रदेश HIMACHAL PRADESH

lease period = 5 years
 value of land = 13,47,813/-
 stamp duty = 11,000/-

FORM 'F'
 [See rule 17(3)]

Average cost = 1107/- per sq. ft.

FORM OF MINING LEASE DEED FOR MINOR MINERALS

1345/22
 13/11/22

This indenture is made on this 14th the day of October, 2022 between the Governor, Himachal Pradesh, acting through Director of Industries, H.P. (hereinafter referred to as the 'Government' which expression shall where the context so admits, include the successors and assignees) of the one part and Sh. Prahlad Singh, Partner M/s New Nurpur Stone Crusher, Village & P. O. Kandwal, Tehsil Nurpur, Distt. Kangra, H. P. (hereinafter referred to as the "lessee" which expression shall where the context so admits, include heirs, executors, administrators, representatives and permitted assignees) of the other part.



WHEREAS the Lessee has applied to the Government in accordance with the Himachal Pradesh Minor Minerals (Concession) and Minerals (Prevention of Illegal Mining, Transportation and Storage) Rules, 2015 (hereinafter referred to as the 'Rules') for a renewal of mining lease for collection/extraction of sand, stone & bajri for use in already established stone crusher unit in respect of the lands hereinafter described in clause (b) and deposited with the Government the sum of Rs. 25,000/- (Rs. Twenty Five Thousand only) as security; and

Sub Registrar
 Nurpur (Kangra) H.P.

Director of Industries
 Himachal Pradesh



हिमाचल प्रदेश HIMACHAL PRADESH

602725

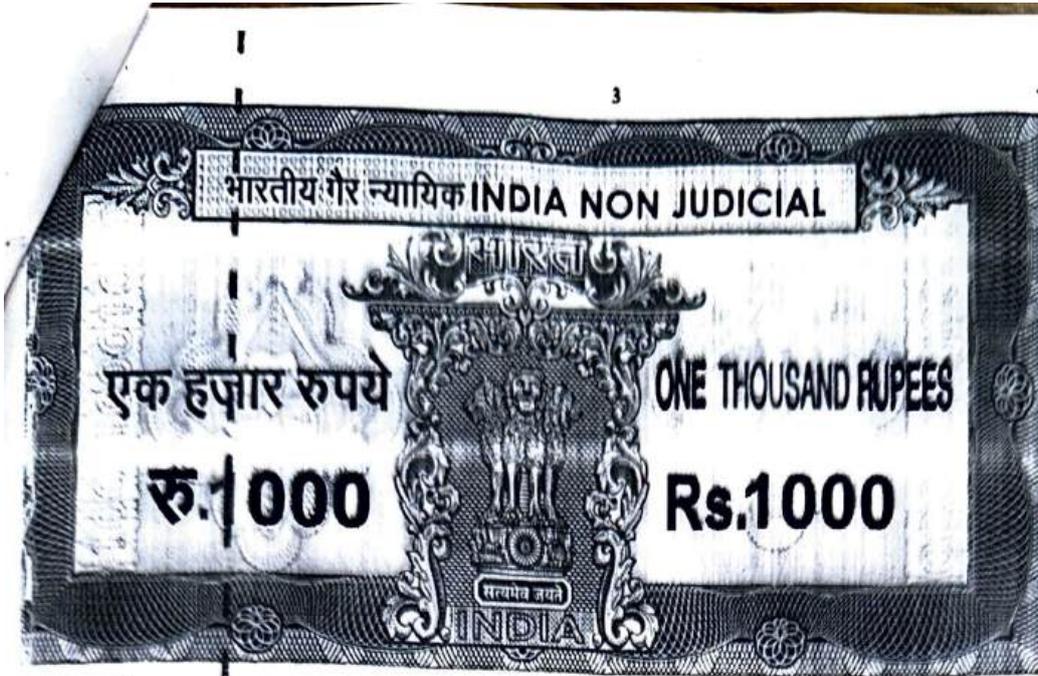
Now, therefore, this deed witnesseth and the parties hereto hereby agree as follows:-

- 1.(a) In consideration of the rents and royalties, covenant and agreement hereinafter contained and on the part of the lessee to be paid, observed and performed, the Government hereby grants and demises unto the lessee all those mines/beds/veins/seams for extraction of sand, stone & bajri (hereinafter referred to as the 'said minor minerals') situated, lying and being in or under the lands which are referred to in clause (b) together with the liabilities, powers and privileges to be executed or enjoyed in connection herewith which are hereinafter mentioned in Part-I subject to the restrictions and conditions and to exercise and enjoyment of such liberties, powers and privileges which are hereinafter mentioned in Part-II and subject to other provisions of this lease.

The area of the said lands is as follows: All that tract of land situated at Village/ Mohal Maira Batrah, Mauza Maira Doomal, Tehsil Nurpur, Distt. Kangra, H. P. bearing Khasra No. 154/1/1 measuring 04-99-19 Hect.(Pvt. land, River bed), or thereabouts delineated on the revenue map (Tatima) or site plan hereto annexed and bounded as follow:-

[Signature]
 Director of Industries
 Himachal Pradesh

[Signature]
 Sub-Divisional
 Officer (Kangra) H.P.



नाचल प्रदेश HIMACHAL PRADESH

602724

On the North by As per Revenue Record

On the South by -do-

On the East by -do-

On the West by -do-

(hereinafter referred to as the 'said lands' or 'leased area').

- (b) The lessee shall hold the premises hereby renewal and demised from the 14th day of October, 2022 for the term of five years or as per mineral reserves estimated in the approved mining plan whichever is earlier subject to the condition that the lessee shall renew/submit the Environment Clearance after expiry of period as the Environment Clearance issue vide letter dated 1.6.2016 which is valid upto 7 years from the date of issue thence next ensuing.

PART - I

LIBERTIES POWERS AND PRIVILEGES TO BE EXERCISED

AND ENJOYED BY THE LESSEE (S)

The following liberties, powers and privileges may be exercised and enjoyed by the lessee(s) subject to the other provisions of this lease deed:

Sub Registrar
Murpur (Manu) H.P.

Director of Industries
Himachal Pradesh



माचल प्रदेश HIMACHAL PRADESH

602723

1. **To enter upon land and search for win, work etc:** Liberties and power at all times during the term hereby demised to enter upon the said lands and to search for mine, bore, dig, drill for win work, dress, process, convert, carry away and dispose of the said minor minerals.
2. **To sink drive and make pit, shaft and inclines etc.:** Liberty and power for or in connection with any of the purposes mentioned in this clause to sink, drive, make, maintain and use in the said lands and pits, shafts, inclines, drifts, levels, water ways, airways and other works (and to use, maintain, deepen or extend any existing works of the like nature in the said lands).
3. **To bring and use machinery, equipments:** Liberty and power for or in connection with any of the purposes mentioned in this clause to erect, construct, maintain and use on or under the said lands any engine, machinery, plant, dressing floors, furnaces, coke ovens, brick kilns, workshops, store-houses-banglows, godowns, shed and other buildings and other works and conveniences of the like nature on or under the said lands.


Director of Industries
Himachal Pradesh


Sub-Registrar
Noida (Kangra) H.P.

No 1567260

2021

Himachal Government Judicial Paper

4. **To use water from streams, etc.:** Liberty and power for or in connection with any of the purposes mentioned in this clause but subject to the rights of any existing or future lessees and with the written permission of the Collector to appropriate and use water from any streams, water course, springs or other source in or upon the said lands and to divert, step up or dam any such stream or watercourse and collect or impound any such water and to make, construct and maintain any water-course, cultivated land, village buildings or watering places for livestock of a reasonable supply of water as before accustomed nor in any way to foul or pollute any streams or springs:

Provided that the lessee shall not interfere with navigation in any navigable stream nor shall divert such stream without the previous written permission of the Government.

5. **To fell undergrowth and utilize timber and trees, etc.:** Liberty and power for or in connection with any of the purposes mentioned in this lease deed, to clear undergrowth and brush-wood. Lessee shall not fell any trees or timber standing or found on the said lands without obtaining prior permission in writing from the concerned Competent Authority in case of the forest area as per requirement of the Forest Conservation Act, 1980.
6. **To get building and road materials, etc.:** Liberty and power for or in connection with any of the purposes, mentioned in this lease deed, to quarry and get stones, gravel and other building and road materials and ordinary clay and to use and employ the same and to manufacture such clay into bricks or tiles and to use such bricks or tiles but not to sell any such material, bricks, tiles.
7. **To use land for stacking purpose:** Liberty and power to enter upon and use a sufficient part of the surface of the said lands for the purposes of stacking, storing or depositing therein any produce of the

Sub Registrar
Nurpur (Kangra) H.P.

Director of Registration
Himachal Pradesh

No 1567261

2
0
2
1**Himachal Government Judicial Paper**

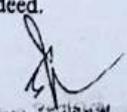
mines and works carried on and tools, equipment and other materials needed for mining operations.

PART-II

RESTRICTIONS AS TO THE EXERCISE OF THE LIBERTIES
BY THE LESSEE

The liberties, powers and privileges granted under Part-I, are subject to the following restrictions and subject to the other provisions of this lease deed:-

1. **No mining operations within the limit of public works etc.:** The lessee shall not carry on, or allowed to carried on any mining operation at any point with in a distance of 100 (hundred) metres from any railway line except under and in accordance with the previous written permission of the Railway Administration, two kilometres from the limits of Municipal Corporation/ Committee, one kilometre from the limit of Nagar Panchayat or 100 (hundred) metres from National Highway/Express way or 25 (twenty five) metres from State Highway or 10 (ten) metres from other roads or 50 (fifty) metres from any reservoir, canal or buildings or inhabited sites except under and in accordance with the previous permission of the Competent Authority. The Railway Administration or the Joint Inspection Committee may in granting such permissions, impose such conditions as may deem fit.
2. **Notice for surface operation in land not already in use:** Before using for surface operations on any land which has not already been used for such operation, the lessee shall give to the Director of Industries, Himachal Pradesh and the Mining Officer, two calendar months, previous notice in writing, specifying the situation and the extent of the land proposed to be so used and the purpose for which the same is required.
3. **Not to use the land for other purposes:** The lessee shall not cultivate or use the land for purposes other than those specified in the lease deed.


Munpur (Kangra) H.P.


Director of Industries
Himachal Pradesh

N^o 1567262 ²/₀/₂1 Himachal Government Judicial Paper

4. **Use of Mechanical Excavator for Mining:** The mechanical mining in river/stream bed shall be undertaken only with the help of tyre mounted front end loader upto 80 Horse Power without backhoe with the permission of the Director of Industries.
5. **Mining Plan:** The lessee(s) shall carryout mining operation in accordance with the approved mining plan.

PART - III

COVENANTS OF THE LESSEE

The lessee hereby covenant(s) with the Government as follows:-

1. Rate of Royalty:

- (a) The lessee shall pay royalty on the quantity of the said minor mineral removed from the leased area in advance at the rate specified in the Second Schedule. However, as and when the limestone is supplied by the lessee to the Industries other than lime-kiln, royalty shall be paid by the lessee for limestone as major mineral, whichever is more.
- (b) **Mode of determination of sale price at the pit's mouth:**
The sale price of the minor minerals at the pit's mouth shall be the current market price for the mineral of the same grade less-
- (i) Transport charges from the mine head to the nearest rail head;
 - (ii) Railway freight from the rail head to the market; and
 - (iii) Estimated handling charges and other incidental expenditure not exceeding five percent of the market price.
- (c) For calculating the royalty, the lessee shall submit by the 10th of every month to the Mining office, a return in **Form-'G'** giving the total quantity of minor mineral(s) raised and despatched from the leased area in the preceding calendar month and its value

Sub Division
Nurpur (Kangra) H.R.


Director of Industries
Himachal Pradesh

N^o 15672632
0
2
1**Himachal Government Judicial Paper**

and in case of mineral based industry the monthly electricity consumption bill and other requisite details also. If the lessee does not deposit royalty due for the preceding month by 10th of month, 24% per annum simple interest will be charged for the default period after 10th of month.

2. **Surface Rent:** - The lessee shall pay for the surface area occupied by him, surface rent at the rate of as specified by the Government per hectare per annum in two half yearly installments. No surface rent shall be charged in the private lands.
3. **Dead Rent:-** The lessee shall also pay for every year, yearly dead rent at the rate of Rupees as per 3rd Schedule of H.P. Minor Minerals (Concession) and Minerals (Prevention of Illegal Mining, Transportation and Storage) Rules, 2015 per hectare per annum and as amended by the Government from time to time. Provided that the lessee shall be liable to pay the dead rent or royalty in respect of each mineral, whichever be higher but not both.
4. **Working of newly discovered minerals:** If any minor mineral, not specified in the lease, is discovered in the leased area, the lessee shall report the discovery without delay to the Government and shall not win or dispose of such minor mineral without obtaining a lease therefore. If he fails to apply for such a lease within 6 months from the discovery of the minor mineral, the Government or the authorized officer may give the lease in respect of such mineral to any other person.
5. **To commence mining operations within one year and carry them on properly:** Unless the Government for sufficient cause permits otherwise, the lessee shall commence mining operations within one year, from the date of execution of the lease deed and shall thereafter conduct such operations in a proper, skillful and workman like manner.

EXPLANATION: For the purpose of this clause 'Mining Operation'


Director of Industries
Munpur (Kangra) H.P.


Director of Industries
Himachal Pradesh

No 1567264

2021

Himachal Government Judicial Paper

shall include the erection of machinery, laying of a tramway or construction of a road in connection with the working of the mine.

6. **To erect and maintain Boundary Pillars, etc.:** The lessee shall, at his own expense, erect and at all times maintain and keep in good repairs boundary marks and pillars according to the revenue map annexed to the lease.
7. **Accounts:** The lessee shall keep correct accounts showing the quantity and other particulars of all minerals obtained from the mines and the number of persons employed therein and a complete plan of the mine and shall allow any officer authorized by the Himachal Pradesh Government or the Central Government in that behalf to examine at any time any accounts and records maintained by him, and shall furnish to the Himachal Pradesh Government or the Central Government with such information and returns as it may require.
8. **To allow facilities to other lessees, etc.:** The lessee shall allow existing and future licensees or lease holders/contractors of any land which is comprised in or adjoins or is reached by the land, held by the lessee, reasonable facilities for access thereto.
9. **To allow entry to Officers:** The lessee shall allow any officer authorized by the Himachal Pradesh Government and the Central Government to enter upon any building, excavation or land comprised in the lease for the purpose of inspecting the mines.
10. **Returns - The lessee shall,-**
 - (a) for calculating the royalty the lessee shall submit by the 10th of every month to the Mining office, a return in Form-'G' giving the total quantity of minor mineral(s) raised and despatched from the leased area in the preceding calendar month and its value and in case of mineral based industry the monthly electricity consumption bill and other requisite details also. If the lessee does not deposit royalty due for the preceding month by


Sub Registrar
Nurpur (Kangra) H.P.


Director of Industries
Himachal Pradesh

No 1567265

2
0
2
1**Himachal Government Judicial Paper**

10th of month, 24% per annum interest will be charged for the default period after 10th of month.

(b) The lessee shall also furnish by the 15th April, every year to the Director and other Officer(s) specified in the lease deed, a statement giving information in **Form-'H'** regarding quantity and value of minor mineral(s) obtained during the last financial year, average number of regular labourers employed (men and women separately), number of accidents, compensation paid and number of days worked and wages paid to them separately.

11. To strengthen and support the mines: The lessee shall strengthen and support to the satisfaction of the State Government, any part of the mine which in its opinion, requires such strengthening or support for the safety of any railway, bridge, national highway, reservoir, tank, canal, road or any other public work or buildings.

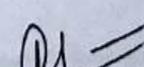
12. Information for using explosive: The lessee shall immediately give an information in **Form-'T'** for use of explosive as soon as-

- (a) the workings in the mine extends below superjacent ground;
- (b) the depth of any open cast excavation measured from its highest to the lowest point reaches six metres;
- (c) the number of persons employed on any day is more than 50(fifty); and
- (d) the explosives which are used.

13. Maintenance of Sanitary conditions: The lessee shall maintain sanitary conditions in the area held in by him under the lease.

14. To pay compensation for damage and indemnify the Government: The lessee/lessees shall make and pay such reasonable satisfaction and compensation as may be assessed by lawful authority in accordance with the law in force on the subject for all damage, injury or disturbance which may be done by him/them in exercise of the powers granted by this lease and shall indemnify and keep indemnified fully and completely the State Government against all claims which may be made by any person or persons in respect of any such damage.


Sub Registrar
Murpur (Kangra) H.P.


Director of Industries
Himachal Pradesh

No 1567266

2
0
2
1**Himachal Government Judicial Paper**

injury or disturbance and all costs and expenses in connection therewith.

15. **Abiding by rules:** The lessee shall abide by all existing Laws (Acts) and Rules made thereunder enforced by the Government of India or the Himachal Pradesh Government and all such other Laws (Acts) or Rules as may be enforced from time to time in respect of working of the mine and other matters affecting safety, health and convenience of the employees of the lessee or of the public.
16. **To report accident:** The lessee shall without delay report to the Deputy Commissioner of the District concerned and the Mining Officer or any other officer authorized by him, any accident which may occur at or in the leased area.
17. **Delivery of possession of Land and Mines on the surrender or sooner determination of the lease:** At the end or sooner determination or surrender of the lease, the lessee shall deliver up the said lands and all mines (if any dug therein) in a proper and workable state, save in respect of any working as to which the Government might have sanctioned abandonment.
18. **To provide weighing machine:** The lessee shall provide and at all times keep at or near the pit-head at which the said mineral shall be brought to bank a properly constructed and efficient weighing machine and shall weigh or cause to be weighed thereon all the said minor minerals from time to time brought to bank sold, exported and converted products, and shall at the close of each day cause the total weights, ascertained by such means of the said minor minerals, ores, products, raised, sold, exported and converted during the previous twenty four hours to be entered in the books of accounts. The lessee shall allow the Government at all times during the said term to employ any person or persons to be present at the weighing of said minor minerals as aforesaid and to keep accounts thereof and to check the accounts kept by the Lessee, The lessee shall give 15 (fifteen)

Sub Registrar
Nurpur (Kangra) H.R.

Director of Industries
Himachal Pradesh

No. 1567267

2
0
2
1**Himachal Government Judicial Paper**

days previous notice in writing to the concerned Mining Officer of every such measuring or weighing in order that he or some officer on his behalf may be present thereat.

19. **To secure pits, shafts, not fill them up:** The lessee shall well and properly secure pits and shafts and will not without permission in writing willfully close, fill up or chock any mine or shafts.
20. **Not to enter upon or to commence operations in the forest land:** The lessee shall not enter upon or commence any mining operations in forest land comprised in the leased area except after previously obtaining permission in writing of the Competent Authority.
21. **To respect water rights and not injure adjoining property:** The lessee shall not injure or cause to deteriorate any sources of water, power or water supply and shall not in any other way render any spring or stream of water unfit to be used or do anything to injure adjoining land, villages or houses.
22. **Stocks lying at the end of the lease:** The lessee shall on the termination or sooner determination of the lease remove all extracted minerals from the premises of the leased areas within three months and thereafter all extracted minerals in the said lands left over indisposed, after the termination or determination of lease shall be deemed to be property of the Government.
23. **Payment of Taxes:** The lessee shall duly and regularly pay to the appropriate authority all taxes, cesses and local dues in respect of the leased area.

PART-IV**RIGHTS OF THE STATE GOVERNMENT**

1. **Premature Termination of Lease:** Where the State Government is of the opinion that it is expedient in the interest of regulation of mines and mineral development, preservation of natural environment, control of floods, prevention of pollution or to avoid danger to public health or


Sec Registrar
Murpur (Kangra) H.R.


Director of Industries
Himachal Pradesh

No 1567268

2
0
1**Himachal Government Judicial Paper**

communication or to ensure safety of building, monuments or other structures or for such other purposes, as the State Government may deem fit, it may, by an order, in respect of any minor mineral, make premature termination of mining lease with respect to the area or any part thereof covered by such lease:

Provided that no order making a premature termination of a mining lease shall be, made except after giving the holder of the lease a reasonable opportunity of being heard.

2. **The Government may determine the lease:** The Government shall have the right to determine the lease after serving a notice on the lessee to pay the dues within 30 (thirty) days from the date of receipt of the notice. If the dead rent or royalty or surface rent reserved or made payable by the lessee is not paid within 15 (fifteen) days next after the date fixed in the lease for payment of the same, Government or any other officer authorized by it in this behalf may also at any time after serving the aforesaid notice, enter upon the said premises and distrains all or any of the minerals or movable property therein and may carry away, detain or order the sale of the property so distrained, or so much of it as will suffice for the satisfaction of the rent or royalty due and all costs and expenses occasioned by the non-payment thereof.
3. **Determination of lease in public interest:** The Government may by giving 6 (six) months' prior notice in writing determine the lease if the Government consider that the area under the lease is required for establishing an industry beneficial to the public in case of Government land:

Provided that in the state of National Emergency or war the lease may be determined without giving such notice.

4. **Right of pre-emption:** The Government shall from time to time and at all times during the term of lease shall have the right (to be exercised by notice in writing to the lessee of pre-emption of the said minerals and all products thereof lying) in or upon the said lands hereby

Sub Registrar
Murpur (Kangra) H.R.

Director of Industries
Himachal Pradesh

No 1567270

2021

Himachal Government Judicial Paper

2. **Notices:** Every notice by these presents required to be given to the lessee shall be given in writing to such person resident on the said lands as the lessee may appoint for the purpose of receiving such notices and if there shall have been no such appointment then every such notice shall be sent to the lessee by registered post addressed to the lessee at the address recorded in this lease or at such other address in India as the lessee may from time to time in writing to the Government designate for the receipt of notices and every such services shall be deemed to be proper and valid service upon the lessee and shall not be questioned or challenged by him/them.
3. **Recovery:** Without prejudice to any other mode of recovery authorized by any provision of this lease or by any law, all amounts, falling due hereunder against the lessee may be recovered as arrears of land revenue under the law in force for such recovery.
4. **Forfeiture of property:** The lessee should remove his property lying on the said lands within three months after the expiry or sooner determination of the lease or after the date from which any surrender by the lessee of the said lands under rule 22 of Himachal Pradesh Minor Minerals (Concession) and Minerals (Prevention of Illegal Mining, Transportation and Storage) Rules, 2015 becomes effective, as the case may be. The property left after the aforesaid period of three months shall vest in the Government free from all encumbrances and may be sold or disposed of in such manner as the Government, shall deem fit without liability to pay compensation therefore, to the lessee.
5. **Security and forfeiture thereof:**
- The Government may forfeit the whole or any part of the security amount of Rs. 25,000/- deposited by the lessee on breach of any covenant to be performed by the lessee under this lease deed.
 - The rights conferred by this clause shall be without prejudice to the rights conferred on the State Government by any other provision or this lease or by any law.
 - On such date as the Government may appoint within twelve

Sub Registrar
Murpur (Kangra) H.R.

Director of Industries
Himachal Pradesh

No. 1567271

2
0
2
1**Himachal Government Judicial Paper**

calendar months after the expiry of this lease the amount of security deposit paid in respect of this lease shall be refunded to the lessee in case there is no violation of terms & conditions of this lease deed. No interest shall run on the security deposit.

6. **Survey and demarcation of the area:** When a mining lease is granted by the Government, arrangements shall be made, if necessary, at the expense of the lessee, for the survey and demarcation of the area granted under the lease. The lessee shall have to bear actual expenses of the staff deputed for the work. Actual expense will include traveling allowances and daily allowances and salary of staff plus 10 percent as instruments charges.
7. **Rights of lessee to determine the lease:** The lessee may determine the lease at any time by giving not less than six calendar months notice in writing to the Government after paying all outstanding dues of the Government.
8. **Applicability of rules:** The lessee shall work according to Mines and Minerals (Development & Regulation) Act, 1957, the Metalliferous Mines Regulation, 1960, Mines Act, 1952, Himachal Pradesh Minor Minerals (Concession) and Minerals (Prevention of Illegal Mining, Transportation and Storage) Rules, 2015, Himachal Pradesh Minor Mineral Policy, 2013 including other rule of law applicable from time to time. The contravention of any provisions of Act or its sub-ordinate legislation shall amount to cancellation of contract.
9. The lessee shall deposit demarcation expenditure if demarcation needs to be carried out by the Department and the lessee shall enter the land only when the demarcation of the area is got conducted from the Revenue Department in the presence of Departmental officials and boundary pillars are raised.
10. The lessee shall at his own expenses erect and at all times maintain and keep in good condition boundary marks and pillars necessary to indicate the demarcation shown in the revenue record annexed to the

Sub Registrar
Nurpur (Kangra) H.R.

Director of Industries
Himachal Pradesh

No 1567272
2021

Himachal Government Judicial Paper

lease deed. Mining operation shall only be allowed after getting a certificate from the concerned Mining Officer that demarcation of the area has been done as per the plan and that concrete boundary pillars of atleast 3 feet height have been raised.

11. The lessee shall have to submit a plan with Mining Officer for approach road in order to give a reasonable & shortest approach to the mine and to the mines of adjoining lessees.
12. The lessee shall do mining in a scientific and systematic manner, and to ensure the same.
 - (a) Dumping sites for mine waste and top soil shall be provided in such a way so that there is no damage to the adjoining land and the same does not roll down the slope. Top soil shall also be used for afforestation purposes in the barren/exhausted pits.
 - (b) Diversion dams and other engineering structures as advised by the Department from time to time, at different suitable sites shall be got erected to arrest and channelize the flow of water and also to avoid erosion of the land, causing siltation of nearby natural water bodies.
 - (c) The loading/unloading points in the mine areas shall be developed in such a way that no hindrance is caused to the traffic and no material is stacked within the acquired width of P. W. D. road.
 - (d) All precaution shall be taken to check air pollution, water pollution and noise pollution, as per the standards of H. P. State Environment Protection and Pollution Control Board. Further, the lessee shall obtain the consent of H. P. State Environment Protection and Pollution Control Board under the provisions of Water Act, 1974 and Air Act, 1981.
 - (e) Visual impact caused due to dug-out areas and waste disposal areas shall be controlled by undertaking afforestation on worked out areas, waste disposal areas and in the areas where no working is proposed.

Sub Registrar
Nurpur (Kangra) H.P.

Director of Industries
Himachal Pradesh

No. 1567273 ²/₀/₂₁ Himachal Government Judicial Paper

- (f) Labourers shall be provided with safety equipments like boots, helmets, ropes, ear plugs and even filters. Site services like rest shelter, drinking water and first aid facilities shall also be provided at the mining site.
13. The surface collection of sand, stone and bajri from river/khad/khalla shall be done in such a way, so as not to cause environmental and ecological imbalance. To ensure this,
- a) Excavations, below the natural surface level of the bed shall not exceed 3 feet and these shall be filled up to the satisfaction on Mining Officer.
- b) The lessee shall not carry out surface operations in any area prohibited by any authority, without obtaining prior permission in writing from the concerned authority.
14. The lessee shall pay royalty on the Scheduled rates as specified in H. P. Minor Minerals (Concession) and Minerals (Prevention of Illegal Mining, Transportation and Storage) Rules, 2015. The royalty shall be charged on the basis of actual production which will be computed based on consumption of electricity and other measures. In case the lessee does not pay royalty in time i.e. by 10th of next month alongwith monthly return of Form-G, simple interest at the rate of 24% (twenty four percent) per annum shall be charged for default period.
15. In case the lessee does not pay dead rent/surface rent in two half yearly installments on the 15th April, and 15th October each year during subsistence of lease, simple interest at the rate of 24% per annum shall be charged for default period.
16. The lessee shall be bound to pay Rs. 5/- per trolley and Rs. 10/- per truck on extraction and export of sand, stone & bajri to the concerned Gram Panchayat through the Mining Officer Nurpur.


Sub-Registrar
Nurpur (Kangra) H.P.


Director of Industries
Himachal Pradesh

No. 1567274

2
0
2
1**Himachal Government Judicial Paper**

17. No River/Stream bed mining shall be allowed within 75 meters from the periphery of soil conservation works, nursery plantation, check dams or within the distance as recommended by the Sub-Divisional Committee, whichever is more.
18. The lessee shall not carry on or allowed to be carried on any mining operation at any point within a distance of two kilometers from the immediate out limits of Municipal Corporation/Municipal Committee, one kilometer from the immediate outer limit of Nagar Panchayat, 100 meters from any railway line, except under and in accordance with the previous written permission of the Railway Administration or 100 meters from edge of National Highway/Express way, 25 meters from the edge of State Highway and 10 meters from the edge of other roads or 50 meters from edge of any reservoir, canal any reservoir, canal or buildings or inhabited sites except under and in accordance with the previous permission of the Competent Authority. The Railway Administration or the Joint Inspection Committee may in granting such permissions, impose such conditions as may deem fit.
19. No River/Stream bed mining shall be allowed within $1/10^{\text{th}}$ of its span or 5 mtrs. from the bank or as specified by the Sub-Divisional Committee, whichever is more.
20. No River/Stream bed mining shall be allowed within 200 mtrs. upstream and downstream of water supply scheme.
21. No River/Stream bed mining shall be allowed within 200 mtrs. upstream and 200 to 500 downstream of bridges depending upon the site specific conditions.
22. No approach road from P.W.D. road shall be allowed to lease area, unless lessee/contractor obtains written permission from the competent authority of Public Works Deptt. for making road leading to all intake places from the roads.


 Director of Land Revenue
 Himachal Pradesh
 Nurpur (Kangra) H.R.


 Director of Land Revenue
 Himachal Pradesh

No. 1567275

2
0
2
1**Himachal Government Judicial Paper**

23. No boulder/cobbles/hand broken road ballast shall be allowed to be transported outside the State from River/Stream beds.
24. No digging for more 3 feet shall be allowed in River/Stream beds and all the debris, waste sand arising due to mining has to be backfilled in ditches/pits caused due to mining as a replenishment measure.
25. The lessee /contractor shall ensure that his labour does not involve in fish poaching.
26. The lessee shall confined mining activities to the central portion of the khad so that it could not pose any threat to private/public property.
27. The lessee shall not carry out mining activities by mechanical means without obtaining permission from the competent authorities and no mining shall be carried out within periphery of 250 Mtr. from the nearest water supply schemes.
28. If necessary, the lessee shall have to erect check dams and other retaining structure to check the banks or soil erosion during mining activities.
29. No blasting shall be allowed in River/Stream beds area. Only surface material will be picked up manually.
30. The lessee shall obtain consent to operate to establish or consent to operate from the H. P. State Environment Protection and Pollution Control Board before start of mining operation, separately under the consent mechanism.
31. The lessee shall be bound to fulfill all the conditions as laid down by the Joint Inspection Committee and other Departments and as specified in H. P. Minor Minerals (Concession) and Minerals (Prevention of Illegal Mining, Transportation and Storage) Rules, 2015.
32. The lessee holders shall work in the area as per the approved Mining Plan for a period of five years as per the approval conveyed by the Government and any deviation shall call for the termination of the mining lease.

Sub. No. 1567275
Nurpur (Kangra) H.P.

 Director of Industries
 Mineral Production

No. 1567276

2
0
2
1**Himachal Government Judicial Paper**

33. The lessee shall be bound to comply with all the directions and instructions if any issued by the Hon'ble Supreme Court/High Court, H. P. Hon'ble NGT as well as by the State Government from time to time with regard to mining operation and stone crusher.
34. With regard to the local objections if any, raised by the local people/concerned land owners, entire responsibility to settle the issue will be of the lease holder and shall indemnify the State govt. from third party claim.
35. In no case hydraulic/mechanical excavators shall be allowed for undertaking mining activities without prior approval of competent authority.
36. The lessee shall made necessary arrangements between the land owners (Private or Govt.) and will take care of other issue if any by his own for the mineral transportation to the nearest road.
37. Natural course of River should not be disturbed and special steps shall be taken to control the soil erosion.
38. Any guidelines issued by State Pollution Control Board shall be binding.
39. Water sprinkling shall be carried out on approach road and proper covered the material during transport from mining area/stone crusher.
40. For the purpose of carrying out mining operation in accordance with approved Mining Plan, the lessee shall retain/employ consultant as per the provisions of new rules.
41. The lessee shall renew the registration of stone crusher unit within stipulated period.
42. The lessee shall comply all the directions imposed by the Joint Inspection Committee in the Joint Inspection Report.
43. The lessee shall work in the mining lease area as per the conditions

Sub Registrar
Nurpur (Kangra) H.A.

Director of Industries
Himachal Pradesh

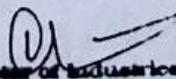
No. 1567277

2
0
2
1**Himachal Government Judicial Paper**

stipulated in the EIA Clearance issued by the State Level Environment Impact Assessment Authority, Himachal Pradesh vide letter F. No. HPSEIAA/2015/365/M/s New Nurpur Stone Crusher-1402 dated 1.6.2016 and restrict the production of material as approved by the above authority or as approval in mining plan, which ever is less. The Environment Clearance is valid upto 31.5.2023, thereafter the mining activities in the granted area shall be deemed suspended till the period of Environment Clearance is further extended by the concerned Authority.

44. Natural course of river shall not be disturbed, if necessary; the lessee shall have to erect check dams and other retaining structures to check the banks or soil erosion during mining activities.
45. The lessee shall not purchase the stone from unauthorized person/tractors, if the material accepted from the unauthorized sources, the crusher unit should be penalized.
46. Any other conditions as required for regulating the mining activities could be incorporated at the time of execution of mining lease deed agreement.
47. The lessee shall install the weighbridge at his complex for weighing the raw material as well as finished material being dispatched and maintain a proper record of the same.
48. The lessee shall procure the other statutory clearances/permissions if any, required from any other department/agencies at his own level.
49. The lessee shall employ/retain consultant as per classification specified in rule 55 of Himachal Pradesh Minor Minerals (Concession) and Minerals (Prevention of illegal Mining, Transportation and Storage) Rules, 2015.
50. The lessee shall be bound to comply the Order passed by Hon'ble


Sub Registrar
Nurpur (Kangra) H.P.


Director of Industries
Himachal Pradesh

1567278

2
0
2
1**Himachal Government Judicial Paper**

Bhag Singh V/s Union of India & Others, as well as the order passed by Hon'ble High Court of Himachal Pradesh in CWP No. 2067/2019-titled as State of H. P. through Secretary Industries & others V/s Bhag Singh & others.

51. The lessee shall, after ceasing mining operations, re-grass the mining area and any other area which has been disturbed due to mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc., at its own cost, in compliance to the directions passed by the Hon'ble Apex Court vide order dated 08.01.2020 in Writ Petition (s) (Civil) No (s) 114/2014 titled as Common Cause V/s Union of India & Ors.
52. The renewal of mining lease granted subject to final outcome of decision of the Hon'ble High Court in COMS No. 43 of 2018 titled as New Nurpur Stone Crusher V/s State of H. P. & others. and compliance of all codal formalities/orders.
53. The lessee shall pay contribution to District Mineral Foundation Fund and all the applicable taxes/funds in lieu of mineral concession.
54. The mining lease deed will be executed at the capital of the State of Himachal Pradesh subject to the provisions of Article-226 of the Constitution of India. It is agreed upon by the lessee and the State Govt. that in the event of any dispute in relation to the area under mining lease, conditions of the lease deed and in respect to all matter touching the relationship of the lessee and the State Govt. suit or petition shall be filed in the Civil Court at Shimla and it is hereby expressly agreed that neither party shall file a suit or appeal being action at any place other than the Court named above i.e. Shimla.
55. As per Rule 16(2) of the Himachal Pradesh Minor Minerals (Concession) and Minerals (Prevention of illegal Mining, Transportation and Storage) Rules, 2015 the lessee shall submit renewal of mining lease application before one year from the expiry of lease period.

at
Nurpur (Mingra) H.P.

Director of Industries
Himachal Pradesh

1567279

2
0
2
1

Himachal Government Judicial Paper

IN WITNESS WHEREOF these presents have been executed in the manner hereunder appearing the day and year first above written.

For and on behalf of the lessee

For and on behalf of the
Governor, Himachal Pradesh
Director of Industries
Himachal Pradesh

Witnesses:

Atul Thakur
1. S/o Nitam Singh P.O. Gogol
TEH Kangra VTC: Gogol
Khas (4/4) Dist. Kangra
Pin 176209

1. _____

Amid Kumar S/o Sh. Nand Lal
2. Vidhaya, P.O. Surali
Dist. Kangra HP

Geologist
Deptt. of Industries
(Geological Wing)
2. _____
HF Shimla-1

Sub Registrar
Nurpur (Kangra) H.P.

Sh. Chaman Lal
VPO LA DORI TAN NURPUR
Dist. Kangra HP

शिवम लाल, नरपुर, हरियाणा

श. चमन लाल, नरपुर, हरियाणा

Identified by
Sidhant Sharma
Nurpur

Drafted by
[Signature]

Annexure R-6/2

Annexure-1

No. Udyog-Bhu(Khani-4)Laghu-405/09-Vol-I
 Government of Himachal Pradesh
 Department of Industries
 "Geological Wing"
 Dated: Shimla- 171001,

REGISTERED

- 2257

7/6/2022

To

Sh. Prahlad Singh,
 Partner M/s New Nurpur Stone Crusher.
 Village & P. O. Kandwal
 Tehsil Nurpur, District Kangra, H. P.

Subject:-

Approval of Mining Plan of area applied for renewal of mining lease for collection/extraction of sand, stone & bajri from Khasra No. 154/1/1 over an area measuring 04-99-19 Hect.(Pvt. land, River bed) falling in Mohal Maira Bartrah Mauza Maira Doomal of Tehsil Nurpur, District Kangra, H. P.

Dear Sir,

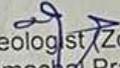
In exercise of powers conferred by Rule 36 of Himachal Pradesh Minor Mineral (Concession) and Minerals (Prevention of Illegal Mining, Transportation and Storage) Rules 2015, I hereby approve the above said Mining Plan for the purpose of the area applied for renewal of mining lease. The mining plan is approved for a period of five years from the date of execution of mining lease deed. This approval is subject to the following conditions:-

1. That the Mining Plan is approved without prejudice to any other laws applicable to the mine/area from time to time whether made by the Central/State govt. or any other authority.
2. That this approval of the Mining Plan does not in any way imply the approval of Govt. in terms of any other provisions of the H. P. Minor Minerals (Concession) Revised Rules, 1971 now repealed as Himachal Pradesh Minor Mineral (Concession) and Minerals (Prevention of Illegal Mining, Transportation and Storage) Rules 2015 or any other laws including Forest (Conservation) Act, 1980, Environment Protection Act, 1986 and the rules made there under and other relevant statutes, orders and guidelines as may be applicable to lease area from time to time.
3. That the Mining Plan is approved without prejudice to any orders or directions from any Court of competent jurisdiction.
4. That in case State Geologist, Geologist, any other inspecting officer/official of Geological Wing Department of Industries, after field inspection notices that proposals made and workings shown in the mining lease by the RQP need certain corrections/ amendments due to change in conditions either natural or man made, the inspecting officer can recommend necessary amendments in the Mining Plan at any point of time in the interest of environment and mineral conservation.
5. That the lease holder shall procure Environment clearance from the competent authority as per Environmental Impact Assessment notification, 2006 and amendements/notifications issued time to time in this regard.
6. That the approval of proposed mining operations is restricted to the mining lease area only.
7. That in case additional conditions are imposed by the Ministry of Environment & Forests Govt. of India while according clearance under EIA notification dated 14.9.2006 and any condition imposed by the State Govt. while granting mining lease the same shall have to be incorporated by making necessary amendments in the Mining Plan by the lessee through R. Q. P.

8. That in case Mining lease is not renewed or is terminated or working is suspended before the expiry of the lease period due to any reason, the approval of Mining Plan shall stand automatically cancelled.
9. That the lease holder shall carry out production of mineral in accordance to the production shown in Mining Plan and Environmental Clearance which ever is less.
10. That no person shall undertake mining operations in any mining lease area, except in accordance with a Mining Plan approved under sub rule (2) of Rule 39 of Himachal Pradesh Minor Mineral (Concession) and Minerals (Prevention of Illegal Mining, Transportation and Storage) Rules 2015.
11. That the lease holder shall carry out working in the mining lease area as per Mining Plan only after obtaining permission to work in the mining lease area from the competent authority.
12. That if the mining operations are not carried out in accordance with the approved Mining Plan the State Geologist, Geologist, Assistant Geologist and the Mining Officer, may order suspension of all or any of the mining operations and permit continuation of only such operations as may be necessary to restore the conditions in the mine as envisaged under the said Mining Plan.
13. That if any thing is found to be concealed as required under various Rules and guidelines pertaining to mining in the context of the Mining Plan and the proposal for rectification has not been made, the approval shall be deemed to have been withdrawn with immediate effect.
14. That in case of any violation of terms and conditions of the approved Mining Plan, the financial assurance deposited by the said lessee shall be liable to forfeited.

Enclosed:- Copy of approved Mining Plan.

Yours faithfully,


Geologist (Zone-II)
Himachal Pradesh
Dated;

2022

Endst. No. As above.

Copy for kind information to:-

1. The Mining Officer, Nurpur, Distt. Kangra, H. P. alongwith a copy of Mining Plan for further necessary action.
2. Sh. Indresh Nath Dhiman, R.Q. P. Sun-Shine Cottage, Floor above parking, Near Anchal Provisional Store, Rajhana Road, Sector-4, New Shimla-171009.


Geologist (Zone-II)
Himachal Pradesh

MINING PLAN



MINING PLAN FOR EXTRACTION OF SAND, STONE & BAJRI OVER AN AREA SITUATED IN KHASRA NO. 154/1/1 MEASURING 04-99-19 HECTARES (PRIVATE LAND, RIVER BED) FALLING IN MAUZA MAIRA DOOMAL, MOHAL MAIRA BATRAH, TEHSIL NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH.

FOR SH. PRAHLAD SINGH, R/O VILLAGE & P.O. KANDWAL, TEHSIL NURPUR & DISTRICT KANGRA, HIMACHAL PRADESH



Prepared by: -

Indresh Nath Dhiman, (Retd. State Geologist),
Sunshine Cottage, Floor above parking, Rajhana Road,
Sector-4-New Shimla-171009, Himachal Pradesh.

MINING PLAN FOR EXTRACTION / COLLECTION OF SAND, STONE AND GRAVEL MEASURING 04.99 (5) HECTARES (PRIVATE LAND, RIVER BED) FROM KHASRA NO. 134/1/1
FALLING IN MAHICHA NAYRI DOGRAM, MOHAL NAHRI BATHRAI, TEHSE AYRUPUR, DISTRICT SANGRA, HIMACHAL PRADESH APPLIED FOR RENEWAL BY SH. PRABLAD SINGH, S/O
SH. YADVIYAN SINGH, R/O VILLAGE & P.O. KANDWAL, TEHSE NARPUJE, DISTRICT KANGRA, HIMACHAL PRADESH

Contents

1. INTRODUCTION:	5
1. GENERAL	6
1.1.1 Name and address of the applicant	6
1.1.2 Name of the Applicant	6
1.1.3 Address of the Applicant	6
1.2 Status of the Applicant	6
1.3 Mineral which the Applicant intends to mine	6
1.4 Period for which the mining lease area is granted	6
1.5 Name and Address of H.P.R.O.P. preparing the Mining Plan	6
1.6 Name of Prospecting Agency	6
2. Location and Approach of the area (Location Map)	7
2.1 Toposheet details	7
2.2 Location Detail of the area	8
2.3 Sub- Divisional Officer (Civil)	9
2.4 Distance from important places in Kilometres	9
2.5 Approach of the Area: -	9
3. PHYSIOGRAPHIC ASPECTS OF THE AREA	10
3.1 General	10
3.2 Altitude, General Terrain Description, with map and Contours Encompassing the Mine area: -	13
3.3 Climate of the Area	13
3.4 Rainfall	15
3.5 Any Other Important Feature: -	16
PART- I	17
DESCRIPTION OF GEOMORPHOLOGY AND MINE DEVELOPMENT	17
1. DESCRIPTION OF THE AREA IN WHICH THE MINE IS SITUATED	17
1.1 General	17
1.2 Name of the River/Stream Bed on which the mining lease is situated	18
1.3 Drainage System	18
1.4 Type of Drainage	19
1.5 Origin of river/stream	19
1.6 Altitude at the origin:	19
1.7 Geometry of the Catchment of the River impacting the Replenishment of Deposits	20
1.8 Annual Deposition of River Bed	21
1.9 The Competency of River/ Stream at the Mining Site	22
1.10 Meandering Pattern of the River near mining site	22
1.11 Altitude of the Mining area	22
1.12 Description of the Ground water table in the Mining Area, before and Post Monsoon. ..	22
2.1 Geology of the Catchment Area	23
2.2 Geology of the Lease Area	30
2.3 The Nature of boulders, cobbles, sand etc.	31
2.4 The nature of Boulder/Cobble/Sand	31
2.5 The description of Annual Deposition with Respect to Geology of Catchment Area ...	32
3. RESERVES ESTIMATE	33

MINING PLAN FOR EXTRACTION / COLLECTION OF SAND, STONE AND BAJRI MEASURING 04-99-19 HECTARES (PRIVATE LAND, RIVER BED) FROM KHASRA NO. 154/1/1
 FALLING IN MAJZI MAIRA DOOMAL, MOHAL MAIRA HATHRI, TEHSIL SURPUR, DISTRICT KANGRA, HIMACHAL PRADESH. APPLIED FOR RENEWAL BY SH. PRANLAD SINGH, S/O
 SH. SURESHWAR SINGH, R/o VILLAGE & P.O. KANDWAL, TEHSIL SURPUR, DISTRICT KANGRA, HIMACHAL PRADESH.

3.1 Percentage wise Distribution of stone, gravel sand etc.....	33
3.2 Estimate of Geological Reserves of Each Mineral	33
3.3 & 3.4 Estimated Mineable Reserves of sand, stone and bajri (gravels) & estimated deposition of different constituents of Mineral.....	34
(4) MINE DEVELOPMENT AND PLAN OF PROGRESSIVE MINING.....	34
4.1 Development and production Programme for First Five years	34
4.2 Year Wise Production Detail:	37
4.2 (a) Development and Production in the First Year (Plate No.-4)	37
4.2 (b) Development and Production in the Second Year (Plate No.-4).....	38
4.2 (c) Development and Production in the Third Year (Plate No.-4).....	39
4.2 (d) Development and Production in the Fourth Year (Plate No.-4).....	40
4.2 (e) Development and Production in the Fifth Year (Plate No.-4).....	42
4.3 End use of mineral	43
4.4 Detail of Road transport: -	43
PART –II.....	44
ENVIRONMENT MANAGEMENT PLAN.....	44
I. BASE LINE DATA	44
1.1 Detail of Population Distribution.....	44
1.2 Socio Economy of the Village	44
1.3 Land Use Details of Surrounding Villages near the auction area	45
1.4 AGRICULTURE.....	46
1.6 Animal Husbandry	54
1.7 Fisheries	55
1.8 Flora	56
1.9 Climate of the Area	61
(2) ENVIRONMENT MANAGEMENT PLAN.....	62
2.1 Impact on Air	62
2.2 Impact on Water	62
2.3 Impact on Noise Level	63
2.4 Waste Disposal Arrangement, if Any	63
2.5 Socio Economic benefits.....	63
2.6 Transport of Mineral	63
PART-III.....	64
PROGRESSIVE MINE CLOSURE PLAN/ RECLAMATION PLAN	64
1.1 MINE WASTE DISPOSAL	64
1.2 Top Soil Arrangement.....	65
1.3 Preventive Retaining Structures.....	65
1. Strategy for protection of point of public utility Etc.: -	66
2. Man power development: -	66
3. Use of Mineral: -	66
4. Disaster Management & Risk Assessment: -	66
5. Any other relevant information: -	67

MINING PLAN FOR EXTRACTION/ COLLECTION OF SAND, STONE AND RAJPT MEASURING 94.99-19 HECTARES (PRIVATE LAND, RIVER BED) FROM KHASRA NO. 154/1/2
FALLING IN MAJZI MAJRA DODMAL, MOHAL RAJRA BATHAL, TEHSIL SURPUR, DISTRICT KANGRA, HIMACHAL PRADESH. APPLIED FOR RENEWAL BY SH. PRANLAD SINGH, S/O
DR. SUDERSHAN SINGH, R/o VILLAGE & P.O. KANIHWAL, TEHSIL SURPUR, DISTRICT KANGRA, HIMACHAL PRADESH.

List of Tables

Table 1: Showing Latitude Longitude of the Area	7
Table 2: Showing Details of the Area	8
Table 3: Climate of Kangra District, Himachal Pradesh	14
Table 4: Lithostratigraphy of the Kangra District.....	26
Table 5: Showing Geological sequence of Chakki Khad Area.....	30
Table 6: Showing % age of minor mineral constituents	33
Table 7: Estimate of Geological Reserves	33
Table 8: Showing Geological Reserve in Metric Tonnes	35
Table 9: Table Showing Lease Area and the total mineable area available after leaving the no mining area.....	36
Table 10: Table Showing Reserve Estimation in the available Mineable Area	36
Table 11: Showing Production of Each Mineral in First Year	37
Table 12: Showing Production of Each Mineral in Second Year	38
Table 13: Showing Production of Each Mineral in Third Year.....	39
Table 14: Showing Production of Each Mineral in Fourth Year.....	41
Table 15: Showing Production of Each Mineral in Fifth Year.....	42
Table 16: Showing Details of Population Distribution.....	44
Table 17: Land Use Details off the lease Area in Hectares	45
Table 18: Table Showing Crop Pattern Surrounding Lease Area.....	47
Table 19: Table Showing Agriculture Area Under Major Crops, District, Kangra.....	47
Table 20: Table Showing Agriculture Area Under Major Crops, District, Kangra (2017-18). ...	48
Table 21: Table Showing Production of Each Crop In District Kangra (2017-18).....	49
Table 22: Table Showing Area in Hects Under & Production In Tonnes Of Vegetables	51
Table 23: Table Showing Net Irrigated Area of The State During 2006-07 To 2009-10.....	51
Table 24: Showing Area (Each Fruit) And Production In Dist Kangra (2017-2018).....	53
Table 25: Showing Animal Husbandry Population Kangra District-2017-18.....	54
Table 26: Showing Animal Husbandry Population Kangra District-2017-18.....	55
Table 27: Showing Total forest cover in H.P.	58
Table 28: Showing Monthly Mean Maximum and Minimum Temperature Data for Dharamshla Year 2013.....	61
Table 29: Proposed Plantation and Re-grassing	65



MINING PLAN FOR EXTRACTION/ COLLECTION OF SAND, STONE AND BAJRI MEASURING 04-99-19 HECTARES (PRIVATE LAND, RIVER BED) FROM KHASRA NO. 154/3/1 FALLING IN MAJES MAIRA DOGMAL, MOHAL MAIRA BAYRAH, TEHSIL SURPUR, DISTRICT KANGRA, HIMACHAL PRADESH. APPLIED FOR RENEWAL BY SH. PRABHAK SINGH, S/O SH. SUBRISHAN SINGH, P.O. VILLAGS & P.O. KANDIVAL, TEHSIL SURPUR, DISTRICT KANGRA, HIMACHAL PRADESH.

List of Figures

Figure 1: Google Earth Image Showing the Lease Area and Boundary Pillars.....	8
Figure 2: LULC Map of 5 Km Buffer Around the Lease Area	8
Figure 3: Satellite Image showing topography around Lease area area and approach road for transportation of mineral.....	10
Figure 4: Geomorphology Map of Kangra District	11
Figure 5: Soil Map of 5 Km Buffer Around Lease Area	12
Figure 6: Elevation Map of 5 Km Buffer around the Lease Area	13
Figure 7: Chart Showing Maximum & Minimum Temperature ($^{\circ}$ C) from Jun, 2010 to Jun, 2020	15
Figure 8: Graph showing annual rainfall of Distt. Kangra from year 2016 to 2020.....	16
Figure 9: Relief Map of District Kangra.....	19
Figure 10: Elevation Profile of Beas River from its origin to its confluence with Pong Dam	20
Figure 11: Catchment Map of Chakki Khad Showing Lease Area	21
Figure 12: Curve Showing the relation of velocity with the grain size of the sediments	22
Figure 13: Geology Map of District Kangra Showing Lease Area	30
Figure 14: Raw material at lease area	31
Figure 15: View of the lease area area.....	32
Figure 16: Pie Chart showing Availability of Mineral.....	33
Figure 17: Graph Showing production in five years.....	36
Figure 18: Graph Showing Production of Each Mineral in First Year	37
Figure 19: Graph Showing Production of Each Mineral in Second Year.....	38
Figure 20: Graph Showing Production of Each Mineral in Third Year	40
Figure 21: Graph Showing Production of Each Mineral in Fourth Year.....	41
Figure 22: Graph Showing Production of Each Mineral in Fifth Year.....	42
Figure 23: Graph Showing Details of Population Distribution	44
Figure 24: Graph Showing General Land Use Pattern of Surrounding Villages.....	45
Figure 25: Graph Showing area under Major crops in Kangra District (2017-18).....	48
Figure 26: Graph Showing area and production under Major crops in Kangra District (2017-18).....	49
Figure 27: Graph Showing Production of Each Crop In District, Kangra (2017-18).....	50
Figure 28: Graph Showing Percentage production and Percentage Area Of Produce Of Each Crop in District, Kangra (2017-18).....	50
Figure 29: Graph Showing Area in Ha Under & Production in Tonnes Of Vegetables in District Kangra (2017-18).....	51
Figure 30: Graph Showing Net Irrigated Area of The State During 2006-07 To 2009-10	52
Figure 31: Graph Showing Animal Husbandry Population Kangra District-2017-18	54
Figure 32: Graph Showing Animal Husbandry Population, Kangra District-2017-18	55
Figure 33: Graph Showing Total Forest Cover in Himachal Pradesh	58
Figure 34: Monthly Mean Maximum and Minimum Temperature Data for Dharamshla Year 2013.....	62

खैमकीय शाखा
 उद्योग विभाग शिमला
 Geological wing
 Deptt. of Industries
 Shimla

APPROVED

With Condition

तर्तों के साथ अनुमोदित

Side Letter No. *Wdg/ Bdn (Kdani-4) Ldg/ 405/09-Vol-I-2257*

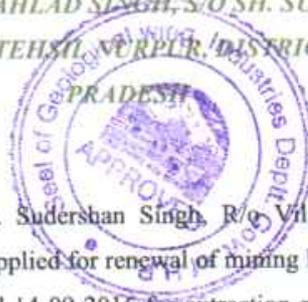
Dated

दिनांक 1/6/22

[Signature]
 Deputy Geologist,
 Shimla

MINING PLAN FOR EXTRACTION/ COLLECTION OF SAND, STONE AND BAJRI MEASURING 04-99-19 HECTARES (PRIVATE LAND, RIVER BED) FROM KHASRA NO. 154/1/1 FALLING IN MAUZA MAIRA DOOMAL, MOHAL MAIRA BATRAH, TEHSIL NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH APPLIED FOR RENEWAL BY SH. PRAHLAD SINGH, S/O SH. SUDERSHAN SINGH, R/o VILLAGE & P.O. KANDWAL, TEHSIL NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH

**MINING PLAN FOR EXTRACTION/ COLLECTION OF SAND, STONE AND BAJRI
MEASURING 04-99-19 HECTARES (PRIVATE LAND, RIVER BED) FROM
KHASRA NO. 154/1/1 FALLING IN MAUZA MAIRA DOOMAL, MOHAL MAIRA
BATRAH, TEHSIL NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH APPLIED
FOR RENEWAL BY SH. PRAHLAD SINGH, S/O SH. SUDERSHAN SINGH, R/o
VILLAGE & P.O. KANDWAL, TEHSIL NURPUR, DISTRICT KANGRA, HIMACHAL**



I. INTRODUCTION:

Sh. Prahlad Singh, S/o Sh. Sudershan Singh, R/o Village & P.O. Kandwal, Tehsil Nurpur, District Kangra, H.P., has applied for renewal of mining lease vide letter no. Udyog-Bhu (Khani-4) Laghu-405/09-6658 dated 14-09-2016 for extraction of sand, stone and bajri over an area situated in khasra no. 154/1/1 measuring 04-99-19 hectares (Private Land, River Bed) falling in Mauza Maira Doomal, Mohal Maira Batrah, Tehsil Nurpur, District Kangra, Himachal Pradesh. The extracted material shall be used in an already established stone crusher unit by the name and style of "New Nurpur Stone Crusher Unit".

The Environmental Clearance was granted vide letter no. F. No. HPSEIAA/2015/365/M/s New Nurpur Stone Crusher/1402 dated 01-06-2016, is valid only for seven years and will expire on 31-05-2023. The mining plan was approved for a period of 05 years, dated 02-06-2016 which has already expired. Therefore, the Department of Industries "Geological Wing" has issued order vide No. Udyog Bhu (Khani-4) Laghu-405/09-Vol-II-8195 to submit mining plan for the renewal of the mining lease.

The lease holder approached the undersigned having R.Q.P. No. H.P./R.Q.P./17/1/2011 for preparation of the Mining Plan of the site to fulfil one of the conditions of Letter of Intent which says that "the Party shall have to submit the approved Mining Plan under the rule 35(1) of Himachal Pradesh Minor Minerals (Concession) and Minerals (Prevention of Illegal Mining, Transportation and Storage) Rules, 2015". The Mining Plan of the area has been prepared as per the format circulated (Form-M) by the State Geologist Himachal Pradesh and in accordance with the various provisions made in the Himachal Pradesh Minor Minerals (Concession) and Minerals (Prevention of Illegal Mining, Transportation and Storage) Rules, 2015.

MINING PLAN FOR EXTRACTION/ COLLECTION OF SAND, STONE AND BAJRI MEASURING 04-99-19 HECTARES (PRIVATE LAND, RIVER BED) FROM KHASRA NO. 154/1/1 FALLING IN MAJRA MAJRA DODMAL, MOHAJ MAJRA BATHRAH, TEHSIL NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH APPLIED FOR RENEWAL BY SH. PRAHLAD SINGH, S/O SH. SUDOKSHAN SINGH, R/o VILLAGE & P.O. KANDWAL, TEHSIL NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH.

The mining lease area is located in the river bed of the Chakki Khad. The minor minerals Sand, Stone and Bajri shall be used for to be established stone crusher unit by the lease holder. On the request of the said lessee to prepare the Mining Plan, the mapping of the mining lease area was carried out on 1:2500 scale with 1-meter contour interval, encompassing Topographical, Lithological and other features. The Mining Plan includes the systematic and scientific exploitation of Sand, Stone and Bajri from within the lease area encompassing a phased programme for a forestation and point of public utility.

1. GENERAL

1.1.1 Name and address of the applicant

1.1.2 Name of the Applicant

Sh. Prahlad Singh

1.1.3 Address of the Applicant

Vill. & P.O. Kandwal, Teh. Nurpur, District Kangra, Himachal Pradesh

1.2 Status of the Applicant

Private Individual

1.3 Mineral which the Applicant intends to mine

The applicant intends to mine sand, stone & bajri from the lease area. The extracted river bed material will be used in to be established stone crusher unit i.e., New Nurpur Stone Crusher, by lease holder to construction industries/ infrastructure industries depending upon the market demand.

1.4 Period for which the mining lease area area is granted

Five years.

1.5 Name and Address of H.P.R.Q.P. preparing the Mining Plan

Indresh Nath Dhiman
(Retd. State Geologist)
Sun-shine cottage, Floor above parking,
Near Anchal provisional store, Rajhana
Road, Sector-4, New Shimla 171009.
R.Q.P. No. H.P./R.Q.P./20/1/2015

1.6 Name of Prospecting Agency

The area has been discovered by the lessee and further investigated by the R.Q.P. as he has a vast experience in mineral exploration.

MIRINI PLAN FOR EXTRACTION/ COLLECTION OF SAND, STONE AND RUJRI MEASURING 04.99-19 HECTARES (PRIVATE LAND, RIVER BED) FROM KHASKA NO. 154/3/1 FALLING IN MAHA MAIRA DOOMAI, MOHAL MAIRA BATHAM, TESIJI SURPUR, DISTRICT GANGRA, HIMACHAL PRADESH. APPLIED FOR RENEWAL BY SH. PRAHLAD SINGH, S/O. SH. EDDERMAN SINGH R/o VILLAGE & P.O. KANDWAL, TESIJI SURPUR, DISTRICT GANGRA, HIMACHAL PRADESH.

2. Location and Approach of the area (Location Map)

Please see Plate no.-1

2.1 Toposheet details

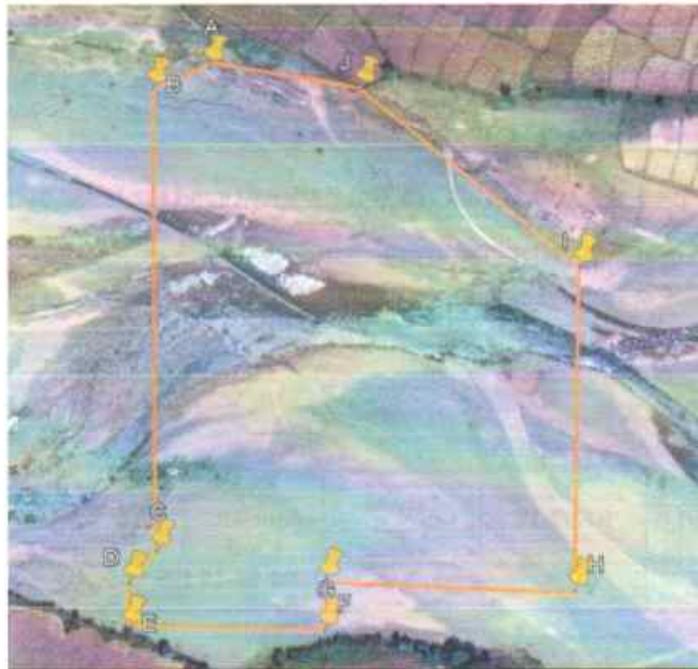
Surveyed by Survey of India

Toposheet Number 43P/15

Scale 1:50000

Table 1: Showing Latitude Longitude of the Area

Boundary Pillar	Latitude	Longitude
A	32°20'55.43"N	75°49'2.51"E
B	32°20'54.72"N	75°49'1.71"E
C	32°20'48.01"N	75°49'5.50"E
D	32°20'47.35"N	75°49'5.29"E
E	32°20'46.69"N	75°49'5.63"E
F	32°20'48.00"N	75°49'8.99"E
G	32°20'48.70"N	75°49'8.62"E
H	32°20'50.24"N	75°49'12.95"E
I	32°20'54.98"N	75°49'10.45"E
J	32°20'56.12"N	75°49'5.29"E



MINING PLAN FOR EXTRACTION/ COLLECTION OF SAND, STONE AND BAJRI MEASURING 04-99-19 HECTARES (PRIVATE LAND, RIVER BED) FROM KHASRA NO. 154/1/1 FALLING IN MAUZA MAIRA DOOMAL, MOHAL MAIRA BATRAH, TEHSIL NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH APPLIED FOR RENEWAL BY SH. PRAHLAD SINGH, S/O SH. SUDERSHAN SINGH, R/o VILLAGE & P.O. KANDIVAL, TEHSIL NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH

Figure 1: Google Earth Image Showing the Lease Area and Boundary Pillars

Land Use Land Cover Map of 5 Km Buffer for Extraction of sand, stone and bajri over an area situated in khasra no. 154/1/1, Measuring 04-99-19 hectares (Private Land, River Bed) falling in Mauza Maira Doomal, Mohal Maira Batrah, Tehsil Nurpur, District Kangra, Himachal Pradesh.

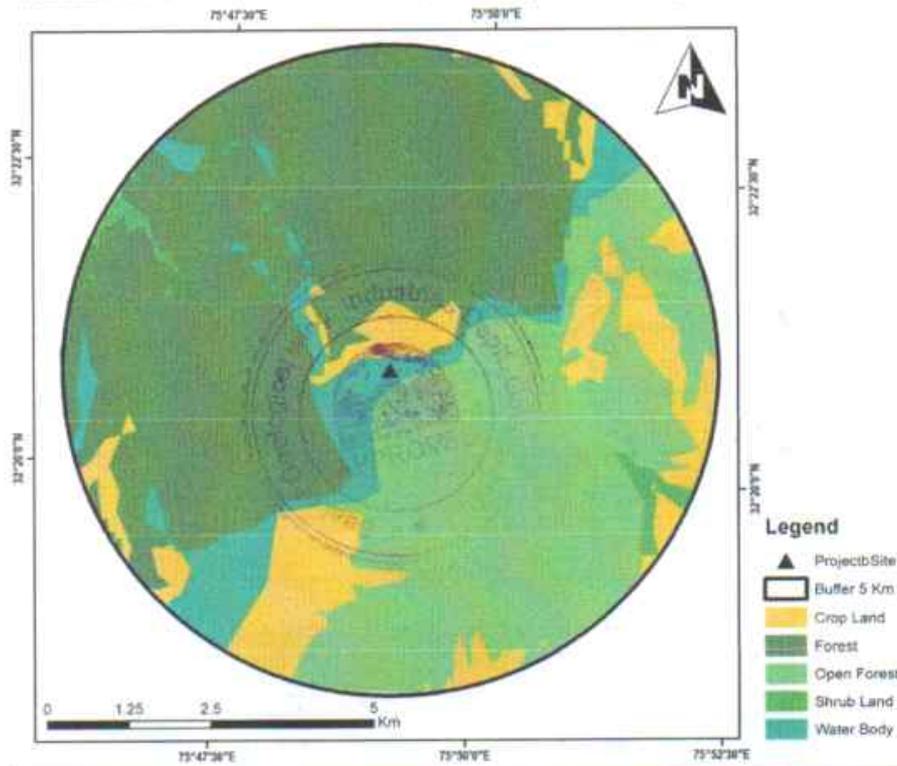


Figure 2: LULC Map of 5 Km Buffer Around the Lease Area

2.2 Location Detail of the area

Table 2: Showing Details of the Area

SR. NO.	KHASRA NOS.	AREA IN HECT	OWNER OF LAND	KISM	MAUZA	MOHAL	PANCHAYAT
1	154/1/1	04-99-19	Private Land	Gair Mumkin Khad	Maira Doomal	Maira Batrah	Haddal
	TOTAL	04-99-19 Hectares.					

MINING PLAN FOR EXTRACTION / COLLECTION OF SAND, STONE AND BAJRI MEASURING 06-99-19 HECTARES (PROHIBIT LAND, RIVER BED) FROM KHASTA NO. 154/1/1 FALLING IN MUAZI MAIRA DOOMAL MOHAL MAHIL BATHAL, TEHSIL NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH APPLIED FOR RENEWAL BY SH. PRAHLAD SINGH, S/O SH. SUDERSHAN SINGH, R/O VILLAGE & P.O. KANDWAL, TEHSIL NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH

Address Details

Village	Maira Doomal
Patwar Circle	Haddal
Tehsil	Nurpur
District	Kangra

2.3 Sub- Divisional Officer (Civil)

Divisional Forest Officer	Nurpur
Sub-Division (IPH)	Nurpur
Sub-Division (PWD)	Nurpur



2.4 Distance from important places in Kilometres

1.	Pathankot	22 Kms.
2.	Nurpur	15 Kms.
3.	Dharamshala	81 Kms.
4.	Kandwal	07 Kms.
6	Shimla	287 Kms.

2.5 Approach of the Area: -

The proposed mining site is located upstream of the Chakki Khad Bridge about 9.79 Km on the river bed. The site is approachable through a link road originating from the right bank of the river which links Nurpur-Kangra (NH-22) at a distance of about 18 kms.

MINING PLAN FOR EXTRACTION / COLLECTION OF SAND, STONE AND BAJRI MEASURING 04-99-19 HECTARES (PRIVATE LAND, RIVER BED) FROM KHASRA NO. 154/1/1 FALLING IN MAUZA MAIRA DOOMAL, MOHAL MAIRA BATRAH, TEHSIL NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH APPLIED FOR RENEWAL BY SH. PRANLAD SINGH, S/O SH. SUDERSHAN SINGH, R/O VILLAGE & P.O. KANDWAL, TEHSIL NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH

Location Map for Extraction of sand, stone and bajri over an area situated in khasra no. 154/1/1, Measuring 04-99-19 hectares (Private Land, River Bed) falling in Mauza Maira Doomal, Mohal Maira Batrah, Tehsil Nurpur, District Kangra, Himachal Pradesh.

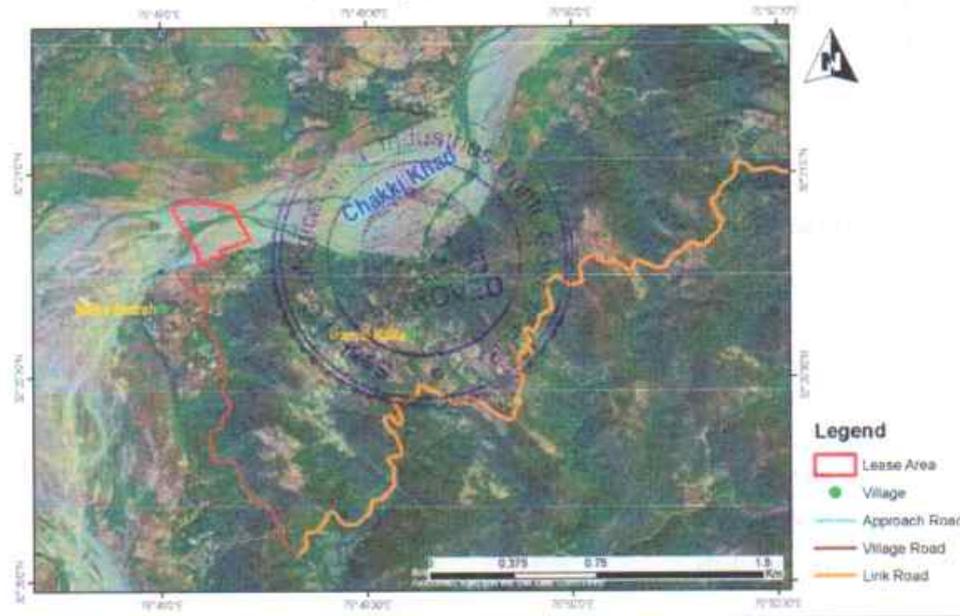


Figure 3: Satellite Image showing topography around Lease area area and approach road for transportation of mineral

3. PHYSIOGRAPHIC ASPECTS OF THE AREA

3.1 General

The Kangra district lies between Siwalik and lesser Himalaya. The lesser Himalaya is located in north western India in the States of Himachal Pradesh and Uttar Pradesh, in north central India in the State of Sikkim range from 1500 meters to 5000 meters in height. The Kangra district cover as area of 5700 Sq. Kms in the west north western part of Himachal Himalaya, bordered by Punjab and Chamba, Kullu, Mandi, Hamirpur and Una in north, east, south respectively. The elevation of the district above mean sea level (MSL) varies from 500 meters to more than 6000 meters. In the district where the Siwalik rocks are exposed, the topography represents a series of parallel hill ranges separated by longitudinal valleys. These valleys are very fertile. The high peaks where altitude is more than 4000 meters above MSL remains covered with snow. Many streams exist in the district are snow fed and many get water from the rains.

Mining Plan for Extraction/Collection of Sand, Stone and Bajri Measuring 04-99-19 Hectares (Private Land, River Bed) from Khayra No. 154/1/1 falling in Mauza Maiba Dogmal, Mohal Maiba Batriah, Tehsil Nurpur, District Kangra, Himachal Pradesh Applied for Renewal by Sh. Prahlad Singh, S/O Sh. Sureshman Singh, R/o Village & P.O. Kandwal, Tehsil Nurpur, District Kangra, Himachal Pradesh

The Dhauladhar Mountains defines the northern limit of the district separated from Chamba district. The peaks of these mountains experience heavy to very heavy snowfall and exhibits precipitation and rugged topography.

The lease is location the Chakki River bed, the left bank of the lease area is occupied with fertile alluvial plain whereas the right bank has the formation of Structural Hills. The soil map of 5 km buffer can be seen in the figure 5, the most dominant soil type is acric fluvaquents, these are occurring on floodplains, with an aquic moisture regime that are not so wet. The other two type of soil occurring to the south of the lease area is Dystric Eutrudepts and Typic Epiaquepts the former is characterized to have no free carbonates above a depth of 100 cm from the mineral soil surface. The Typic Epiaquepts soils have a frigid or warmer soil temperature regime and do not have any sulfuric, placic, or salic horizon or a fragipan near the soil surface. The elevation map of the lease area is attached as figure 6 the elevation vales range between 806 to 405 meters. The higher elevation values can be found to the east of the lease area, however the lowest elevation ranging from 405 m to 500 m can be found in the river bed.

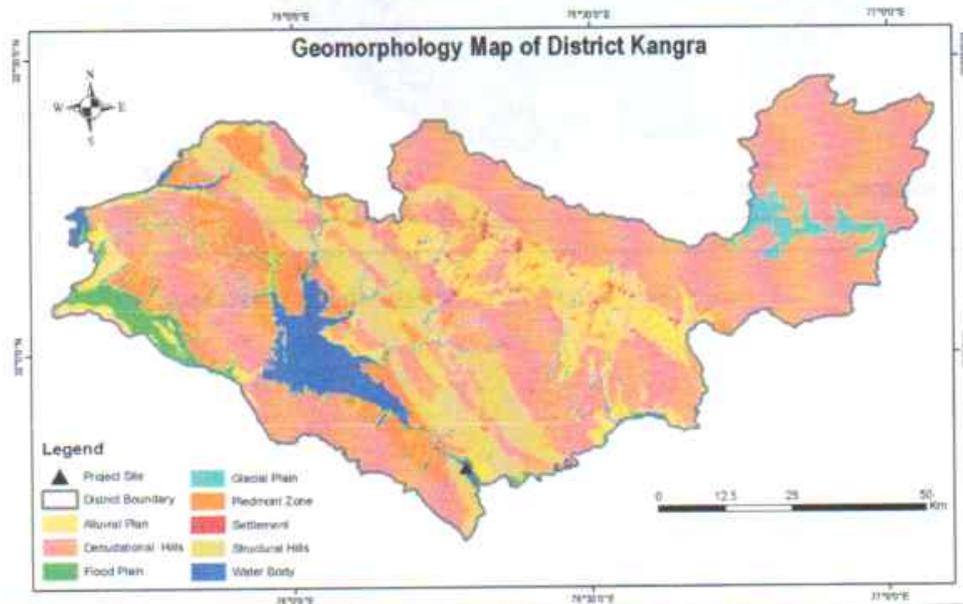


Figure 4: Geomorphology Map of Kangra District

MINING PLAN FOR EXTRACTION/ COLLECTION OF SAND, STONE AND BAJRI MEASURING 04-99-19 HECTARES (PRIVATE LAND, RIVER BED) FROM KHASRA NO. 154/3/1 FALLING IN MAOZA MAHA DOBMAI, MOHAL MAHA BATHAL, TEHSI NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH. APPLIED FOR RENEWAL BY SH. PRAHLAD SINGH, S/O. SH. EDDERSHAN SINGH, R/o VILLAGE & P.O. KANDWAL, TEHSI NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH.

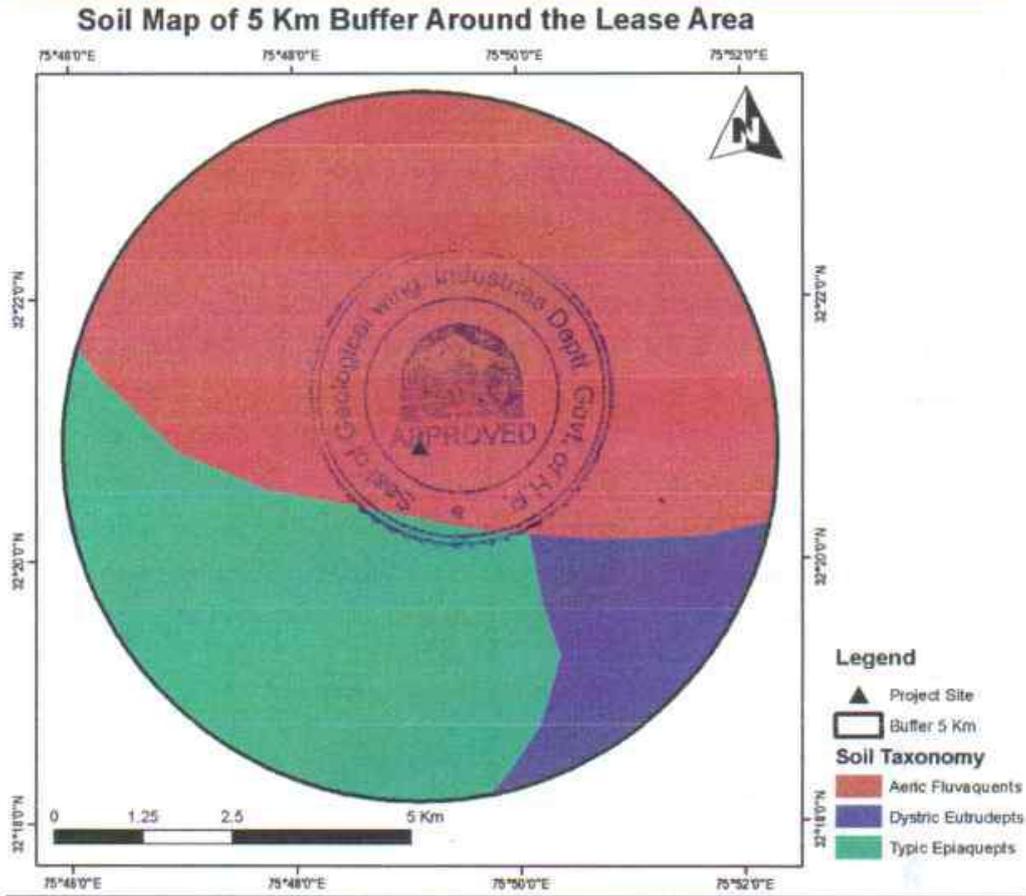


Figure 5: Soil Map of 5 Km Buffer Around Lease Area

MINING PLAN FOR EXTRACTION/ COLLECTION OF SAND, STONE AND BAJRI MEASURING 04-09-34 HECTARES (PRIVATE LAND, RIVER BED) FROM KHADA NO: 154/1/1 FALLING IN MAUZA MAIRA DOOMAL, MOHAL MAIRA BATEAH, TEHSIL NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH. APPLIED FOR RENEWAL BY SH. PRAHLAD SINGH, S/O SH. SUDERSHAN SINGH, R/o VILLAGE & P.O. KANUWAL, TEHSIL NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH.

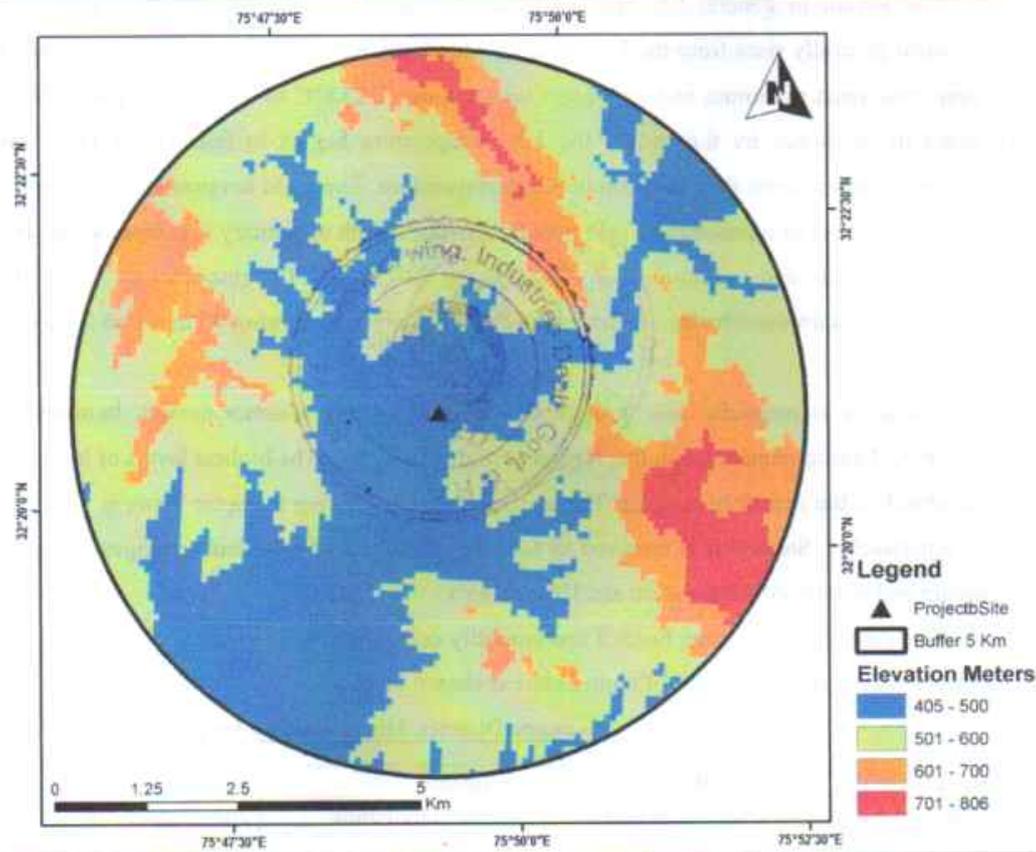


Figure 6: Elevation Map of 5 Km Buffer around the Lease Area

3.2 Altitude, General Terrain Description, with map and Contours Encompassing the Mine area: -

The map of the mining lease area on 1:2000 scale with one-meter contour interval is plate no. - III. The highest altitude of the mining lease area is 443 meters above MSL and the lowest altitude of the lease area is 440 meters above MSL.

3.3 Climate of the Area

The region has four distinct seasons. The area experiences severe winter from December to March followed by severe summer season lasting from April to June. The area receives rain fall under the influence of south -west monsoon from July to mid-September followed by post - monsoon season lasting up to November.

MINING PLAN FOR EXTRACTION/ COLLECTION OF SAND, STONE AND BAJRI MEASURING 94.99-19 HECTARES (PRIVATE LAND, RIVER BED) FROM KHASMA NO. 114/1/1 FALLING IN MAUSA MAJRI ODONAL, MOHAL MAJRI BATHRAH, TEHSIL NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH APPLIED FOR RENEWAL BY SH. PRAHLAD SINGH, S/O SH. SUDHAKARAN SINGH, R/o VILLAGE & P.O. KANDWAL, TEHSIL NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH

The terrain in general has profound influence on the temperatures of a region. The temperature generally rises from the beginning of March till June, which is the hottest month of the year with mean minimum and maximum temperature of 25.6°C to 44°C respectively. With the onset of monsoons by the end of the June temperature begins to fall. The drop in day temperature is much more than the drop in night temperature. The night temperature falls rapidly after the withdrawal of monsoons by mid-September. The month of January is cooler month with the mean maximum and minimum temperature being 24°C and 1.7°C respectively. Under the influences of western disturbance, the temperature falls appreciably during winters and it may go even below 0° C.

Humidity is generally low throughout the year. During summer season, humidity is lowest 36 %. During monsoon months, it goes as high as 80-90%. The highest levels of humidity are observed in the month of August. The average humidity during synoptic hours is 53% and 62% respectively. Snow fall is received in the higher reaches of Dhauladhar ranges. Average minimum and maximum temperature are 3°C and 45°C

The general temperature, rainfall and humidity corresponding to each type is given below in table 10 and month wise detail of temperature is shown in graph:

Table 3: Climate of Kangra District, Himachal Pradesh

Climate	Winter	Summer	Rainy
Period	Oct.-Mid March	Mid. March-June	July-September
Weather	Cool	Hot	Humid

Temperature

Mean monthly maximum and minimum temperature of last five years recorded at Kangra is given in figure 4. Temperature varies from 9°C in winter to maximum of from 39°C in summer.

Mining Plan for Extraction/Collection of Sand, Stone and Bajri Measuring 04-99-19 Hectares (Private Land, River Bed) from Khamba No. 154/1/3 Falling in Mauza Majri Doamal, Mohal, Bahra Batriah, Tehsil Nurpur, District Kangra, Himachal Pradesh Applied for Renewal by Sh. Prahlad Singh, S/O Sh. Sunderbhai Singh, R/o Village & P.O. Kandwal, Tehsil Nurpur, District Kangra, Himachal Pradesh

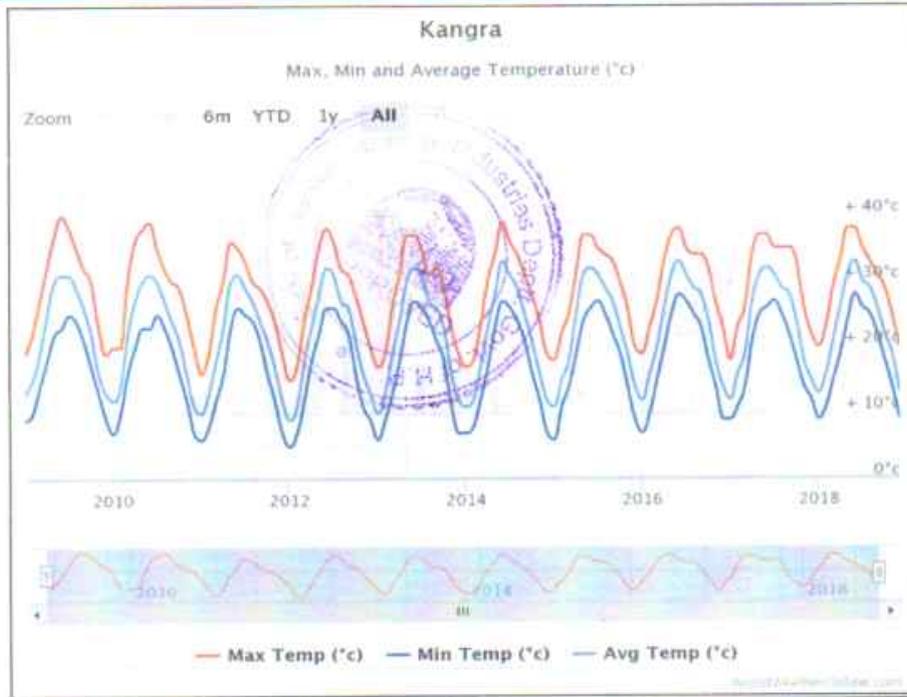


Figure 7: Chart Showing Maximum & Minimum Temperature (°C) from Jun, 2010 to Jun, 2020

3.4 Rainfall

Rainfall varies significantly with altitude of the area. The catchment area receives rainfall due to western disturbances that pass over the north - western part of the country during winter months. Significant precipitation in form of snow is received at higher altitude and rainfall in valleys is received during the winter month. Rainy season generally starts from mid-July and extends up to mid-September. During winter the rains are scarce and extend in between 15th December to 15th February. The following Table shows the quantum of rainfall during the year 2016, 2017, 2018, 2019 & 2020 adjoining to the mining lease area area as per IMD.

MINING PLAN FOR EXTRACTION/COLLECTION OF SAND, STONE AND BAJRI MEASURING 04-99-19 HECTARES (PRIVATE LAND, RIVER BED) FROM KHASKA NO. 11A/1/1 FALLING IN MAOZA MAIRA DOOMAL, MOHAL MAIRA BATHRAI, TEHSE, NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH APPLIED FOR RENEWAL BY SH. PRAHLAD SINGH, S/O SH. SUDRASHAN SINGH, R/o VILLAGE & P.O. KANDWAL, TEHSE, NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH.

Rainfall in Last 5 Years in Distt. Kangra (2016-2020)



Figure 8: Graph showing annual rainfall of Distt. Kangra from year 2016 to 2020

3.5 Any Other Important Feature: -

The present site falls in the catchment area of Beas River. The Chakki Khad and other streams such as Baner, Neugal roughly flow at each other and take a general flow direction towards south west. Although, the other two streams Baner and Neugal are glacier fed from Dhauladhar Range but, originates from NW-SE trending Ridges. Chakki Khad is Rain fed Khad.

3.6. Description of the Area in which the mining lease area is situated: -

The lease area is situated in river bed of Chakki Khad, a tributary of Beas. The general flow of this in this section is NW-SE of the lease area. The adjoining area is occupied fertile alluvial plains which is used for cultivation purposes.

Mining Plan for Extraction/ Collection of Sand, Stone and Bajri Measuring 64-95-19 Hectares (Private Land, River Bed) from Khadra No. 154/1/1 Falling in Mahra Maira Dohmal, Monal Maira Bahraic, Tehsil Nohpur, District Kangra, Himachal Pradesh. Applied for Renewal by Sh. Prahlad Singh, S/O Sh. Inderjeet Singh, R/o Village & P.O. Kandhwal, Tehsil Nohpur, District Kangra, Himachal Pradesh.

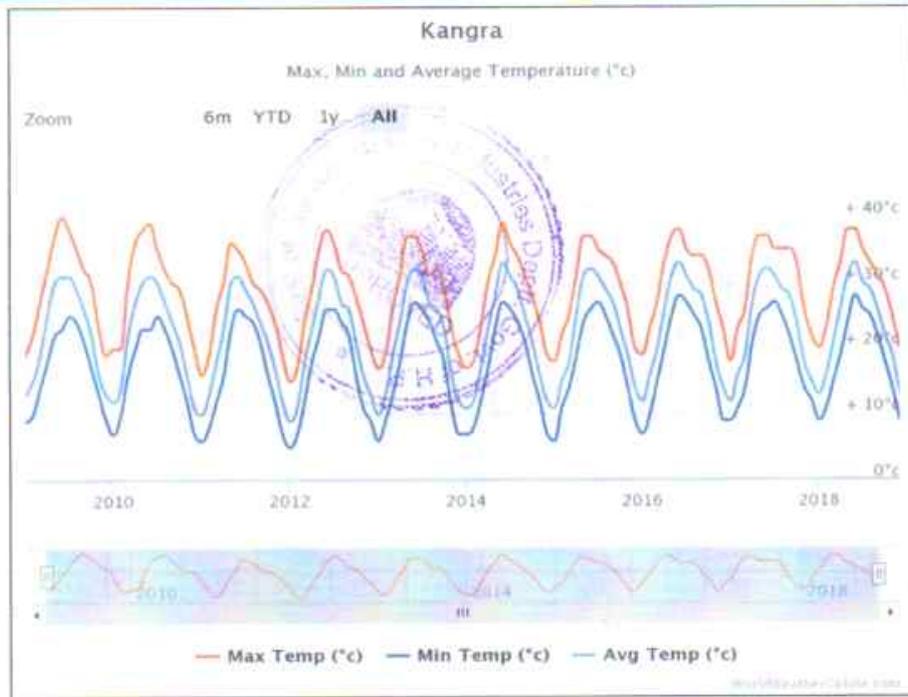


Figure 7: Chart Showing Maximum & Minimum Temperature (°C) from Jun, 2010 to Jun, 2020

3.4 Rainfall

Rainfall varies significantly with altitude of the area. The catchment area receives rainfall due to western disturbances that pass over the north - western part of the country during winter months. Significant precipitation in form of snow is received at higher altitude and rainfall in valleys is received during the winter month. Rainy season generally starts from mid-July and extends up to mid-September. During winter the rains are scarce and extend in between 15th December to 15th February. The following Table shows the quantum of rainfall during the year 2016, 2017, 2018, 2019 & 2020 adjoining to the mining lease area area as per IMD.

MINING PLAN FOR EXTRACTION/ COLLECTION OF SAND, STONE AND BAJRI MEASURING 04-99-19 HECTARES (PRIVATE LAND, RIVER BED) FROM KHASRA NO. 254/1/3 FALLING IN NAHA MAHA DOOMAL, MOHAL MAHA BATHRI, TEHSIL NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH APPLIED FOR RENTAL BY SH. PHANLAD SINGH, S/O SH. SUDERSHAN SINGH, R/o VILLAGE & P.O. KANDWAL, TEHSIL NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH

PART- I

DESCRIPTION OF GEOMORPHOLOGY AND MINE DEVELOPMENT

1. DESCRIPTION OF THE AREA IN WHICH THE MINE IS SITUATED

1.1 General

The mining lease area lies in Chakki Khad which is a tributary of Beas River. The Khad is a rain fed stream and originates from Chamba District. The general flow of this Khad is towards SW upto the confluence with River Beas. Total length of the Chakki Khad in Kangra district is 50 Kms while total catchment is 975 Sq. Kms. The Chakki Khad originates near Janjru, on the western side of Dhauladhar Range at an altitude of 3212-meters above mean sea level in Chamba District. The Dhauladhar from water divide between River Beas on the southern side and River Ravi on the northern side. The Chakki River then flows through the Nurpur Subdivision of the Kangra District then it follows the Boundary of te Himachal Pradesh and ultimately flows in the Punjab before joining the River Beas at an elevation of 258-meter above mean sea level.

The Catchment of the Chakki Khad is shown below:

Chakki Khad (Right Bank Tributary of Beas River)		Length in Km	Catchment Area in Sqm	Perimeter of Catchment in Km	Origin (in meters) above MSL	Confluence(in Meters) above MSL
		50 km in Kangra	364 km in Kangra	130 km in Kangra	880 at entry point in Kangra	2
1	Sannsar Nadi (left bank tributary of Chakki Khad)	3	3	10	1188	880
2	Hatli Khad (left bank tributary of Chakki Khad)	10	29	29	1036	486
3	Jabbar Khad (left bank tributary of Chakki Khad)	24	217	69	1490	403
3.1	Harar Khad (left bank tributary	8	38	33	1470	580

MINING PLAN FOR EXTRACTION/ COLLECTION OF SAND, STONE AND BAJRI MEASURING 04-99-19 HECTARES (PRIVATE LAND, RIVER BED) FROM KHASRA NO. 154/1/1 FALLING IN MUGGA MAIRA DOOMAL, MONGAL MAIRA BATHRAH, TERPAI NARPUK, DISTRICT KANGRA, HIMACHAL PRADESH APPLIED FOR RENEWAL BY SH. PRAHLAD SINGH, S/O SH. JUDERSHAN SINGH, R/o DILLIGER P.O. KANDWAL, TERPAI NARPUK, DISTRICT KANGRA, HIMACHAL PRADESH.

	of Jabbar Khad)					
3.2	Gareli Khad(left bank tributary of Jabbar Khad)	16	73	47	627	371
3.2.1	Gard Khad (left bank tributary of Gareli Khad)	4	30	18	620	520
3.2.1.1	Lamba Nala (left bank tributary of Gard Khad)	3	4	10	680	596
3.2.1.2	Sukhala Khad (left bank tributary of Gard Khad)	2	2	6	605	540
4	Bari Khad (left bank tributary of Chakki Khad)	4	6	12	520	401
5	Balir Di Khad (left bank tributary of Chakki Khad)	8	17	20	510	304

1.2 Name of the River/Stream Bed on which the mining lease is situated

The lease area lies in the braid of Chakki Khad.

1.3 Drainage System

It forms part of Beas Drainage system

MINING PLAN FOR EXTRACTION/ COLLECTION OF SAND, STONE AND RAJRI MEASURING 04-99-19 HECTARES (PRIVATE LAND, RIVER BED) FROM KHASRA NO. 154/1/1 FALLING IN MATIYA WAIRA DOORAL, NODIAL MAIRA GETTAH, TENSU NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH APPLIED FOR RENEWAL BY SH. PRAHLAD SINGH, S/O SH. SUDHERSHAN SINGH, R/o VILLAGE & P.O. KATHIWAH, TENSU NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH

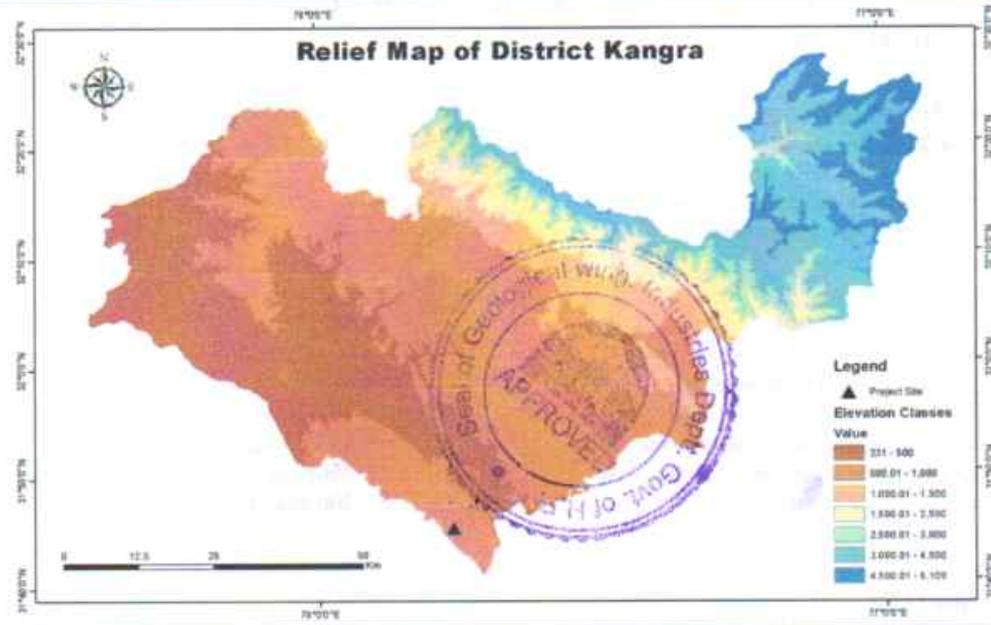


Figure 9: Relief Map of District Kangra

1.4 Type of Drainage

The primary tributaries above 430 M.R.L. exhibits dendritic type of drainage pattern and then to its downstream side show sub-dendritic type of drainage pattern.

1.5 Origin of river/stream

The Chakki Khad originates at height of about 3212-meters near Janjru village and joins Beas River after travelling a distance of about 35 Kms in Kangra and 20 Kms in Chamba District.

1.6 Altitude at the origin:

About 3212-meters above mean sea level in Chamba District The highest point of the lease area lying in the river bed is 443 meters above MSL.

MINING PLAN FOR EXTRACTION/COLLECTION OF SAND, STONE AND BAJRI MEASURING 04-99-10 HECTARES (PRIVATE LAND RIVER BED) FROM KHAKRA NO. 154/1/3 FALLING IN MAHA MAHA DODMAL, MAHA MAHA BATHAN, TERHA NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH APPLIED FOR RENEWAL BY SH. PHANLAD SINGH S/O IN SUDERSHAN SINGH R/O VILLAGE & P.O. KANDWAL, TERHA NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH

1.7 Geometry of the Catchment of the River impacting the Replenishment of Deposits

Geometry of Beas River

Total Area of catchment	= 808.88 Sq. Km.
Perimeter of the catchment	= 256.2 Kms.
Number of tributaries on right bank	= 7
Number of tributaries on left bank	= 3
Stream order up to lease area	= 2
Highest Elevation	= 2976 Mts. (M.S.L.)
Lowest Elevation	= 247 Mts. (M.S.L.)
Total length of stream	= 89.3 Kms.
Length of the stream upto lease area	= 45.9 Kms.
Maximum Length of watershed	= 68.75 Kms.
Maximum Breadth of watershed	= 26.5 Kms
Total Area of catchment upto Lease Area	= 357.85 Sq. Km
Total Elevation Loss upto mining lease	= 2508 meters
Width of River at mining place	= 300 Meters



Profile of Beas River Bed

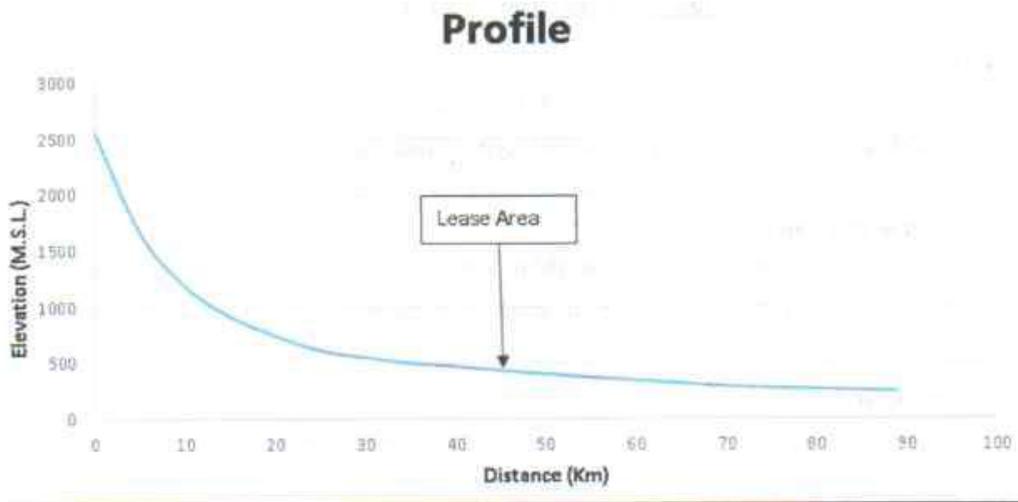


Figure 10: Elevation Profile of Beas River from its origin to its confluence with Pong Dam

MINING PLAN FOR EXTRACTION/ COLLECTION OF SAND, STONE AND BAJR NEARBY 04-99-19 HECTARES (PRIVATE LAND, RIVER BED) FROM KHASRA NO. 154/1/1 FALLING IN MAJZI MAIRA DOOMAL, MOHAL MAIRA BATHAJ, TEHSI, SURPUR, DISTRICT RANGRA, HIMACHAL PRADESH APPLIED FOR RENEWAL BY SH. PRAHLAD SINGH, S/O SH. SURESHAN SINGH, R/o VILLAGE & P.O. KANDWAL, TEHSIL SURPUR, DISTRICT RANGRA, HIMACHAL PRADESH

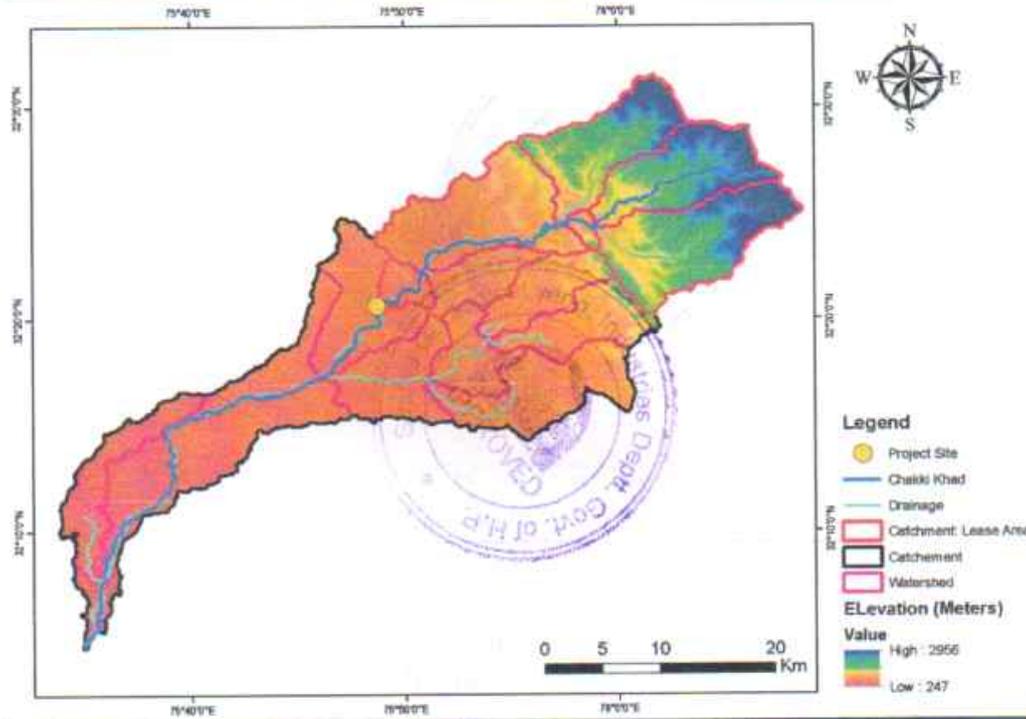


Figure 11: Catchment Map of Chakki Khad Showing Lease Area

1.8 Annual Deposition of River Bed.

The river has sufficient capacity to replenish almost equivalent to the stress on the lease area so no rotational mining has been proposed. The annual deposition of river borne material mostly takes place during monsoon season when the river is in full spate and annual deposition varies from 6.0 cms to 2.0 cms in general depending upon the location. However, the pits excavated during previous year mining are filled up completely with the deposition of new sediment load. The mining lease area is located at the mature stage of the river with gentle slope and the velocity can be seen from figure 9. Apart from this, the width of the khad is 300 m in the lease area which further decreases the flow of water.

MINING PLAN FOR EXTRACTION/ COLLECTION OF SAND, STONE AND GRAVEL MEASURING 04-99-19 HECTARES (PRIVATE LAND, RIVER BED) FROM KHASRA NO. 154/1/1 FALLING IN MAUZA MAIRA DOOMAL, MITHAL MAHA BATHRAH, TEHSIL NUNPUR, DISTRICT KANGRA, HIMACHAL PRADESH APPLIED FOR RENEWAL BY SH. PRABLAD SINGH, S/O SH. SUDERSHAN SINGH, R/W VILLAGE & P.O. KANDWAL, TEHSIL NUNPUR, DISTRICT KANGRA, HIMACHAL PRADESH



Figure 12: Curve Showing the relation of velocity with the grain size of the sediments

1.9 The Competency of River/ Stream at the Mining Site

The general competency of river as observed at the place of mining is high and it carry the size of boulder of more than 12-30 cms × 10 × 40 cms × 9 × 24 cms.

1.10 Meandering Pattern of the River near mining site

The highest flood level is 443 MRL. The river shows the braided pattern in this section of river profile with highest flood level of 1.5-meters to the lowest flood level of 0.5 to 1 meter.

1.11 Altitude of the Mining area

The highest contour in the lease area is 443-meters and lowest contour being 440-meters.

1.12 Description of the Ground water table in the Mining Area, before and Post Monsoon.

The area is located in the Siwalik system, which consists of boulder bed and has minimum water retention capacity. The area is a hilly terrain as such cannot have any regular water table but the percolated water comes out in a shape of spring at those places where there is non-pervious formation is available to stop the water from further flow. After monsoon period the springs can be seen functional in number of places but the intensity of discharge start reducing at September and most of the spring goes dry after November and the major source of water remains along the course of the Khad.

MINING PLAN FOR EXTRACTION/ COLLECTION OF SAND, STONE AND BAJRI MEASURING 04-99-19 HECTARES (PRIVATE LAND RIVER BED) FROM KHASRA NO. 154/3/1 FALLING IN MANZA WAIRA DHOMAI, MOHAJ MANJA BATHAN, TEHSIL NERPUR, DISTRICT KANGRA, HIMACHAL PRADESH. APPLIED FOR RENEWAL BY M. PRAHLAD SINGH, S/O SH. SUDERSHAN SINGH, R/o VILLAGI & P.O. KANDWAL, TEHSIL NERPUR, DISTRICT KANGRA, HIMACHAL PRADESH.

2. GEOLOGY

2.1 Geology of the Catchment Area

In Himachal Pradesh Geological history goes back to the archaean proterozoic transition although the actual Himalayan Mountain building took place only during Cenozoic era. The Himalaya is a classic example of continent and continent collision due to convergent movement of Indian plate toward the Eurasian plate. It comprises two contrasting tectogens with their own distinctive geological history. The dividing line between these two tectogens, represent a major tectonic discontinuity and is designated by several local name. However, it can be collectively refer to as a Main Central thrust and on either side of this thrust the tectogens display contrasting stratigraphic and tectonics features indicating convergence of two alien blocks. These are the lesser Himalayan tectogens and the tethys Himalayan tectogen.

Chamba Basin

In the Chamba area, falling between the Pir Panjal and the Dhauladhar Ranges of NW Himachal Pradesh, a thick sequence of Proterozoic and Upper Palaeozoic-Mesozoic formation is exposed. These formation link up with similar rock type of Bhadarwah in Jammu and Kashmir in the NW and the Proterozoic rocks are the continuation of similar rocks of south western Lahaul.

The Chamba formation, which forms the upper part of the Proterozoic Salkhala Group, appears prominently in the core of an anticline in the NW corner of Chamba and also as a long and narrow band along the SW part. The Chamba formation comprises a thick sequence of metagreywacke, slate and phyllite with strong flyschoid characteristics. It is rimmed by the Manjir Formation which succeeds it along an unconformity followed by a broad belt of the Batal Formation, also called as the Katari Gali Formation in Bhadarwah-Bhalesh.

Study by the Geological Survey of India has brought out that much of what was earlier identified as the Salooni Formation in Chamba is Actually the extension of the Terminal Proterozoic Batal Formation of Lahaul area and the Manjir is actually its basal unit.

MINING PLAN FOR EXTRACTION / COLLECTION OF SAND, STONE AND BAJRI MEASURING 04-99-19 HECTARES (PRIVATE LAND, RIVER BED) FROM KHASRA NO. 154/1/1 FALLING IN MAJRA MAIRA DOOMAL, MOHAL MAJRA BATHRI, TEHSIL NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH. APPLIED FOR RENEWAL BY MR. PRAHLAD SINGH, S/O SH. SUDDESHAN SINGH, R/W VILLAGE & P.O. KANDWAL, TEHSIL NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH.

Manjir Formation

The Manjir formation overlies the Chamba formation of the Salkhala group with an unconformity. It borders the Chamba Formation in NW, W&SW part and continues SE towards Karsog and turns around and extends in to Kullu area. The Manjir Formation comprises chiefly lenticular thick bedded or massive diamictite together with subordinate sand stone and intercalated argillites. The matrix of the diamictite shows variation from sand silt to clay. There are several units of diamictite within the Manjir with thickness ranging from a few metres to several hundred meters. Clasts comprise dominantly quartzite, Limestone, volcanic rocks and at places phyllitic clasts. Faceting and flat iron shape are rarely noticed. The clasts are poorly sorted ranging from grit to boulders in size and sub-angular to subrounded in shape. The clasts matrix ratio is highly variable and some phyllite magaclasts have slaty cleavage, the orientation of which discordant implying an earlier phase of deformation (Rattan-1973, Thakur & Pande-1972) possibly in Mesoproterozoic. The overall characteristics of the diamictite point to glacio-marine origin (Tandon & Thakur-1976) This may actually coincide with the globe proterozoic glacial phenomenon witnessed in all the continents other than Antarctica.

Batal Formation

Manjir is succeeded by the Batal Formation without any perceptible break. It is also infolded with the Batal and even occurs as imbricates. The Batal Formation, as described in the Tethyan belt of Lahaul-Spiti-Kinnaur basin, comprises dark grey carbonaceous slate and phyllite with interbeds of quartzite. At places lenticular bands of dolomite are seen in the basal part of the Batal Formation closer to its contact with the Manjir Formation. These dolomite bands are also associated with magnesite.

Salooni Formation

The Salooni Formation is infolded within the Batal Formation and it comprises black shales, slates, calcareous slates and lenticels of limestone. *Modiola lidarensis*, *spiriferalla rajah*, *Products* sp. are some of the fossils found in Salooni (Datta and Bhattacharyya-1975). This assigns permian age to the Salooni. Associated with its rocks there are basic lava flows correlatable with the Panjal volcanics of Jammu-Kashmir. However, the lithostratigraphic position of various lithounits with regard to the lava flows has not been worked out. The exact correlation of permo-Trias units of Chamba with those of the main Kashmir basin has to await more detailed classification of Chamba Rocks and also the discovery of additional fossil beds.

MINING PLAN FOR EXTRACTION / COLLECTION OF SAND, STONE AND GRAVEL MEASURING 04-95-19 HECTARES (PRIVATE LAND, RIVER BED) FROM KHASRA NO. 154/1/1 FALLING IN MATIYA MAIRA DOORAL, MOTAL MAIRA BATHAL, TENSU, SURPUR, DISTRICT KANGRA, HIMACHAL PRADESH APPLIED FOR RENEWAL BY SH. PRABHU SINGH, S/O SH. SUDERSHAN SINGH R/o VILLAGE & P.O. KANDWAL, TENSU, SURPUR, DISTRICT KANGRA, HIMACHAL PRADESH

From the locality Swanthith, plant remains have been recovered (Srivastva & Kumar-1992). These are variously compared with the Glossopterid leaves which point to a Lower Permian age. The plant bearing beds may correspond to the Nishatbagh Formation and the Spiriferalla rajah bearing beds are equivalent of the Zewan Formation of Kashmir. The Salooni Formation of Chamba needs more detailed study and classification.

Kalhel Formation

The Kalhel Formation normally overlies the Salooni. It comprises mainly greyish blue, grey and yellow limestone and dolomites with inter-bedded grey quartzite in the upper part. Limestone contains fossils of crinoids in the lower part. A teleostean fish saurichthys Agassiz 1834 has been reported from the topmost bed of Kalhel (Dalmon Formation, Mishra et al. 1990). The Salooni and Kalhel represent the major Permo-Trias marine transgressive event in the Himalaya, which is common to the Bhadrwah area of Jammu (Sharma, 1977) and the Tandi Belt of SW Lahaul. The Chamba basin is actually the extension of the Bhadrwah basin and these two together constitute a larger Permo-Trias basin in NW Himalaya.

Siwalik Group

The Siwalik Group in the Himachal Himalaya forms a parallel foot – hill belt in the Sub-Himalayan zone, extending along the southern margin of the Palaeogene Sirmour Group belt from the Ravi to the Yamuna and forms part of the larger Sub-Himalayan mega belt extending from Potwar basin in NW to the Arunachal foot-hill in SE. In the Himachal Himalaya it has maximum width between Hoshiarpur and Jogindernagar.

The Siwalik sediments, though occurring as an independent structural belt, are also seen to overlie the Muree in the Jammu sector of the Kashmir Himalaya and the Kasauli in the Himachal Himalaya. Pilgrim (1910) recorded a gradual transition from Muree beds to Lower Siwalik in the Rawalpindi and Jhelum districts of Pakistan and from Kasauli to Lower Siwalik (Nahan) in the Himachal Himalaya. This fact assumes importance because there is a tendency to ignore this normal relationship between the Siwalik and Sirmour Groups at Dharamsala, Sarkaghat and Nalagarh.

At Haritalyengar near Bilaspur, the Lower Siwalik is seen resting on the Dagshai with an unconformity, which is described as the most striking discordance in the whole sequence of

MINING PLAN FOR EXTRACTION/ COLLECTION OF SAND, STONE AND BAJRI MEASURING 04-99-19 HECTARES (PRIVATE LAND, RIVER BED) FROM KHASRA NO. 158/7/1 FALLING IN MAJHA MAHA DOOMAL, MOHAL MAHA BASTAR, TEHSIL NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH APPLIED FOR RENEWAL BY SH. PRAHLAD SINGH, S/O SH. SUDERSHAN SINGH, R/W VILLAGE & P.O. KANDWAL, TEHSIL NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH.

freshwater deposits and evidently representing a period of considerable earth movements (Pascoe, 1964).

The Siwalik Group is divisible into three subgroups respectively the Lower, Middle and Upper on the basis of lithostratigraphy (Table – Karunakaran and Ranga Rao, 1979).

Lower Siwalik Subgroup

The Lower Siwalik subgroup consists essentially of sandstone-clay alternation. The lower boundary of the Lower Siwalik does not crop out at surface in the Jawalamukhi sector. In a deep well drilled in the over thrust block of the Jawalamukhi Thrust, however, the Lower Siwalik is found conformably is also marked by an increase in the percentage of heavy minerals giving a dark appearance to the rock and incoming of less rounded heavy minerals like staurolite and unstable types like zosite and epidote.

Table 4: Lithostratigraphy of the Kangra District

Sub Group	Lithology	Thickness (approx.)
Upper Siwalik	B) predominantly massive conglomerate with red and orange clay as matrix and minor sandstone and earth, buff and brown clay stone A) Sandstone, clay and conglomerate alternation.	2300 m
Middle Siwalik	B) Massive sandstone with minor conglomerate and local variegated clay stone. A) Predominantly medium to coarse-grained sand stone and red clays alternation, soft pebbly with subordinate clay stone, locally thick prism of conglomerate	1400 m. to 2000 m
Lower Siwalik	B) Alternation of fine to medium-grained sporadically pebbly sandstone, calcareous cement and prominent chocolate and maroon clays tone in the middle part. A) Red and mauve clay stone with thin intercalations of medium to fine-grained sandstone	1600 m

MINING PLAN FOR EXTRACTION, COLLECTION OF SAND, STONE AND BAJRY MEASURING 94-99-2V HECTARES (PRIVATE LAND, RIVER BED) FROM KHASRA NO. 154/1/1
FALLING IN MAJHA MAJHA DOBHAL, MOHAL MAJHA BATHAL, TERAYI SURPUR, DISTRICT KANGRA, HIMACHAL PRADESH. APPLIED FOR RENEWAL BY SH. PRANLAD SINGH, S/O
SH. SUMERSHAN SINGH, R/o VILLAGE & P.O. KANDWAL, TERAYI, SURPUR, DISTRICT KANGRA, HIMACHAL PRADESH.

The Lower Siwalik at Jawalamukhi is 1600 m in thickness. Several subdivisions are possible on the basis of sandstone-shale ratio. Clasts are present only locally especially towards the top of the formation, usually consisting of well-rounded, grey coloured quartzite, Kasauli sandstone and Shali dolomite in 1 or 2 cm size. Clasts are present locally in the sand stone especially towards the top and these usually consist of grey and pink coloured quartzarenite possibly belonging to either the Sundernagar Group or the Khairi Formation of the Shali Group.

Further east of Jawalamukhi at the inner edge of the foot-hills, the Lower Siwalik shows a different facies. Immediately overlying the Kausauli, there is an unit of coarse feldspathic sandstone and orange coloured clays. Higher up, angular clasts of quartzarenite and chert are found in the sandstone. The main Lower Siwalik sequence consists of conglomerate ending with boulder bed containing clasts

In the Paror-Sarkaghat area, lying between the inner edge of the foot-hills and Jawalamukhi, the lithology of the Siwalik is intermediate in character. The lower part of the sequence consists of medium grained sub greywacke inter bedded with thick red clays, but higher up in the sequence, sandstones are coarser and clasts become more frequent while clays are less developed. The uppermost horizon consists of conglomerate with well-rounded clasts of grey quartzite possibly derived from the Shali Group. The total thickness of the Lower Siwalik in the western flank of the Sarkaghat anticline is 1900 m.

Middle Siwalik Subgroup

The middle Siwalik Subgroup comprises of large thickness of coarse micaceous sandstone, some inter beds of earthy clay. It normally succeeds the Lower Siwalik consists of sub greywacke to arkose inter bedded with clay stone and calcareous matter occurring in segregations rather than disseminated throughout the sandstones. The sandstones are less well-sorted than those in Lower Siwalik. Clays are dull coloured and silty. Clasts are common in coarser clastics, especially towards top and consist of fragments of metamorphic rocks occurring in the Dhauladhar range and Mandi Volcanics. The thickness of Middle Siwalik 1390 in the gorge of Banganga river, SW of Kangra. Petrologically the Lower boundary of the Middle Siwalik coincides with the influx of kyanite in the heavy mineral assemblage (Karunakaran and Ranga Rao, 1979).

Lateral facies changes are common. In the Jawalamukhi area, a thick prism of conglomerate occurs in the Middle Siwalik, which within 15 km on either side changes to typical

Mining Plan for extraction/ collection of sand, stone and baji measuring 94.99-19 HECTARES (PRIVATE LAND, RIVER BED) FROM KHARA NO. 154/1/1 FALLING IN MESSI MISHRA DOOMAL, MOHAI MAIRA RAJRAH, TEHSIL NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH APPLIED FOR RENEWAL BY SH. PRANLAD SINGH, S/O SH. SUDERHAN SINGH, R/o VILLAGE & P.O. KANDHAL, TEHSIL NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH

Middle Siwalik sandy facies. The thickness near the Beas river is 1890 m. In the Jawalamukhi sector, the middle Siwaliks, which are of nature of channel and flood plain deposits in both NW. At the outer margins these areas, Middle Siwalik is transitional to flood plain facies, especially in the lower part of the sequence. Higher up massive arkosic sandstones occur. In the Bhakra gorge section, Middle Siwalik sequence is about 1400 in thickness, divisible into two lithostratigraphic units. The lower litho-association is 750 m thick with alternations of moderately hard, well-bedded, medium to coarse-grained sandstone and red sandy clays. The overlying unit consists mainly of thick, soft to moderately hard, massive, coarse to medium-grained sandstones with thin intercalations of red and gray clays.

Along the northern edge of the foot hills, the Middle Siwalik becomes predominantly conglomeratic with pebbles derived from Sirmour Group and the Sunder Nagar -Shali Groups. The lack of roundness of the clasts suggests a short distance transport. The conglomerates are generally very thick (2000 m in Mandi area). Such conglomerates, representing piedmont deposits are found at Bilaspur, Sarkaghat, Palampur, Bakloh and other areas, and they indicate that the Himalayan uplift had already begun with antecedent erosion.

In the Sirmour areas, on the other hand, the middle Siwalik which is nearly 2000 m thick, consists of alternations of clay and sandstones in the lower part and massive sandstones in the upper part. It contains a moderately rich assemblage of opaques, garnet, tourmaline, epidote, staurolite, zoisite, zircon, rutile, chlorite and kyanite marker attended by Lithological changes in the Siwalik points to a major change in depositional pattern, accompanied by earth movements resulting in the area north of the Siwalik basin.

Upper Siwalik Subgroup

The upper Siwalik Subgroup can be easily separated from the under lying Middle Siwalik on the basis of distinct Lithological change. In the Kangra area where the middle Siwalik, the conglomerates contains clasts of basic volcanic rocks of the Mandi – Darla Volcanic with a very thin (10 m) transitional zone between them which may even suggest a local break between Middle and Upper Siwalik. The upper Siwalik conglomerates contain red and orange coloured clay as matrix. NE of Jawalamukhi, in the lambagaon syncline only 600 to 900 m. of upper Siwalik are exposed as the upper part is overlapped by the post-Upper Siwalik, Neogal conglomerates and red clays. In these, the clasts are smaller and well-rounded than those of the Upper Siwalik. They probably belong to the first interglacial period of the Pleistocene and

Mining Plan for Extraction/ Collection of Sand, Stone and Bajri Measuring 04-99-19 Hectares (Private Land, River Bed) from Khaska No. 134/7/1 falling in Mauza Wakra Doolal, Mohal Maira Ristran, Tehsil Nurpur, District Kangra, Himachal Pradesh. Applied for Renewal by Sh. Prahlad Singh, S/O Sh. Sudershan Singh, R/o Village & P.O. Kandwal, Tehsil Nurpur, District Kangra, Himachal Pradesh

therefore, the top of the Upper Siwalik extends into the Lower Pleistocene. The time interval between the two represents the last phase of the Himalayan orogeny.

The conglomeratic facies of the Upper Siwalik is found in the main Mandi Reentrant mainly in the Lambagaon syncline and in the area immediately to the SE of the main tectonic divide between the Siwalik belt and the Sirmaur belt. South wards, the conglomeratic facies comes progressively higher in the sequence, underlain by grits and arkoses sandstone. SW of Jawalamukhi, for example, 1500 m Upper Siwalik area exposed consisting of 1040 m lower pebbly sand stone sequence, often with grey and brown clay bands and 460 m of conglomerate overlying them. This situation continues along the Nadaun dun. At Bhakra gorge, the Upper Siwalik is 2350 mtrs thick, divisible in to a lower member of 1730 mtrs thickness, and an Upper Member 620 mtrs thick. The Lower Member mainly consists of soft, massive, pebbly, sand stone with thin intercalation of conglomerates, and grey sandy clays become prominent enough at the top of the formation to be identified separately has a Sub-Member, 215 m thick at Bhakra. North west wards, the clays are replaced by massive sand stone and conglomerates which pass once more in to a clay, sand stone succession near Pathankot

In the outer foot-hills belt, in Janauri, the Upper Siwalik is mainly a sand stone inter bedded with silts. Conglomerates occur only at the North western part of the structure. The Upper Siwalik is 2300 m thick. Further south-west wards, in the planes, the sandy facies of the Upper Siwalik extends all the way up to the Delhi-Lahore arch which separates the Punjab platform from the Rajasthan Platform. The thickness of the Upper Siwalik decreases steadily from 1610 m at Hoshiarpur to 445 m at Zira near the top of the arch in Punjab. In the planes there is to be no discordance between the post- Siwalik alluvium and the Upper Siwalik.

Mining Plan for Extraction/ Collection of Sand, Stone and Bajri Measuring 04-99-19 Hectares (Private Land, River Bed) from Khassa No. 15A/3/1 falling in Matiza Maira Doomal, Mohal Maira Batabai, Tehsil Nurpur, District Kangra, Himachal Pradesh Applied for Renewal by Sh. Prabhakar Singh, S/O in Sudevman Singh, R/o Village & P.O. Kandwal, Tehsil Nurpur, District Kangra, Himachal Pradesh

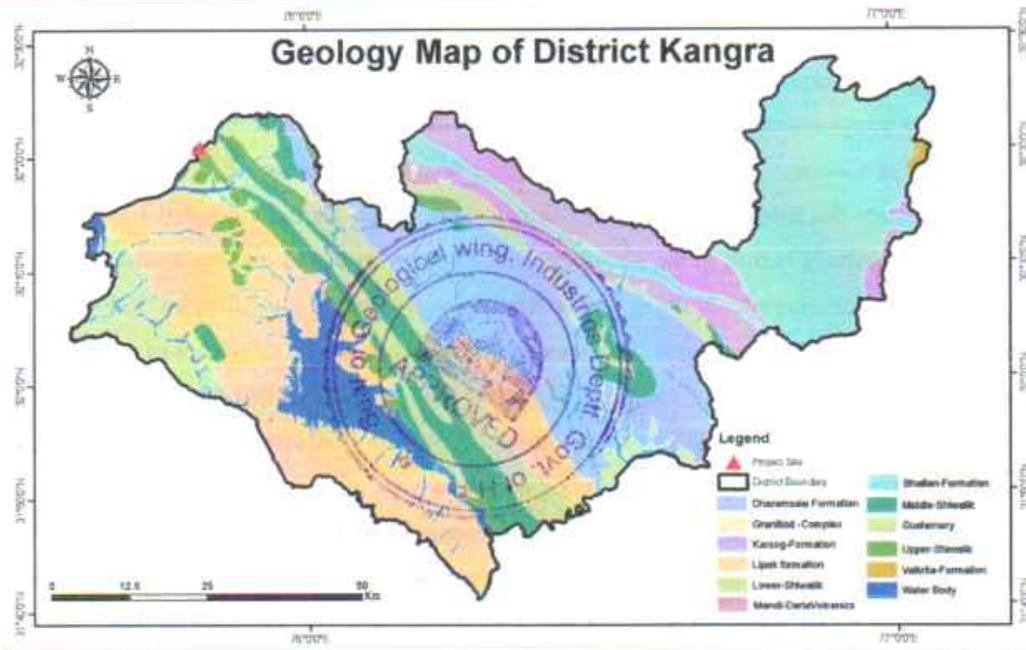


Figure 13: Geology Map of District Kangra Showing Lease Area

2. 2 Geology of the Lease Area

The leased-out area forms a part of the terrace deposit consisting boulders, stone, cobbles, pebbles, river born bajri, and sand and clay deposit of Post-Shiwalik Formation. The rocks in the catchments of Chakki Khad are of Siwalik Formation and Dharamshala formation. The area is comprising predominantly the quartzite Boulders, Sand and river born bajri. The boulders are white, spotted white, greenish white, pink, purple and dark green in colour.

The local geological sequence in the area is given in the figure 8 and stratigraphy of the area is given in the table -5.

Table 5: Showing Geological sequence of Chakki Khad Area

Formation	Group	Lithology	Age
Post Shiwalik	Channel Alluvium	Grey micaceous, fine to coarse grained sand, silt, clay & boulders.	Quaternary
	Terrace Alluvium	Cyclic sequence of grey micaceous sand, silt, clay, and boulders	

MINING PLAN FOR EXTRACTION/ COLLECTION OF SANDS (TONE AND BAJRI) MEASURING 04-99-19 HECTARES (PRIVATE LAND, RIVER BED) FROM KHASBA NO. 154/1/1 FALLING IN MAJRA MAIRA DDOMAL, MOHAL MAIRA BATHRAH, TEHSIL NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH. APPLIED FOR RENEWAL BY SH. PRAHLAD SINGH, S/O SH. SUDERSHAN SINGH, R/o VILLAGE & P.O. KANDWAL, TEHSIL NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH

Siwalik	Upper Siwalik	Predominantly massive conglomerate with red and orange clay as matrix and minor sandstone and earthy buff and brown claystone	Neogene
---------	---------------	---	---------

2.3 The Nature of boulders, cobbles, sand etc.

The lease area is filled with rounder to sub-rounded boulders with prolate to oblate cobbles and pebbles forming bajri. These boulders, cobbles and pebbles are mainly of quartzite, granite and hard sandstone with granite gneisses and schists. The sand mainly consists of quartz sand and feldspar sand having a mixture of amorphous and crystalline particles.

2.4 The nature of Boulder/Cobble/Sand

The rocks along the banks of river in the area mainly consist of Middle Siwalik Formation having general strike direction SE to NW with dipping direction to north. During the monsoon, the riverbed replenishes by the eroded rocks from the pre tertiary Formations. Due to sudden decrease in the carrying capacity and competency of the river after monsoon floods, the annual deposition of six to eight cm is received.



Figure 14: Raw material at lease area

Mining Plan for Extraction/Collection of Sand, Stone and Bajri Measuring 04-99-19 Hectares (Private Land, River Bed) from Khaska No. 134/1/3 falling in Maske Mahe Dooval, Mohal Mahe Bafrah, Tehsil Nurpur, District Kangra, Himachal Pradesh. Applied for Renewal by Sh. Prahlad Singh, S/O Sh. Sudershan Singh, R/o Village & P.O. Kandwal, Tehsil Nurpur, District Kangra Himachal Pradesh

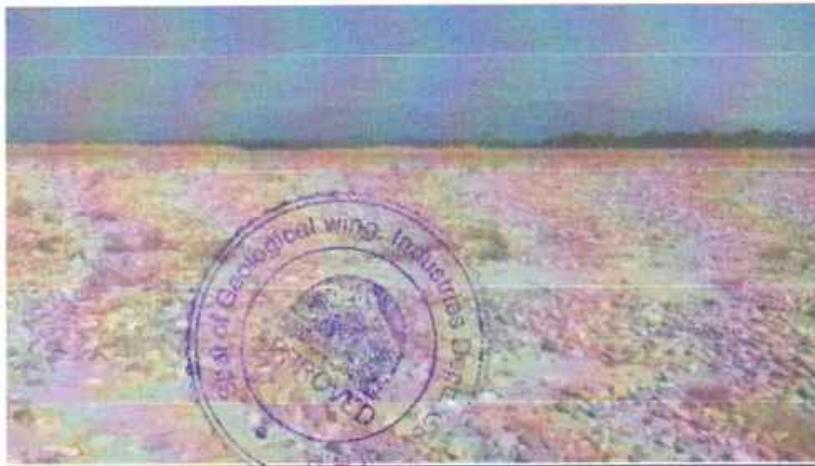


Figure 15: View of the lease area area

2.5 The description of Annual Deposition with Respect to Geology of Catchment Area

Total area Chakki Khad catchment up to the mining site is about 357.5 sq. km and it encompasses geology from Dhauladhar granite to post Shiwalik Formation. During monsoon seasons the river water is loaded with heavy suspended particles ranging in size from less than 2 mm to 600 mm. Since the river in the applied for area is in old stage, it supplies enough mineral every year to cater the demand of established stone crusher. The thickness of this river borne material is 3.0 mts. depth as gathered in discussion with P.W.D. authorities as they have noticed in the past while digging for bridge abutments. The area granted submerges during monsoon therefore no permanent vegetation is possible in the river bed, however seasonal grass grows in the stable lands of the khad. For calculation of quantity of mineral one meter depth has been taken into consideration. The nearest bridge Chakki Bridge which connects Himachal and Punjab lies at a aerial distance of 8.5 Kms in the south west direction downstream of the lease area.

MINING PLAN FOR EXTRACTION/ COLLECTION OF SAND, STONE AND BAJRI MEASURING 04-99-19 HECTARES (PRIVATE LAND, RIVER BED) FROM KHASRA NO. 154/1/3 FALLING IN MAHA MAHA DOOMAL, MOHAL MAHA BATHAL, TEHSIL NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH APPLIED FOR RENEWAL BY SH. PRAHLAD SINGH, S/O SH. SUDERSHAN SINGH, R/o VILLAGE & P.O. KANIMHAL, TEHSIL NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH

3. RESERVES ESTIMATE

3.1 Percentage wise Distribution of stone, gravel sand etc.

The different constituents of river borne deposits such as boulder, bajri(Gravel), sand and silt/clay based on size classification were considered for reserve calculation. In order to calculate the geological reserve two pits at different locations of 1x1x1 meter were got dug in the mining lease area and material so excavated was separated into different size and their percentage was worked out and this percentage was taken in to account during calculation of reserves. The average specific gravity of the minor mineral has been taken as 2.24. The results of the test pit dug are given in the following table:

Table 6: Showing % age of minor mineral constituents

1.	Boulder	50%	40 mm to 600 mm
2.	Bajri	30%	5 mm to 40 mm
3.	Sand	15%	2 mm to 5 mm
4.	Silt/Clay	5%	Less than 2 mm

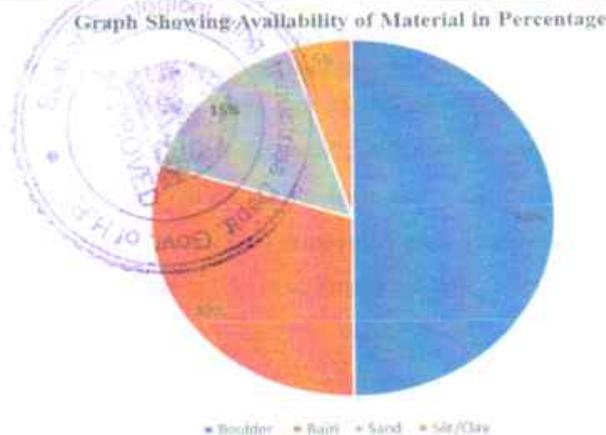


Figure 16: Pie Chart showing Availability of Mineral

3.2 Estimate of Geological Reserves of Each Mineral

The average depth of sediments in the lease area is expected to be 3 meters in total lease area as per information gathered from Public Works Department (P.W.D.) and following are the geological reserves: -

Table 7: Estimate of Geological Reserves

MINING PLAN FOR EXTRACTION/ COLLECTION OF SAND, STONE AND BAJRI MEASURING 04-99-19 HECTARES (PRIVATE LAND, RIVER BED) FROM KHASRA NO. 154/1/1 FALLING IN MAJEE NAIKA DOOMAL, MOHAL NAIKA BATHAL, TEHSIL NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH. APPLIED FOR RENEWAL BY SH. PRAHLAD SINGH, S/O. SH. YUDERSHAN SINGH, R. NO. VILLAGE & P.O. KANDMAL, TEHSIL NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH.

Name of Mineral	Boulder M.T. (50%)	Bajri M.T. (30%)	Sand M.T. (15%)	Silt & Clay M.T. (5%)	Total M.T. (100%)
Quantity in M.T.	142464	85478	42739	14246	284928

However, as the mineral replenishes every year, the reserves are always renewable and shall not exhaust as such geological reserves in river bed has no relevance to the production size.

3.3 & 3.4 Estimated Mineable Reserves of sand, stone and bajri (gravels) & estimated deposition of different constituents of Mineral

Considering the vertical permissible depth of 1-meter and available mineable area of about 42400 sqm following estimate of mineable reserves has been accounted:

Name of the Mineral	Area in SQM	Stone in M.T.	Bajri in M.T.	Sand in M.T.	Silt & Clay in M.T.	Total
Sand, Stone and Bajri	42400	47488	28493	14246	4749	94976

(4) MINE DEVELOPMENT AND PLAN OF PROGRESSIVE MINING

4.1 Development and production Programme for First Five years

The basic requirement of the bidder is sand, stone and bajri for to be established stone crusher. Hence, Bidder intends to mine Sand, Stone, & Bajri. The minerals by hand shovelling into tractor trolleys will be transported to crusher site. As the Lease area contains prominently mineral of river bed, the constituent does not require washing as this will increase the production cost as a result the day or silt which is integral part of the sand will be sold as such without washing. In order to calculate the mineable reserves, the following points are taken in to consideration;

1. A Geological map is prepared and main Litho-units were marked on the plan to know the surface spread of each unit.
2. The different constituents of river borne deposits such as Stone, bajri, sand and silt /clay based on size classification were considered for reserve calculation. Two pits at different locations in the lease area of 1x1x1 meter were got dug in the mining lease area and material so excavated was separated into different size and their percentage was worked out and this percentage was taken in to account during calculation of reserves.

MINING PLAN FOR EXTRACTION / COLLECTION OF SAND, STONE AND BAJRI MEASURING 04-95-19 HECTARES (PRIVATE LAND, RIVER BED) FROM BHAGRA NO. 154/1/1 FALLING IN MAHA MAHA DOHAI, MOHAL MAHA BISTRAL TEHSE NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH APPLIED FOR RENEWAL BY SH. PRABHAKAR SINGH, S/O SH. SUDERSHAN SINGH, RAJ VILLAGE & P.O. KANDWAL, TEHSE NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH

3. Keeping in view of the replenishment factor, no rotational mining has been proposed. Whole block shall be explored in every year
4. The mining shall be under taken manually and mechanical mining may be under taken if allowed by the Government.
5. An average of specific gravity i.e., 2.24 is taken for the calculations of minerals potential in the area applied for lease.
6. The total available mineable area after leaving no mining zone of 7519 sqm by taking into consideration the safety of banks, is about 42400 sqm.
7. The total available area is 85% of the lease area after leaving no mining zone as per total requirement of the mineral per year, after leaving the 1/10 of the HFL.
8. Instream mining area has not been out from the planning area, annual production is similar to the approved production as per the EC letter.

Table 8: Showing Geological Reserve in Metric Tonnes

Year	Area in SQM	Reserve in M.T.
1 st Year	42400	94976
2 nd Year	42400	94976
3 rd Year	42400	94976
4 th Year	42400	94976
5 th Year	42400	94976
Total		474880

MINING PLAN FOR EXTRACTION/ COLLECTION OF SAND, STONE AND BAJRI MEASURING 04.99-19 HECTARES (PRIVATE LAND, RIVER BED) FROM KHASRA NO. 154/7/3 FALLING IN MAJGA MAIRA DOGMEL, MOHAL MAJRI BATHALI, TEHSIL SURPUR, DISTRICT KANGRA, HIMACHAL PRADESH. APPLIED FOR RENEWAL BY SH. PRAHLAD SINGH, S/O SH. SUDARSHAN SINGH, R/o VILLAGE & P.O. KANDWAL, TEHSIL SURPUR, DISTRICT KANGRA, HIMACHAL PRADESH.

Graph Showing Total Material Handling in five Years



Figure 17: Graph Showing production in five years

Table 9: Table Showing Lease Area and the total mineable area available after leaving the no mining area

Total Lease Area	49919 sqm
No Mining Zone Area	7519 sqm
Area Availability After Leaving no Mining Zone (IN M.T.)	42400 sqm

Table 10: Table Showing Reserve Estimation in the available Mineable Area

Total Area Available (IN SQM.)	42400
Depth (IN M)	1
Specific Gravity	2.24
Availability of Mineral (IN MT)	94976

1. The average specific gravity of boulders has been taken for calculation of reserves has been taken 2.24 and one-meter depth is taken for calculation of reserves.
2. The Mineable reserves calculated as per the production's requirement has been calculated in the mineable area.

MINING PLAN FOR EXTRACTION / COLLECTION OF SAND, STONE AND BAJRI MEASURING 04-99-19 HECTARES (PRIVATE LAND, RIVER BED) FROM KHASNA NO. 124/7/T FILLING IN MAJRA MAJRA DOHMAL, MOJAL MAJRA BATHAL, TEHSIL NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH. APPLIED FOR RENEWAL BY SH. PRABHAK SINGH, S/O SH. SUDERSHAN SINGH, R/o TELLAGE & P.O. KANDWAL, TEHSIL NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH

4.2 Year Wise Production Detail:

The Chakki Khad gets replenished during monsoon and winter rains when the river gets heavy load for a short period. The river level is raised up to 1.5-meters for a shorter spell of time. The mining has been planned in full block up to the depth of 1-meter to give a better chance for replenishment during monsoon and winter rainy season.

4.2 (a) Development and Production in the First Year (Plate No.-4)

During 1st Year of development and production Programme, mining is proposed in the 42,400 square meters only. The production of each mineral Constituent will be as under: -

Table 11: Showing Production of Each Mineral in First Year

Year	Area in SQM	Stone in M.T.	Bajri in M.T.	Sand in M.T.	Silt/ Clay in M.T.	Total
1 st Year	42400	47488	28493	14246	4749	94976

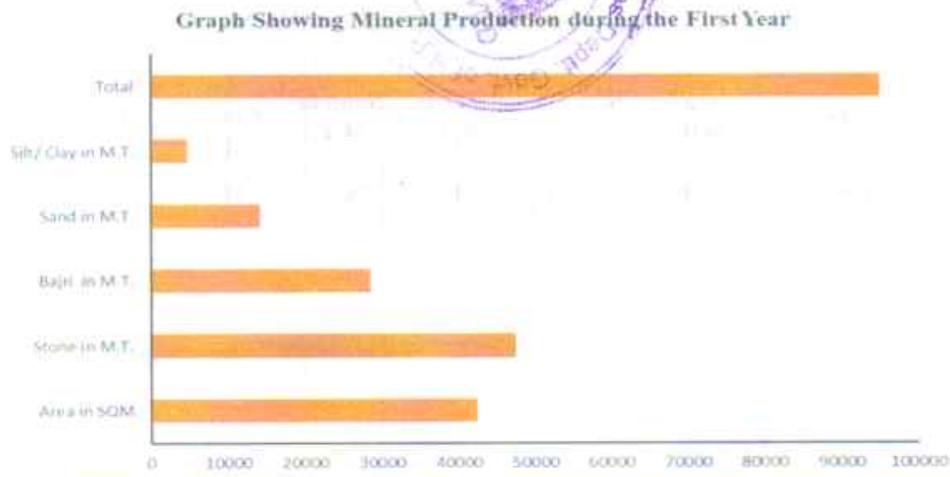


Figure 18: Graph Showing Production of Each Mineral in First Year

- i. 47,488 metric tonnes of Stone will be fed in to be established stone crusher.
- ii. 28,493 metric tonnes of bajri will be fed in to be established stone crusher.
- iii. 14,246 metric tons of sand will be produced and sold in open market.

MINING PLAN FOR EXTRACTION/ COLLECTION OF SAND, STONE AND BAJRI MEASURING 04-98-19 HECTARES (PRIVATE LAND, RIVER BED) FROM KHASRA NO. 154/1,1 FALLING IN MUDA MAHA DOOMAL, MOHAL RAJRA BATHAH, TEHSE SURPURI, DISTRICT KANGRA, HIMACHAL PRADESH APPLIED FOR RENEWAL BY SH. PRAHLAD SINGH, S/O SH. SURESHAN SINGH, R/o VILLAGE & P.O. KANDHWAL, TEHSE NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH

- iv. 4,749 metric tons of silt as associated minerals and too admixed with sand to be separated, will be lifted and sold with sand.

Afforestation – As the lease area lies in the centre of the river bed so there is no scope for plantation in the proximity of the mining site. Therefore, the auctioned holder will do the plantation in consultation with the concerned department.

Protection of bank – A retaining structure will be constructed at C-1 with dimensions L X B X H = 20m X 2m X 2m to keep a check on river flow as marked in Plate No. 3.

Waste dump – A mixture of silt and clay will be produced as waste which will be dumped out of the river bed after consulting local gram panchayat and will be later plantation or by locals for agricultural or other household purposes.

4.2 (b) Development and Production in the Second Year (Plate No.-4)

During 2nd Year of development and production Programme, mining is proposed in the 42,400 square meters only. The production of each mineral Constituent will be as under: -

Table 12: Showing Production of Each Mineral in Second Year

Year	Area in SQM	Stone in M.T.	Bajri in M.T.	Sand in M.T.	Silt/ Clay in M.T.	Total
2 nd Year	42400	47488	28493	14246	4749	94976

Graph Showing Mineral Production during the Second Year

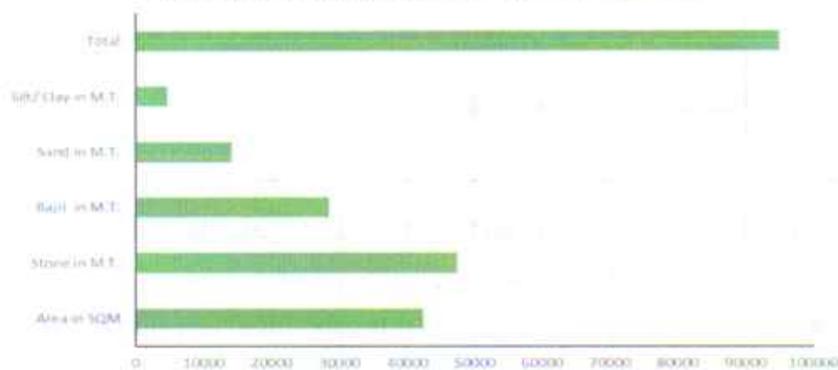


Figure 19: Graph Showing Production of Each Mineral in Second Year

MINING PLAN FOR EXTRACTION/ COLLECTION OF SAND, STONE AND BAJRI MEASURING 04-99-19 HECTARES (PRIVATE LAND, RIVER BED) FROM KHASRA NO. 154/1/1 FALLING IN MAJHA MAHA DOOMAL, MOHAL MAJHA BATHAL, TEHSIL NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH. APPLIED FOR RENEWAL BY SH. PRAHLAD SINGH, S/O SH. SUDERSHAN SINGH, R/O VILLAGE & P.O. KANDWAL, TEHSIL NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH.

- i. 47,488 metric tonnes of Stone will be fed in to be established stone crusher.
- ii. 28,493 metric tonnes of bajri will be fed in to be established stone crusher.
- iii. 14,246 metric tons of sand will be produced and sold in open market.
- iv. 4,749 metric tons of silt as associated minerals and too admixed with sand to be separated, will be lifted and sold with sand.

Afforestation – As the lease area lies in the centre of the river bed so there is no scope for plantation in the proximity of the mining site. Therefore, the auctioned holder will do the plantation in consultation with the concerned department.

Protection of banks – A retaining structure will be constructed at C-2 with dimensions L X B X H = 20m X 2m X 2m to keep a check on river flow as marked in Plate No. 3.

Waste dump – A mixture of silt and clay will be produced as waste which will be dumped out of the river bed after consulting local gram panchayat and will be later plantation or by locals for agricultural or other household purposes.

4.2 (c) Development and Production in the Third Year (Plate No.-4)

During 3rd Year of development and production Programme, mining is proposed in the 42,400 square meters only. The production of each mineral Constituent will be as under: -

Table 13: Showing Production of Each Mineral in Third Year

Year	Area in SQM	Stone in M.T.	Bajri in M.T.	Sand in M.T.	Silt/ Clay in M.T.	Total
3 rd Year	42400	47488	28493	14246	4749	94976

MINING PLAN FOR EXTRACTION/ COLLECTION OF SAND, STONE AND BAJRI MEASURING 64-95-19 HECTARES (PRIVATE LAND, RIVER BED) FROM KHAMBA NO. 154/1/1 FALLING IN MAUZA MAIRA DOOMAI, MOHAL MAIRA BATHAI, TEHSIL NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH APPLIED FOR RENEWAL BY SH. PRAHLAD SINGH, S/O SH. SUDERSHAN SINGH, R/o VILLAGE & P.O. KANDWAL, TEHSIL NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH

Graph Showing Mineral Production during the Third Year



Figure 20: Graph Showing Production of Each Mineral in Third Year

- i. 47,488 metric tonnes of Stone will be fed in to be established stone crusher.
- ii. 28,493 metric tonnes of bajri will be fed in to be established stone crusher.
- iii. 14,246 metric tons of sand will be produced and sold in open market.
- iv. 4,749 metric tons of silt as associated minerals and too admixed with sand to be separated, will be lifted and sold with sand.

Afforestation – As the lease area lies in the centre of the river bed so there is no scope for plantation in the proximity of the mining site. Therefore, the auctioned holder will do the plantation in consultation with the concerned department.

Protection of banks –A retaining structure will be constructed at C-3 with dimensions L X B X H = 20m X 2m X 2m to keep a check on river flow as marked in Plate No. 3.

Waste dump – A mixture of silt and clay will be produced as waste which will be dumped out of the river bed after consulting local gram panchayat and will be later plantation or by locals for agricultural or other household purposes.

4.2 (d) Development and Production in the Fourth Year (Plate No.-4)

During 4th Year of development and production Programme, mining is proposed in the 42,400 square meters only. The production of each mineral Constituent will be as under: -

Mining Plan for extraction/ collection of sand, stone and bajri measuring 04-99-19 hectares (private land, river bed) from Khaska No. 154/1/1 falling in Mauza Nandi, Doolal, Mohal Nandi Batraik, Tehsil Nurpur, District Kangra, Himachal Pradesh applied for renewal by Sh. Prabhad Singh, S/O Sh. Sumershan Singh, R/o Village & P.O. Kandwal, Tehsil Nurpur, District Kangra, Himachal Pradesh.

Table 14: Showing Production of Each Mineral in Fourth Year

Year	Area in SQM	Stone in M.T.	Bajri in M.T.	Sand in M.T.	Silt/ Clay in M.T.	Total
4 th Year	42400	47488	28493	14246	4749	94976

Graph Showing Mineral Production during the Fourth Year



Figure 21: Graph Showing Production of Each Mineral in Fourth Year

- i. 47,488 metric tonnes of Stone will be fed in to be established stone crusher.
- ii. 28,493 metric tonnes of bajri will be fed in to be established stone crusher.
- iii. 14,246 metric tons of sand will be produced and sold in open market.
- iv. 4,749 metric tons of silt as associated minerals and too admixed with sand to be separated, will be lifted and sold with sand.

Afforestation – As the lease area lies in the centre of the river bed so there is no scope for plantation in the proximity of the mining site. Therefore, the auctioned holder will do the plantation in consultation with the concerned department.

Protection of banks – A retaining structure will be constructed at C-4 with dimensions L X B X H = 20m X 2m X 2m to keep a check on river flow as marked in Plate No. 3.

MINING PLAN FOR EXTRACTION/ COLLECTION OF SAND, STONE AND BAJRI MEASURING 04 99 24 HECTARES (PRIVATE LAND, RIVER BED) FROM KHASRA NO. 124/1/1 FALLING IN MALUA MAHA DODMAL, MOTAL MAHA BIPRAH, TENDU KHUPUR, DISTRICT KANGRA, HIMACHAL PRADESH- APPLIED FOR RENEWAL BY SH. PRAHLAD SINGH, S/O SH. SUDERSHAN SINGH R/o VILLAGE & P.O. KANDWAL, TENDU KHUPUR, DISTRICT KANGRA, HIMACHAL PRADESH

Waste dump – A mixture of silt and clay will be produced as waste which will dumped out of the river bed after consulting local gram panchayat and will be later plantation or by locals for agricultural or other household purposes.

4.2 (e) Development and Production in the Fifth Year (Plate No.-4)

During 5th Year of development and production Programme, mining is proposed in the 42,400 square meters only. The production of each mineral Constituent will be as under: -

Table 15: Showing Production of Each Mineral in Fifth Year

Year	Area in SQM	Stone in M.T.	Bajri in M.T.	Sand in M.T.	Silt/ Clay in M.T.	Total
5 th Year	42400	47488	28493	14246	4749	94976

Graph Showing Mineral Production during the Fifth Year

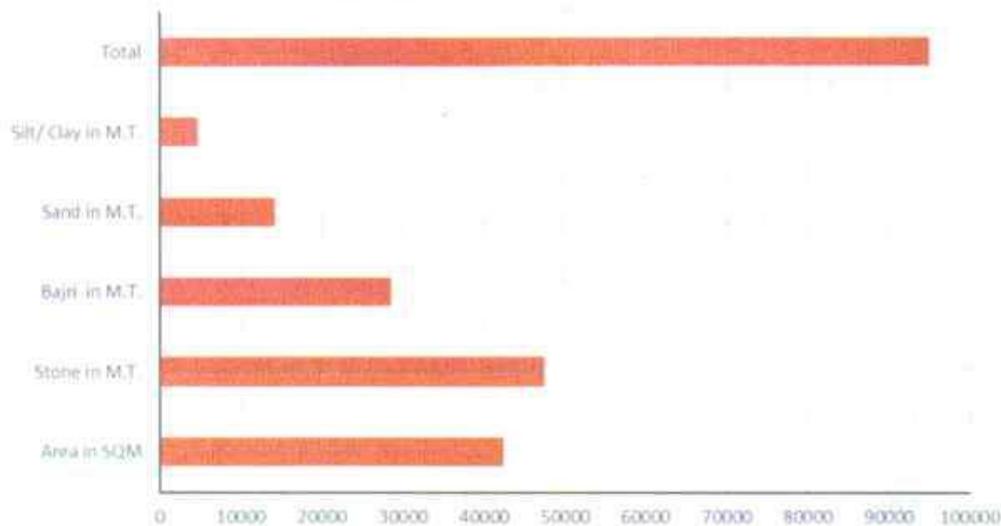


Figure 22: Graph Showing Production of Each Mineral in Fifth Year

MINING PLAN FOR EXTRACTION/ COLLECTION OF SAND, STONE AND BAJRI MEASURING 04-99-19 HECTARES (PRIVATE LAND, RIVER BED) FROM KHASRA NO. 124/7/1 FALLING IN MAJGA NAIRI DOHWAL, MUGHAL NAIRA RIYAZI, TIZANG NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH. APPLIED FOR RENEWAL BY SH. PRAHLAD SINGH, S/O SH. SUDERMAN SINGH, R/o VILLAGE & P.O. KANDWAL, TEROSI, NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH.

- i. 47,488 metric tonnes of Stone will be fed in to be established stone crusher.
- ii. 28,493 metric tonnes of bajri will be fed in to be established stone crusher.
- iii. 14,246 metric tons of sand will be produced and sold in open market.
- iv. 4,749 metric tons of silt as associated minerals and too admixed with sand to be separated, will be lifted and sold with sand.

Afforestation – As the lease area lies in the centre of the river bed so there is no scope for plantation in the proximity of the mining site. Therefore, the auctioned holder will do the plantation in consultation with the concerned department.

Protection of banks – A retaining structure will be constructed at C-5 with dimensions L X B X H = 20m X 2m X 2m to keep a check on river flow as marked in Plate No. 3.

Waste dump – A mixture of silt and clay will be produced as waste which will be dumped out of the river bed after consulting local gram panchayat and will be later plantation or by locals for agricultural or other household purposes.

4.3 End use of mineral

The extracted/collected minerals will be a captive source in an already established stone crusher unit by the name and style of “M/s New Nurpur Stone Crusher”.

4.4 Detail of Road transport: -

The lease is in the river bed and there is very low to no traffic from the lease area till the stone crusher unit. The main connectivity of this is with the Pathankot-Mandi National Highway. This National Highway is in good condition enough to bear the additional truck/transport created by the operations of the stone crusher unit.

As per proposed production of 90227 metric tonnes of material, shall be transported in a year by trucks. At this rate only 300 metric tonnes of material shall be transported at an average per day (Total working days 300/year) for which an average 20-21 trucks with 15 metric tonnes capacity are required.

Mining Plan for Extraction/Collection of Sand, Stone and Bajri Measuring 04.94.19 Hectares (Private Land, River Bed) from Khaska No. 154/L/1, PALLAVIN MEHTA MAIRA DOGMAL, MOHAL MAIRA BATRAH, TENSU, SURPUR, DISTRICT KANGRA, HIMACHAL PRADESH APPLIED FOR RENEWAL BY SH. PREM LAD SINGH, E/O SH. SUDERSHAN SINGH, R/o VILLAGE & P.O. KANDIVAL, TENSU, SURPUR, DISTRICT KANGRA, HIMACHAL PRADESH.

PART -II

ENVIRONMENT MANAGEMENT PLAN

1. BASE LINE DATA

1.1 Detail of Population Distribution

Table 16: Showing Details of Population Distribution

Sr. No.	Name of Villages	Total Population	Male Population	Female Population
1.	Maira Batrah	327	164	163
2.	Lihora	65	30	35
3.	Dumal Kaila	264	134	130
4.	Nala	211	111	110
5.	Parnala	263	129	134

Graph Showing Population Distribution of nearby Villages

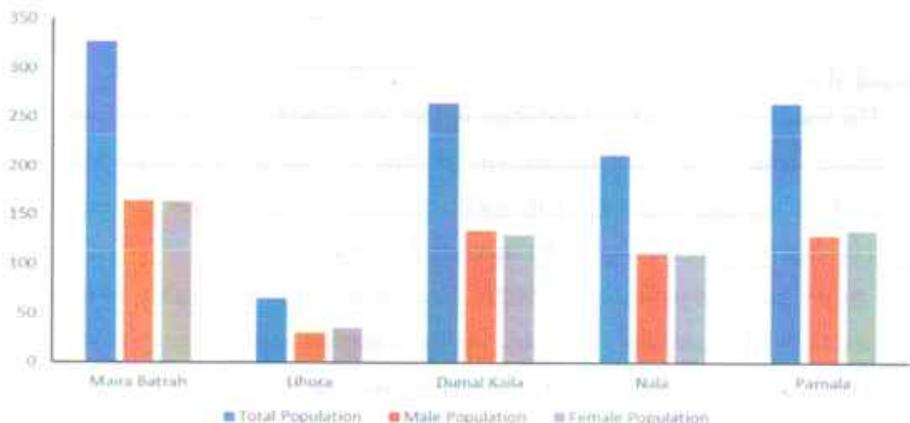


Figure 23: Graph Showing Details of Population Distribution

1.2 Socio Economy of the Village

The general economy of the village in agriculture and animal husbandry based and people go to find out job opportunities in for flung industrial area outside the state of Himachal

MINING PLAN FOR EXTRACTION/ COLLECTION OF SAND, STONE AND BAJRY MEASURING 94-99-19 HECTARES (PRIVATE LAND, RIVER BED) FROM KHASRA NO. 154/1/1 FALLING IN MADZI MAIRA DUMAL, MADZI MAIRA BATRAH, TEHSIL NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH APPLIED FOR RENEWAL BY SH. PRAHLAD SINGH, S/O SH. SUMERSHAN SINGH R/o VILLAGE & P.O. KANDWAL, TEHSIL NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH.

as there is no industry in the nearby are. Therefore, any job opportunity created by any entrepreneur may be of small magnitude shall add to the economy of the people. The people who are offered job in the mining as well in the stone crusher, shall be a local employment at the door and such worker in the off hours, shall be able to look after their retinuc agriculture and livestock.

1.3 Land Use Details of Surrounding Villages near the auction area

Table 17: Land Use Details off the lease Area in Hectares

Sr. No.	Name of Villages	Total Area	Forest	Non-Agricultural Use	Barren Land	Grazing Land	Land Under Miscellaneous tree crops etc	Culturable Waste Land
1.	Maira Batrah	308	63	152	4	1	1	26
2.	Lihora	71	54	4	2	0	0	0
3.	Dumal Kaila	319	177	60	13	2	2	2
4.	Nala	178	135	4	5	0	0	6
5.	Parnala	112	55	7	0	5	8	1

Graph Showing the General Land Use Pattern of the Surrounding Villages near the Lease Area

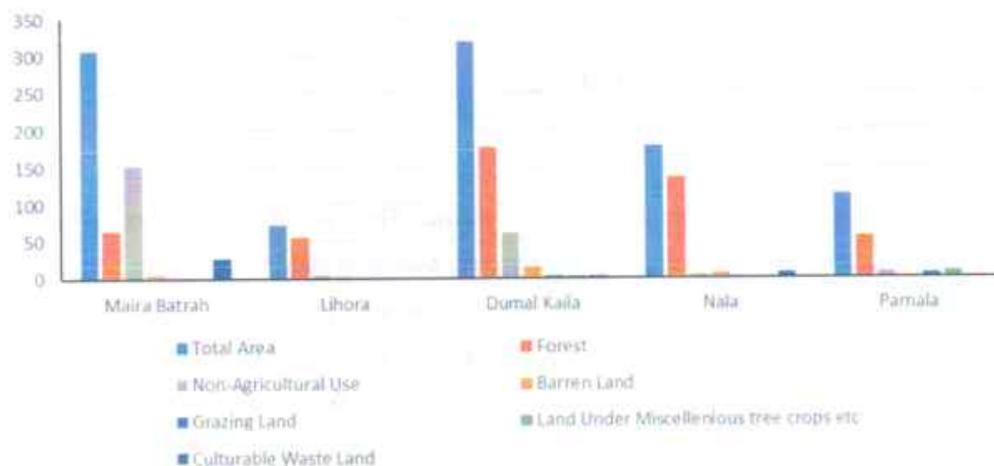


Figure 24: Graph Showing General Land Use Pattern of Surrounding Villages

MINING PLAN FOR EXTRACTION/ COLLECTION OF LKRD, STONE AND BARI MEASURING 04-99.19 HECTARES (PRIVATE LAND, RIVER BED) FROM KHASRA NO. 154/1/1 FALLING IN MAUZA MAIRA DOOMAL, MOHAL MAIRA BISTRAN, TEROH NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH. APPLIED FOR RENEWAL BY SH. PRAHLAD SINGH, S/O SH. YODKESHAN SINGH, R/O VILLAGE & P.O. KANDWAL, TEROH, NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH

1.4 AGRICULTURE

Agriculture is the main occupation of the people in the District, having different types of soil and agro-climate conditions which are quite suitable for the growing of various types of cereals vegetables, temperate and stone fruits and other crops. The major crops grown in the district are wheat, Paddy, Maize, Barley, Millet. Besides these, potato and a variety of vegetable like green-peas, cauliflower, cabbage, spinach tomatoes, etc. are also grown in the district. The economy is mostly agrarian and majority of population depend on agriculture and activities allied to it for earning their livelihood. The most of the land is un-irrigated and depends upon the rainy season. The part of the lands are irrigated and the irrigation facilities are provided by lifting water from streams, shallow Dug wells and medium to deep tubs wells in the valley area. The source of water type of irrigation can be classified in to following five classes.

- 1 Lift irrigation scheme
- 2 Well used for irrigation
- 3 Well use for domestic purpose
- 4 Kuhls
- 5 Tube wells

The water flows throughout the year in this khad. The land holding in the district are small and scattered. The farmers grow more than two crops in a year so as to get maximum production from the land. The crop rotation followed in the district is:

- I. Maize- Toria-Wheat
- II. Maize-Potato-Potato
- III. Maize- Toria-Wheat-Baisakhi Moong
- IV Paddy Wheat
- V Maize-Wheat

Wheat and Maize are major crops of the district. These are followed by gram, Paddy and other pulses. Besides these, Barley, Ragi, Mustered, Seasmum and Sugarcane are also grown in the district. Peas, Carrot, Cabbage, Ladyfinger, Tomato, Brinjal, Capsicum, Cauliflower, Cucumber, Pumpkin etc. Vegetables are also grown. About 95% of the total cultivable area in the district is rain fed. Hence production of the district mainly depends upon rain.

Mining Plan for extraction/ collection of sand, stone and silt measuring 04-99-19 Hectares (Private Land, River Bed) from Khaska No. 154/7/71 falling in Maize Mahal Doamal, Mohal Maika Batrial, Tehsil Surpur, District Kangra, Himachal Pradesh. Applied for lease by Sh. Prahlad Singh, S/O Sh. Sunderman Singh, R/o Village & P.O. Ravihwal, Tehsil Surpur, District Kangra, Himachal Pradesh.

Table 18: Table Showing Crop Pattern Surrounding Lease Area

June	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Maize				Wheat				Maize			
Maize			Toria			Wheat			Maize		
Maize			Patato			Wheat			Maize		
Maize			Potato			Potato			Maize		
Bhindi				Cauliflower				French Bean/Tomato/brinjal/Capsicum Cucubits			
			Sesame					Sarson/Raya/G.Sarson			
Ginger/Caucasia/Turmeric			Potato			Wheat			Ginger		
Paddy						Wheat					
Paddy						Barsecm					
Paddy						Potato					
Kulthi Mash						B. Sarson/Raya/G. Sarson/Taramira(Eruca Sativa)					
Mash						Wheat					
Maize+ Mash						Wheat					
Arhar											

Table 19: Table Showing Agriculture Area Under Major Crops, District, Kangra

(2017-18)

In Hectares	Wheat	Maize	Rice	Barley	Pulses	Chillies	Ginger	Oil Seed
Production	86828	56610	36511	2566	4170	2	23	2383
Percentage Area	45.92	29.94	19.31	1.36	2.21	0.00	0.01	1.26

Mining Plan for extraction/ collection of sand, stone and baji measuring 36.99-19 Hectares (Private Land, River Bed) from Khaska No. 254/2/1, falling in Mauza Maiba Doodmal, Mohal Maiba Batram, Tehsil Nurpur, District Kangra, Himachal Pradesh. Applied for Renewal by Sh. Prahlad Singh, S/O Sh. Sudershan Singh, R/o Village & P.O. Kandwal, Tehsil Nurpur, District Kangra, Himachal Pradesh.

Agriculture: Area Covered under Major Crops, Dist Kangra 2017-18



Figure 25: Graph Showing area under Major crops in Kangra District (2017-18).

Table 20: Table Showing Agriculture Area Under Major Crops, District, Kangra (2017-18).

In Hectares	Wheat	Maize	Rice	Barley	Pulses	Chillies	Ginger	Oil Seed
Production	86828	56610	36511	2566	4170	2	23	2383
Percentage Area	45.92	29.94	19.31	1.36	2.21	0.00	0.01	1.26

MINE PLAN FOR EXTRACTION / COLLECTION OF SAND, STONE AND BAJRI MEASURING 04-99-19 HECTARES (PRIVATE LAND, RIVER BED) FROM KHASRA NO. 154/1/1 FALLING IN MAJRA MAIRA DODMAL, NIHAL MAJRA BETRAI, TEJNDI SOHPUR, DISTRICT KANGRA, HIMACHAL PRADESH. APPLICANT FOR RENEWAL BY SH. PRABHAKAR SINGH, S/O SH. SUDERSHAN SINGH, R/O VILLAGE & P.O. KANIHVAL, TEHSIL NERPUR, DISTRICT KANGRA, HIMACHAL PRADESH.

**Agriculture: Area Covered under Major Crops, Dist Kangra
2017-18**



Figure 26: Graph Showing area and production under Major crops in Kangra District (2017-18).

Table 21: Table Showing Production of Each Crop In District Kangra (2017-18)

In Hectares	Wheat	Maize	Rice	Barley	Pulses	Chillies	Ginger	Oil Seed
Production M.T.	190985	125815	50512	4958	8038	1	162	1377
Percentage Area	50.02	32.95	13.23	1.30	2.11	0.00	0.04	0.36

Mining Plan for Extraction/Collection of Sand, Stone and Balmi Measuring 64-89-19 Hectares (Private Land, River Bed) from Khassa No. 154/1/3 falling in Maida Maida Dohmal, Mihal Maida Bafmah Tehsil Nainpur, District Kangra, Himachal Pradesh) Applied for Renewal by M. Prasad Singh, S/O. Sh. Sukdev Singh, R/o Village & P.O. Kandwal, Tehsil Nainpur, District Kangra, Himachal Pradesh.

Agriculture: Production under Major Crops, Dist Kangra 2017-18

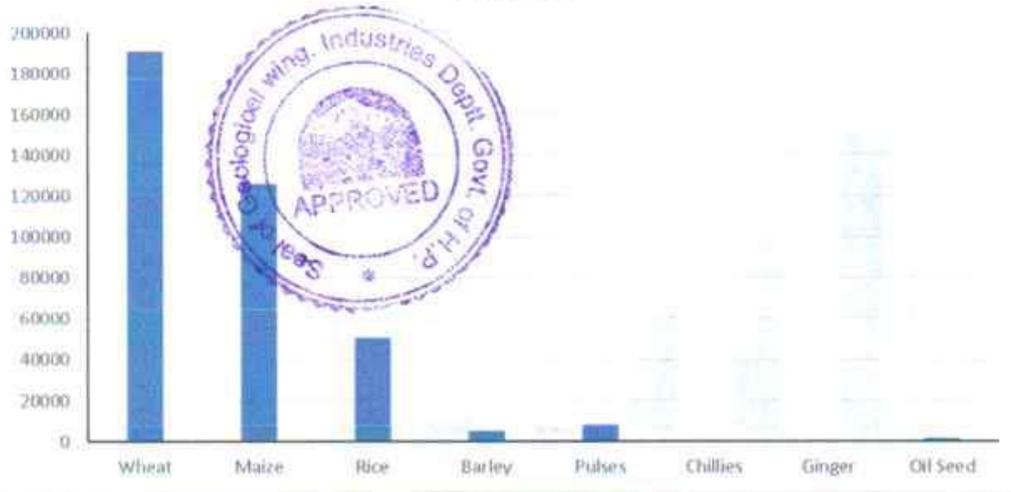


Figure 27: Graph Showing Production of Each Crop In District, Kangra (2017-18)

Percentage Area and Production of Crops in Kangra District 2017-18

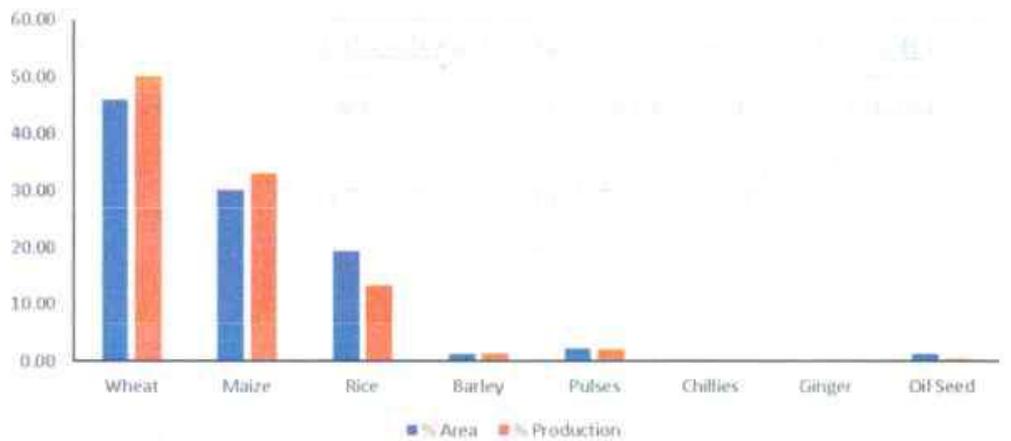


Figure 28: Graph Showing Percentage production and Percentage Area Of Produce Of Each Crop in District, Kangra (2017-18)

MINING PLAN FOR EXTRACTION/ COLLECTION OF SAND, STONE AND BAJRI MEASURING 04-99-19 HECTARES (PRIVATE LAND, RIVER BED) FROM KHASRA NO. 154/1/1 FALLING IN MAJGA NAIRA DOUMAI, MOJAI NAIRA BÉTRAJI, TEHSIL NURPURI, DISTRICT KANGRA, HIMACHAL PRADESH. APPLD FOR RENEWAL BY SH. PRAHLAD SINGH, S/O SH. SUDERSHAN SINGH, R/A VILLAGE & P.O. KANDWAL, TEHSIL NURPURI, DISTRICT KANGRA, HIMACHAL PRADESH.

Table 22: Table Showing Area in Hects Under & Production In Tonnes Of Vegetables

Name of vegetable	Potato	Other vegetables
Area under crop in Hects	1400	17920
Production in tonnes	8283	181537

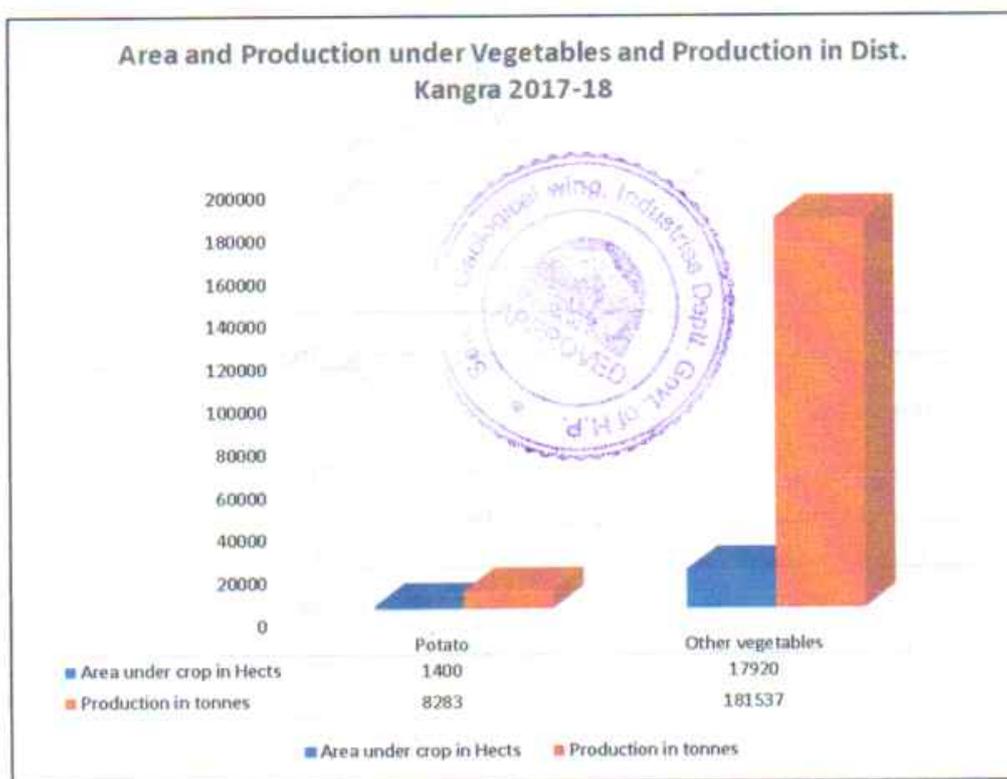


Figure 29: Graph Showing Area in Ha Under & Production in Tonnes Of Vegetables in District Kangra (2017-18)

Table 23: Table Showing Net Irrigated Area of The State During 2006-07 To 2009-10

Year	Canals	Tanks	Wells & Tube Wells	Other Sources	Total Area in Ha.
2006-07	4107	701	15744	86997	107549
2007-08	4390	236	15752	73172	93550
2008-09	4046	283	17432	86091	107852
2009-10	4104	149	19357	81966	105576

MINING PLAN FOR EXTRACTION/ COLLECTION OF SAND, STONE AND BAJRI MEASURING 94-99-19 HECTARES (PRIVATE LAND, RIVER BED) FROM KHASRA NO. 154/3/7, FALLING IN NAUZA MAHA DUDOMAL, MONAL MAIRA BATHAL, TEHSIL NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH APPLIED FOR RENEWAL BY SH. PEARLAD SINGH, S/O SH. SUDERSHAN SINGH, R/o VITLAGY & P.O. KANDWAL, TEHSIL NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH.



Figure 30: Graph Showing Net Irrigated Area of The State During 2006-07 To 2009-10

1.5 Horticulture

The topography and agro-climatic conditions of the district are quite suitable for the productions of various fruits. The topography of the district can be grouped into three categories namely High hill areas located at the higher elevation mid hill areas and low lying valley areas. Fruits of various kinds depending upon the terrain climatic condition and soil are grown in the district. The Main horticulture produce of the area can be classified into four categories

- 1 Citrus Fruits
- 2 Sub-tropical Fruits
- 3 Nuts and dry fruits
- 4 Other temperate fruits

The following table shows the area under cultivations of each fruit in district Kangra.

The area under each fruit and percentage area to total district area as well as the percentage of the area under fruit in each category is given in the table below. The table also shows the production of each fruit in district Solan. Also, the tables below show the area covered under each category and the total production as per survey.

MINING PLAN FOR EXTRACTION/ COLLECTION OF SAND,STONE AND RAJRI MEASURING 04-99-19 HECTARES (PRIVATE LAND, RIVER BED) FROM KHASRA NO. 154/T/1 FALLING IN MAUZA NAIRA DOOMAL, MOHAL NAIRA BETAH, TEHSE NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH. APPLIED FOR RIGHTS BY SH. PRAHLAD SINGH, S/O. SH. SIDHESHAN SINGH, R/o VILLAGE & P.O. KANDHWAL, TEHSE NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH.

Table 24: Showing Area (Each Fruit) And Production In Distt Kangra (2017-2018)

Name of Fruit	Area (In Hectares)	Production (In Tonnes)
Apple	453	502
Plum	416	1113
Peach	217	553
Apricot	37	40
Pear	421	1637
Cherry	0	0
Kiwi	11	0
Pomegranate	69	370
Olive	0	5
Persimmon	4	6
Strawberry	2	0
OTF	1177	3734
Green Almond	417	0
Almonds		146
Walnut	201	113
Piccanut	196	126
Hazelnut	1	0
NUTS & DRY FRUITS	815	384
Orange	5544	12935
Malta	667	1346
K.Lime	2749	2749
Galgal	491	1431
Grapes	14	16
CITRUS	9465	18483
Mango	21245	21028
Lichi	2712	2044
Guava	663	745
Aonala	668	1026
Jackfruit	109	149
Papaya	101	223
Grapes	16	35
Loquat	48	35
Karonda	5	3
Ber	5	6
Sapota	10	3
Fig	2	0
Banana	86	205
Jamun	254	289
Bael	12	16
Deon	33	97
OSTF	25969	25904

MINING PLAN FOR EXTRACTION/ COLLECTION OF SAND, STONE AND RAJRI MEASURING 04-99-77 HECTARES (PRIVATE LAND, RIVER BED) FROM KHASRA NO. 156/1/2 FALLING IN MAJZA MAIRA DODMAL, MORAL MAIRA BATHAR, TENDU NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH APPLIED FOR RENEWAL BY SH. PRADIP SINGH, S/O SH. SUDERSHAN SINGH, S/O VILLAGE & P.O. KANDWAL, TENDU NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH.

1.6 Animal Husbandry

Livestock is the main wealth next to agriculture of the predominant population of the district. The entire terrain in the district is mountainous with high slopes and deep valleys. The development of agriculture, therefore, broadly depends upon the development of animal husbandry. Animal husbandry has several direct and indirect uses for a farmer and so it is an almost integral part of agriculture. To improve the fertility of the soil and to plough the fields, they need animals. Besides this milk and wool is also the need of the people. The people keep the following kind of animals: -

- | | | | |
|---|-------|----|------------------|
| 1 | Cow | 2 | Buffalo |
| 3 | Sheep | 4 | Horse and Ponies |
| 5 | Mules | 6 | Donkey |
| 7 | Camel | 8 | Pigs |
| 9 | Dogs | 10 | Poultry |



Table 25: Showing Animal Husbandry Population Kangra District-2017-18

Name of animal	Sheep	Goats	Horse and pony	Mule	Donkey	Camels	Pigs	Yaks	Dogs	Others	Poultry
Numbers	84628	202694	3781	4068	390	16	637	84	40965	4	344296

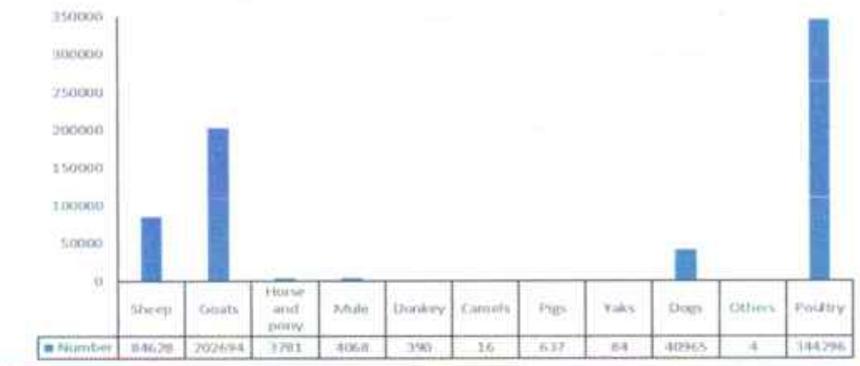


Figure 31: Graph Showing Animal Husbandry Population Kangra District-2017-18

MINING PLAN FOR EXTRACTION / COLLECTION OF SAND, STONE AND BAJRI MEASURING 04-99-19 HECTARES (PRIVATE LAND, RIVER BED) FROM KHASRA NO. 154/1/7 FALLING IN MAJHA MAJHA DOOMAL, MUMAL MAJHA BATHRAH, TEHSIL NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH APPLIED FOR RENEWAL BY SH. PRAHLAD SINGH, S/O. SH. SUDERSHAN SINGH, R/o VILLAGE & P.O. KANDHWAL, TEHSIL NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH

Table 26: Showing Animal Husbandry Population Kangra District-2017-18

Bulls	Cows	Bulls	Cows	Total Cattle	Male	Female	Total
Cross Breed		Indigenous		Buffaloes			
39896	1822351	91316	45566	359129	12648	137071	149719



Figure 32: Graph Showing Animal Husbandry Population, Kangra District-2017-18

1.7 Fisheries

Kangra District is blessed with vast and variegated fisheries resources in the vast network of perennial rivers, streams, Khads and fast flowing cold waters, harboring wide variety of tropical species of fish. River system in the District constitutes river Beas and its tributaries namely Gaj Neugal, Manjhi, Benera and many other perennial small Khads. The following prominent varieties of fish family are found in the river and streams of Kangra District.

- Mahaseer
- Gid
- Trout
- Mirror carp

The main source of fishery cultivation is in the Pong Dam Reservoir. Fishing in these water is regulated by fisheries legislation under the Himachal Pradesh Fisheries Act, 1976. Fisheries development in Pong reservoir has helped in rehabilitation of the families displaced due to inundation. Small fishes are spotted on the Beas river where the water is deep and stagnant.

MINING PLAN FOR EXTRACTION/ COLLECTION OF SAND, STONE AND RAJHI MEASURING 04-99-19 HECTARES (PRIVATE LAND, RIVER BED) FROM KHASKA NO. 114/2/1 FALLING IN MAJRA MAJRA DOGAM, MOHAL RAJRA BUTRUP, TEHSIL NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH APPLIED FOR RENEWAL BY M. PRAGAD SINGH, S/O SRI. SUDERSHAN SINGH, R/O VILLAGE & P.O. KANDHAL, TEHSIL NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH.

Annual Production of Fisheries and Its Value of Catch in District Kangra

TOTAL PRODUCTION (In Tonnes)	2540.11
TOTAL VALUE OF FISH PRODUCE (Rs. IN LACS)	1330.00

Tor putitora (Mahaseer)

- II. Schizothorax plagiostomus (Gulguli)
- III. Lebeo dero (Gad)
- IV. Labeo Calbasu (Kalbas)

Channa punctatus (Sal)

- VI. Mystus seenghala (Singhara)
- VII. Labeo dicheilus (Kunhi)



1.8 Flora

Majority of the Kangra district consist of Chil forest. Under the second category of the forest the Khair is predominant species. The third category consists of broad leave species but have got lot of bushy growth as well.

The forests in the district have been divided in to three categories:

1. Lower Siwalik Chil Pine forest
2. Northern dry mixed deciduous scrub forest.
3. Broad leaved forest.

The most prominent varieties of trees found in the area are

Simbal (Bombex malabaricum)	Mango (Magnifera indica)
Tun (Cedrela toana)	Several species of acasia and albizia
Salambra (Odina wodier)	Terminalia
Jamun (Enginia jambolana)	Larger tour
Bamboo	Shurubs
Vitex	Munj
Ber	Ipomea
Dodenea	

MINING PLAN FOR EXTRACTION/COLLECTION OF SAND, STONE AND RAJRI MEASURING 04-99-19 HECTARES (PRIVATE LAND, RIVER BED) FROM KHASRA NO. 154/1/1 FALLING IN MAHIZA MAJRA DOGMAL, MAHAL MAJRA BATHRAH, TEHSIL NUNPUR, DISTRICT KANGRA, HIMACHAL PRADESH APPLIED FOR RENEWAL BY SH. PRAHLAD SINGH, S/O SH. SUDERSHAN SINGH, R/o VILLAGE & P.O. KANDWAL, TEHSIL NUNPUR, DISTRICT KANGRA, HIMACHAL PRADESH

Forests:

The forests play a vital role in shaping the characteristic conditions of an area. Besides, these also influence the economic and social life of the people considerably. The forests provide valuable timber, medicinal herbs, and raw material for industries and also provide employment and play a vital role in conserving the soil and ensure timely rains. The forests of Kangra district have a great variety of vegetation due to variations in altitude, geological formations and climatic factors. The vegetation varies from dry scrub forests at lower elevation to alpine pasture at higher altitude. In between two extremities occur distinctive vegetation zones of chil, ban-oak, mixed coniferous (kail, spruce, fir) and kharsu, oak forests. Kangra forests have a large number of aromatic and medicinal plants which can be utilized for the pharmaceutical and ayurvedic medicines like dhoop, karu/kour, brahmi, kuth/khuth, bankakni etc. The forests of Kangra can be classified into seven main groups.

(i) Ban-Oak Forests:

These forests occur at elevation from 1,600 meters to 2,300 meters. There are, however, a few exceptions like the oak forests of Dhalun near Yol Cantonment, Shahpur, Manjgran and Khaniara where these forests have gone down to about 800 meters elevation.

(ii) Chil Forests:

The chil forests occur between elevations of 800 meters to 1,700 meters. The best growth is, however, between 1,200 meters to 1,700 meters.

(iii) Deodar Forests:

Deodar forests are only found in Dharamkot forests near Mcleodgang town and are exclusively of artificial origin.

(iv) Kharsu Oak Forests:

These forests are found between the altitudinal zone of 2,300 meters to 3,800 meters, the upper most limit of tree growth. This oak generally occurs as a pure crop spruce and fir is found scattered individually or in small groups of sites suitable for these species.

(v) Mixed Coniferous (Kail, Spruce and Fir):

These forests are only patchy between 2,100 meters to 3,000 meters elevation. Kail forests are practically absent. Towards the upper most extremities Kharsu Oak is found intimately mixed with fir and spruce. The common associates are walnuts, horse chestnut, dun, afar species, alums species etc.

MINING PLAN FOR EXTRACTION/COLLECTION OF SAND, STONE AND BAJRI MEASURING 04-99.19 HECTARES (PRIVATE LAND, RIVER BED) FROM KHASRA NO. 114/1/3 FALLING IN MAZLA MAIRA DODMAL, MOHAL MAIRA RAIPUR, TERSEI SHIPUR, DISTRICT KANGRA, HIMACHAL PRADESH APPLIED FOR RENEWAL BY SH. PRAHLAD SINGH, S/O SH. SURESHAN SINGH, R/o VILAGE & P.O. KANDWAL, TERSEI NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH.

(vi) Alpine Scrub and Alpine Pastures:

This type extends in this division above 3,800 meters elevation and is represented by extensive alpine meadows with a few scattered patches of ever green branchy scrub of junipers acurva and rhododendron. The meadows are mostly composed of perennial herbs and grasses.

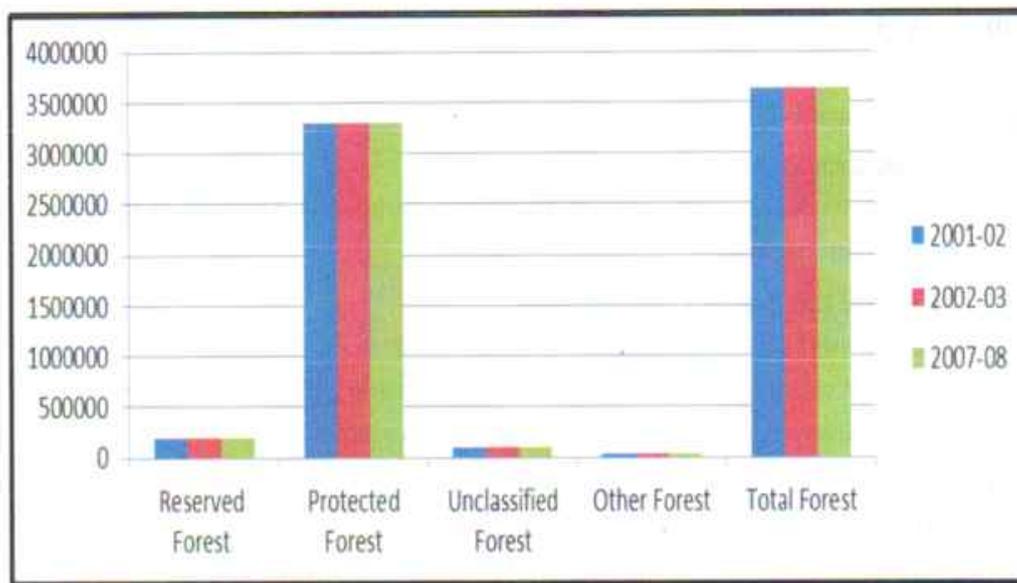
(vii) Miscellaneous Scrub Forests:

These forests are mainly found between 600 and 1,200-meters elevation and are composed mainly of tree/scrubs of khair, kachnar, sins, kakrain, thingan, bil, etc. The undergrowth consists of garna, mander, basuti, gandla etc. The forests are generally open, degraded due to over grazing and excessive exercise of various rights.

Table 27: Showing Total forest cover in H.P.

Year	Reserved Forest (In Hect)	Protected Forest	Unclassified Forest	Other Forest	Total Forest (in Hect.)
2001-02	1,89,613	33,04,277	97,657	36,949	36,28,496
2002-03	1,89,613	33,04,277	97,657	36,949	36,28,496
2007-08	1,89,786	33,05,973	97,668	36,949	36,30,676

Figure 33: Graph Showing Total Forest Cover in Himachal Pradesh



Fauna

MINING PLAN FOR EXTRACTION / COLLECTION OF SAND, STONE AND BAIRI MEASURING 04-89-19 HECTARES (PRIVATE LAND, RIVER BED) FROM KHASRA NO. 114/1/1 FALLING IN MAUZA MAHA DOOMAL, MOHAL MAHA BETAJAI, TEHSIL NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH APPLIED FOR RENEWAL BY SH. PRAHLAD SINGH, S/O SH. SUDERSHAN SINGH, R/A VILLAGE & P.O. KANDHWAL, TEHSIL NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH.

Mammals in Kangra

Zoological Name	English Name	Common Name
<i>Felis bengalensis</i>	Leopard cat	Mirag Bagh
<i>Felis Chane</i>	Jungle Cat	Jangli Billi
<i>Muntucus muntisk</i>	Barking Sear	Kakkar
<i>Vaulpes bengalnsis</i>	Fox	Lomari,Fohiki
<i>Comis aureus</i>	Jackal	Giddar
<i>Macaca mulatta</i>	Ressus monkey	Lal Bandar
<i>Preshytes entellus</i>	Langour	Langour
<i>Hystrix indica</i>	Porcupine	Sehal
<i>Lepus nigricoilis</i>	Hare	Khargosh,Sehru,Farru
<i>Axis axis</i>	Spotted Dear	Chital
<i>Cervus unicolor</i>	Samber	Samber
<i>Hylopetes fimbriatus</i>	Flying Squirrel	
<i>Panthra pardus</i>	Leopard	Cheeta
<i>Paradoxurus hermaphroditus</i>	Indian civet	Sakralu
<i>Felis chaus</i>	Jungle cat	
<i>Hipposiderous armiger</i>	The great Himalyan leafnosed Bat	Chamgadar
<i>Paguma lavarta</i>	Himalyan Palm civet	
BIRDS		
Zoological Name	English Name	Common Name
<i>Milvus migrants</i>	Vulture	Cheel, gidh Ecll
<i>Endynamys scolopacca</i>	Koel	Koel
<i>Colambia livia</i>	Pigeon	Kabuttar
<i>Coracias benglalenses</i>	Blue jay	Nilkantha
<i>Colums livia</i>	Hawk	Baj
<i>Francolius francolinus</i>	Black partridge	Kala Tittar
<i>Francolinus pondicerians</i>	Grey partridge	Safed Tittar
<i>Payo crisslatus</i>	Pea cock	Mor
<i>Coturnix colurnix</i>	Common quail	Bater

Mining Plan for extraction/ collection of sand, stone and baji measuring 04.99 (4) Hectares (Private Land/ River Bed) from khasra no. 154/1/1 falling in Maiza Nagra, Doodmal, Mohal Nagra Bahrahi, Tehsil Nurpur, District Kangra, Himachal Pradesh. Applied for renewal by Sh. Prahlad Singh, S/O Sh. Sunderhan Singh, R/o Village & P.O. Rasdwal, Tehsil Nurpur, District Kangra, Himachal Pradesh.

<i>Alectoris graeca</i>	Chakor	Chakor
<i>Crocvus splendens</i>	Crow	Kanwa
<i>Prottacula karneri</i>	Parrot	Totta
<i>Picoises macr</i>	Fulvousbreasted pied woodpecker	Kathfoura
<i>Strptopalia decadocto</i>	Ring dove	Ghugi
<i>Strptopalia chinensis</i>	Spotted dove	
<i>Accipiter badius</i>	Shukra	
<i>Aquila rapex vindhian</i>	Tawny eagle	
<i>Dacula bicolor</i>	Green pigeon	
<i>Parus rufomuchalis</i>	Titus	
<i>Picus camus</i>	Black napped woodpecker	Wood pecker
<i>Dryocopus javensis</i>	Woodpecker	
<i>Acidotheres tristis</i>	Common Myna	Ghatari
<i>Terpsiphone paradise</i>	Pradise flycatcher	Choti pinja
<i>Passer domesticus</i>	House sparrow	
<i>Arduelis spinoides</i>	Himalyan green finch	Chiria

Around leased out area and surrounding hills following are the common animals and birds

ANIMALS

Hare	Wild Bore
Jackal	Barking Deer(kakkar)
Monkey	Samber
Pig	

BIRDS

Chakor	Crow
Red Jungle Fowl	Black Partridge (Kala Tittar)
Grey Partridge (safed Tittar)	Wood pecker

MINING PLAN FOR EXTRACTION/ COLLECTION OF SAND, STONE AND RAJM MEASURING 04-99-19 HECTARES (PRIVATE LAND, RIVER BED) FROM KHASRA NO. 154/7/1 FALLING IN MAJRA MAJRA DOOMAL, MAJRA MAJRA BATHRAH, TEHSIL NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH. APPLIED FOR RENEWAL BY SH. PRAHLAD SINGH, S/O. SH. SHIBKISHAN SINGH, R/O. VILLAGE & P.O. KANDWAL, TEHSIL NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH.

1.9 Climate of the Area

The region has four distinct seasons. The area experiences severe winter from December to March followed by severe summer season lasting from April to June. The area receives rain fall under the influence of south -west monsoon from July to mid-September followed by post - monsoon season lasting up to November.

The terrain in general has profound influence on the temperatures of a region. The temperature generally rises from the beginning of March till June, which is the hottest month of the year with mean minimum and maximum temperature of 25.6°C to 44°C respectively. With the onset of monsoons by the end of the June temperature begins to fall. The drop in day temperature is much more than the drop in night temperature. The night temperature falls rapidly after the withdrawal of monsoons by mid-September. The month of January is cooler month with the mean maximum and minimum temperature being 24°C and 1.7°C respectively. Under the influences of western disturbance, the temperature falls appreciably during winters and it may go even below 0° C.

Humidity is generally low throughout the year. During summer season, humidity is lowest 36 %. During monsoon months, it goes as high as 80-90%. The highest levels of humidity are observed in the month of August. The average humidity during synoptic hours is 53% and 62% respectively.

Table 28: Showing Monthly Mean Maximum and Minimum Temperature Data for Dharamshla Year 2013

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Max. Temp.	16.8	17.7	22.4	25	31.6	28.8	27.6	26.8	27.4	25.7	21.3	16.5
Min. Temp.	6	7.2	11.7	14.1	20	21.2	21.4	20.6	19.9	18	10	6.8

Mining Plan for Extraction/Collection of Sand, Stone and Balmi Measuring 04-99-19 Hectares (Private Land, River Bed) from Khaska No. 124/1/1 Falling in Mauza Maira Dohal, Mawal Maira Batrial, Tehsil Surpur, District Kangra, Himachal Pradesh Applied for Renewal by M. Prasad Singh, S/O M. Subhashan Singh, V/O Village & P.O. Kandiwal, Tehsil Nurpur, District Kangra, Himachal Pradesh

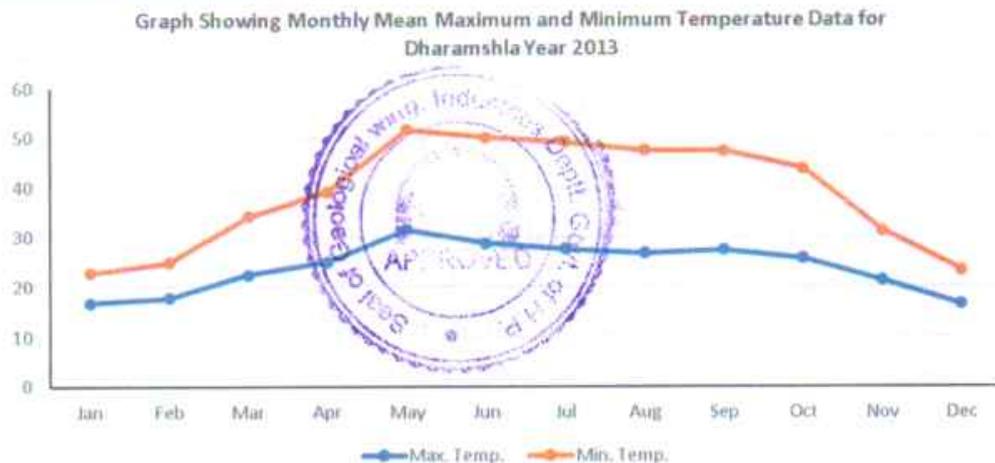


Figure 34: Monthly Mean Maximum and Minimum Temperature Data for Dharamshla Year 2013

(2) ENVIRONMENT MANAGEMENT PLAN

2.1 Impact on Air

The magnitude of mining is not very high and restricted to the limited area as such there is hardly any impact other than dust emission to smaller extent which can be controlled by sprinkling water on the working face so that the dust be suppressed. Water sprinkling will be carried out twice a day over the unmetalled road that will be used to excavate the mineral.

2.2 Impact on Water

A total number of 5 check dams lease area with dimensions L X B X H = 20m X 2m X 2m as marked in Plate No. 3. have been proposed to stop flooding of the river. The Beas River is perennial and about 45 Kms downstream side of mining site. Therefore, it has no adverse impact on the flow of the river; neither there is any intake of Kuhl within the lease area or below the lease which could be affected.

MINING PLAN FOR EXTRACTION/COLLECTION OF SAND, STONE AND BAJRI MEASURING 04-09-19 HECTARES (PRIVATE LAND, RIVER BED) FROM KHASRA NO. 194/1/1 FALLING IN MAJHA WAHA DOOMAL, MOHAL WAHA BATHAN, TEHSIL NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH. APPLIED FOR RENEWAL BY SH. PRAHLAD SINGH, S/O SH. SUDERSHAN SINGH, R/O VILLAGE & P.O. KANDWAL, TEHSIL NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH

2.3 Impact on Noise Level

The area is away from the habitation and the noise shall be caused only by plying tractors/tippers/trucks to bring mineral to the stone crusher site, which shall be kept under control by proper lubrication and the working would only be done during day time to keep noise level below the permissible limit prescribed. No blasting operations are involved as the process is only to lift the material manually and to load in tractors/tippers/trucks hence, the noise level will not exceed the required level.

2.4 Waste Disposal Arrangement, if Any

The waste which is silt mixed with sand shall generate and shall be dumped at the defined dumping place in consultation with Local Panchayat and the local villagers.

2.5 Socio Economic benefits

The mining shall provide employment to approx. 50 local people who are in need of additional source of income when they are free from agriculture engagements and shall be helpful in raising additional source of income.

2.6 Transport of Mineral

The lease is in the river bed and there is very low to no traffic from the lease area till the approach road. However, for the transportation of the loaded vehicles to the nearest approach road, the vehicles may pass through private as well as Govt. Land. The project proponent shall make necessary arrangements between land owners (Pvt. & Govt.) and will take care of other issues if any at his own for material transportation to the nearest road.

The proposed mining site is located upstream of the Chakki Khad Bridge about 9.79 Km on the river bed. The site is approachable through a link road originating from the right bank of the river which links Nurpur-Kangra (NH-22) at a distance of about 18 kms.

This National Highway as well as the link road is in good condition enough to bear the additional truck/ transport. As per proposed production of 90,227 metric tonnes of material, shall be transported in a year by trucks. At this rate only 301 metric tonnes of material shall be transported at an average per day (Total working days 300/year) for which an average 20-21 trucks with 15 metric tonnes capacity are required.

Mining Plan for Extraction/Collection of Sand, Stone and Bajri Measuring 04-99.19 Hectares (Private Land, River Bed) from Khaska No. 154/3/1 Falling in Matia Mairi Dooval, Mohal Natha Batriah, Tehsil Norder, District Kangra, Himachal Pradesh Applied for Renewal by Sh. Prahlad Singh, S/O Sh. Sunderman Singh, R/w Village & P.O. Kandhwal, Tehsil Nurpur, District Kangra, Himachal Pradesh.

PART-III PROGRESSIVE MINE CLOSURE PLAN/ RECLAMATION PLAN

1.1 MINE WASTE DISPOSAL

a) Year wise generation of mine waste Production of mine waste during Five Years

Year	1stYear	2ndYear	3rdYear	4thYear	5thYear	Total
Waste (Silt/ Clay) in M.T.	4749	4749	4749	4749	4749	23745



Figure 32: Graph Showing Year Wise Mine Waste (Silt/Clay) in M.T.

During mining operation, sub-grade minerals like silt/clay are likely to be generated. Since the mining lease area is a part of the river bed as such on such landform there is no possibility of occurrence of any soil cover. An inseparable mixture of sand and Silt/clay is produced as mine waste i.e., 4749 M.T. per year this will be sold as it is in the open market. Therefore, no waste will be generated in the mining process.

MINING PLAN FOR EXTRACTION/ COLLECTION OF SAND, STONE AND BAJRI MEASURING 04.99.19 HECTARES (PRIVATE LAND, RIVER BED) FROM KHASRA NO. 154/1/1 FALLING IN NAJIZ NAIRA DOGNAI, MOHAL NAIRA BETAJI, TESIYI NURPURI, DISTRICT KANGRA, HIMACHAL PRADESH, APPLIED FOR RENEWAL BY SH. PRAHLAD SINGH, S/O SH. SUDERSHAN SINGH, R/A VILLAGE & P.O. KANDWAL, TESIYI, NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH

b) Cost of Mine Waste Disposal

The material shall be brought to the dump site mechanically and manually and it shall add a little addition to the mining cost around Rs.10/- per tonne of waste. The total waste production in 5 years is 23745 tonnes. The total cost of dumping shall be around Rs.2,37,450/- in 5 years.

1.2 Top Soil Arrangement

There is no top soil available in the river bed.

1.3 Preventive Retaining Structures.

A total number of 5 check dams lease area with dimensions L X B X H = 20m X 2m X 2m as marked in Plate No. 3. have been proposed to stop flooding of the river.

1.4. Plantation & Re-grassing work

The afforestation programme is the foremost important to improve the environment and ecological balance of the area. Grasses and bushes which have fibrous roots must be grown as these helps in binding of soil and moreover, it provides fodder for the local animals. Furthermore, indigenous trees and plant species will be grown with consultation with the experts, based on the characteristics of soil, topography and climatic conditions. The site for year wise plantation is shown in plate no. 3. The year wise area proposed for plantation is as under:

Table 29: Proposed Plantation and Re-grassing

S. No.	Year	Area in Sq. Mts.	No of Plants
1	1 st Year	1000	Local Grass Seeding and 100 plants
2	2 nd year	1000	Local Grass Seeding and 100 plants
3	3 rd year	1000	Local Grass Seeding and 100 plants
4	4 th Year	1000	Local Grass Seeding and 100 plants
5	5 th Year	1000	Local Grass Seeding and 100 plants
	Total	5000	500

The total cost of plantation and its protection by engaging a part time Gardner shall cost 24,000 per year and in five years; the expenditure shall amount to Rs.1,20,000. The estimated survival rate proposed to be achieved shall be 80% for plants.

MINING PLAN FOR EXTRACTION/ COLLECTION OF SAND, STONE AND BAJRI MEASURING 04-99-19 HECTARES (PRIVATE LAND, RIVER BED) FROM KHASRA NO. 154/1/1, FALLING IN MAUSA MAIRA DODMAL, MOHAL MAIRA BATRAH, TEHSIL NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH APPLIED FOR RENEWAL BY SH. PRABHAT SINGH, S/O SH. SUDERSHAN SINGH, K/V VILLAGE & P.O. KANDHAI, TEHSIL NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH.

1. Strategy for protection of point of public utility Etc.: -

There is no point of public utility or of interest which need to be protected while under taking mining operations.

2. Man power development: -

Around 50 local people shall be employed to carry on the mining and associated activities and preference shall be given to employ 100% local people.

3. Use of Mineral: -

The extracted stone shall be used for manufacturing of grit and possibility shall also be explored to use the waste material in road construction works.

4. Disaster Management & Risk Assessment:-

The mining lease area is the part of a river bed which is prone to some risk hazards but there will not be any major risk hazards associated with the entire extraction process.

The possible risk hazards selected for this project are: -

- Flooding
- Drowning
- Accident damage caused during mineral extraction, loading, transportation and waste disposal
- Earthquakes

Risk Reduction Recommendations: -

- Mining operation should be stopped during rainy days or monsoon.
- Digging of deep pits should not be allowed.
- Workers should be moved to safer place at the time of flood alert.
- Operations carried out during day time only in good visibility.
- Overloading never be allowed.
- To assure safe transportation truck drivers with proper driving license should be employed, and maximum permissible speed limit should be ensured and after loading truck should be covered properly to prevent spillage.

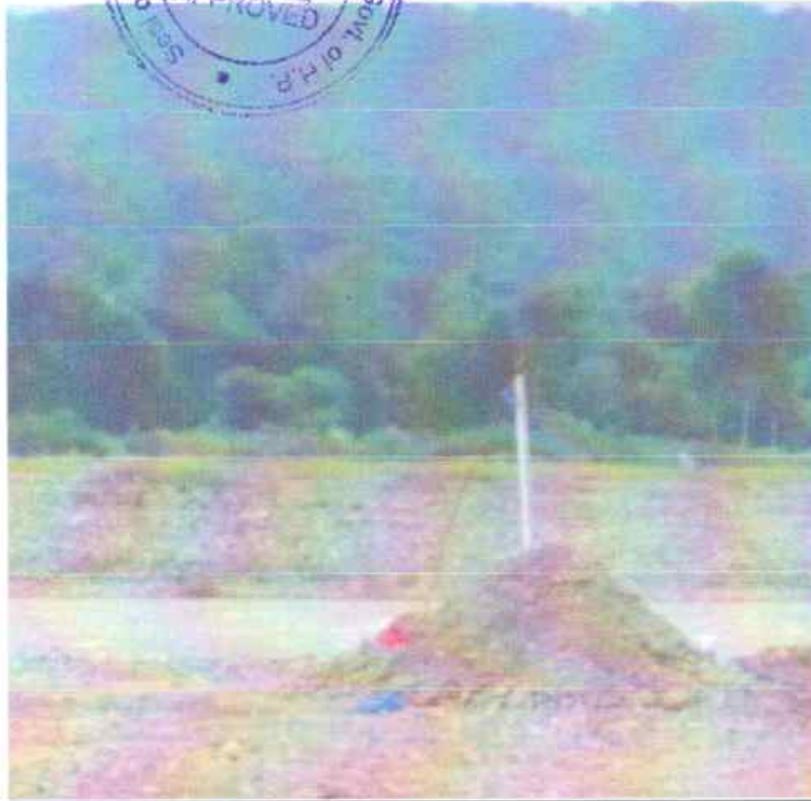
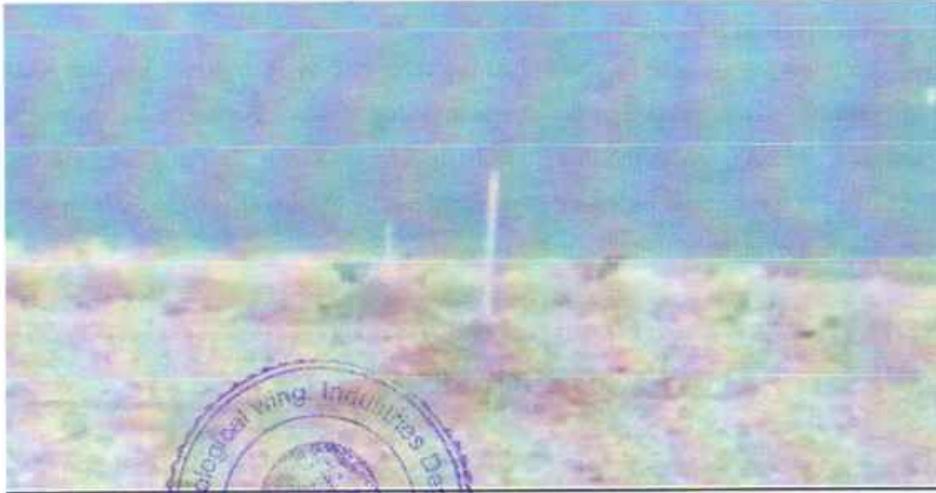
MINING PLAN FOR EXTRACTION/ COLLECTION OF SAND, STONE AND GRAVEL MEASURING 04-99-74 HECTARES (PRIVATE LAND, RIVER BED) FROM KHASRA NO. 174/1/1 FALLING IN MATIYA MAIRA DODMAL, MOHAL MAIRA BATHAR, THESI NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH APPLIED FOR RENEWAL BY SH. PRAHLAD SINGH, S/O SH. SUDERSHAN SINGH, R/o VILLAGE & P.O. KANDWAL, THESI NURPUR, DISTRICT KANGRA, HIMACHAL PRADESH.

5. Any other relevant information: -

The mining lease area is situated in the river bed of Beas River and the Khad gets sufficiently replenished during the monsoon /rainy season. Further, a lot of construction activities are going on in the Private and Government sector. Grit and sand are the basic requirement for the constructions and there is necessity of such activity to flourish so that the requirement of material could be met locally.



Mining Plan for Extraction/ Collection of Sand, Stone and Bajri Measuring 04-99-19 Hectares (Private Land, River Bed) from Khaska No. 154/2/1 falling in Mauza Mahe Doolal, Mohal Mahe Batriah, Tehsil Nurpur, District Kangra, Himachal Pradesh. Applied for Renewal by Sh. Prahlad Singh, S/O Sh. Sukhdev Singh, R/O Village & P.O. Kandwal, Tehsil Nurpur, District Kangra, Himachal Pradesh.



Photographs of Boundary Pillars



PART-IV
CERTIFICATE
&
DECLARATION

CERTIFICATE

Certified that the provisions of the Himachal Pradesh Minor Minerals (Concession) and Minerals (Prevention of Illegal Mining, Transportation and Storage) Rules, 2015 Matiferous Mines Regulation 1961 and other guidelines issued from time to time, in this regard have been complied for the preparation of Mining Plan for renewal of mining lease for extraction of Sand, Stone & Bajri over an area situated in Khasra No. 154/1/1 measuring 04-99-19 Hectares, falling in Mauza Maira Doomal, Mohal Maira Batrah, Tehsil Nurpur, District Kangra, Himachal Pradesh. (Private Land, River Bed).

While preparing the mining plan including progressive mine closer plan all statutory rules, regulation, orders made by competent authorities of the State or Central Government or orders passed by Courts have been taken into consideration.

The information provided and the data furnished in this Mining Plan is correct to the best of my knowledge.

Date

Place



Indresh Nath Dhiman
(Retd. State Geologist)

Sun-shine cottage, Floor above parking,
Near Anchal provisional store, Rajhana
Road, Sector-4, New Shimla 171009.
R.Q.P. No. H.P./R.Q.P./20/1/2015

Declaration

This is to declare that the Mining Plan including Progressive Mine Closure Plan of mine for extraction of Sand, Stone & Bajri situated in Khasra No. 154/1/1 measuring 04-99-19 Hectares (Private Land, River Bed), falling in Mauza Maira Doomal, Mohal Maira Batrah, Tehsil Nurpur, District Kangra, Himachal Pradesh., has been prepared with my consent and approval and that we/I shall abide by all commitment there under.

"The Mining Plan" and 'Progressive Mine Closure Plan' complies all statutory rules, regulations, orders made by competent authorities of State or Central Government or orders passed by courts have been taken into consideration and wherever specific permission is required, shall be obtained.

We undertake to implement all the measures proposed in this Mining Plan and Progressive Mine Closure Plan' in a time bound manner.

We have deposited a sum of Rs. Nil with the competent authority of the State Government in form of Fixed Deposit Receipt as financial assurance of the same.

In case of default on my/our part, the approval of Mining Plan may be withdrawn and the aforesaid sum assured may be forfeited.

Date: -

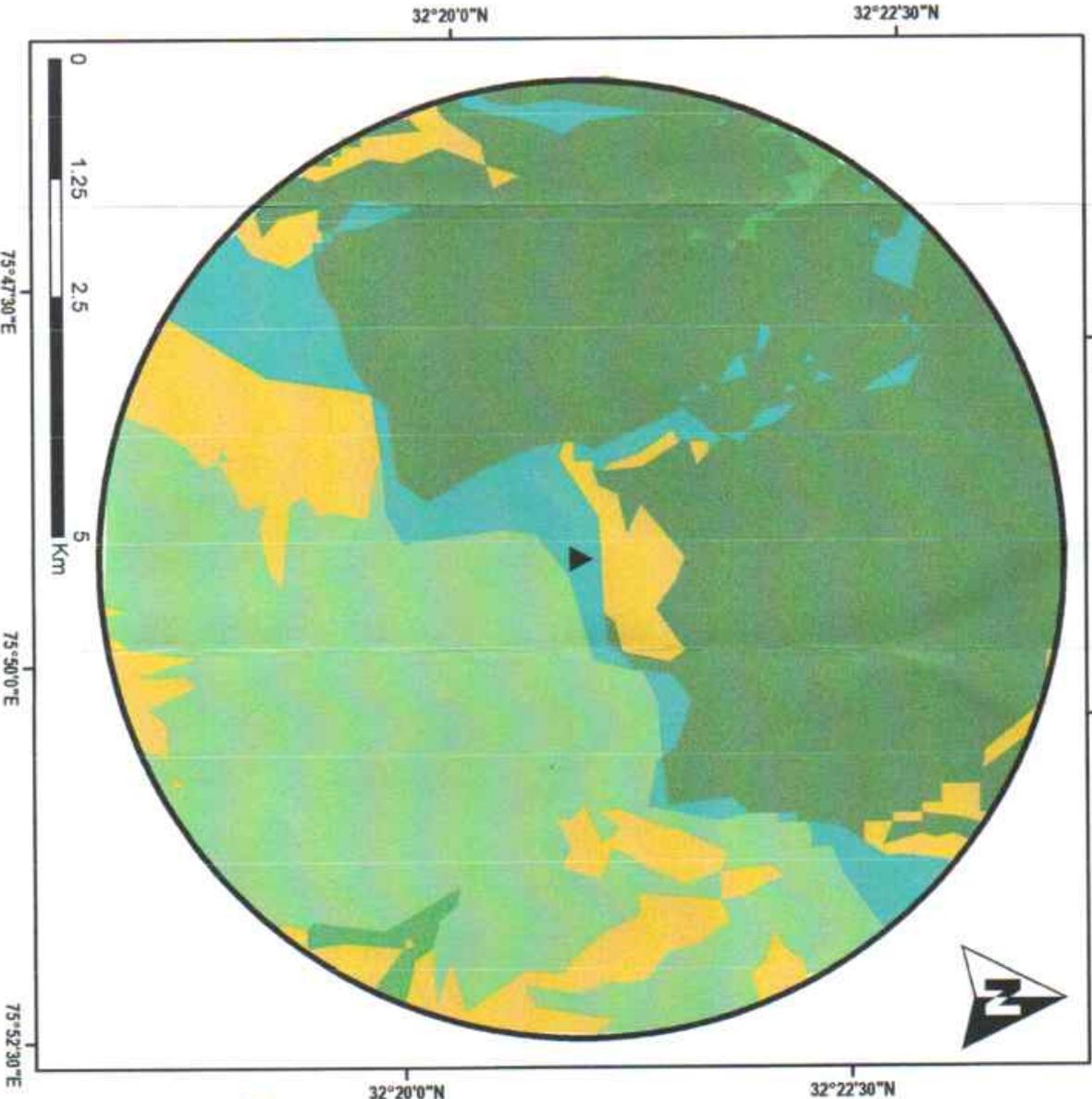
Place: -



*Sh. Prahlad Singh,
S/o Sh. Sudershan Singh, R/o Village &
P.O. Kandwal, Tehsil Nurpur, District
Kangra, Himachal Pradesh.*

Land Use Land Cover Map of 5 Km Buffer for Extraction of sand, stone and bajri over an area situated in khasra no. 154/1/1, Measuring 04-99-19 hectares (Private Land, River Bed) falling in Mauza Maira Doomal, Mohal Maira Batrah, Tehsil Nurpur, District Kangra, Himachal Pradesh.

PLATE No. 4



75°47'30\"/>

75°50'0\"/>

32°20'0\"/>

32°22'30\"/>

75°47'30\"/>

75°50'0\"/>

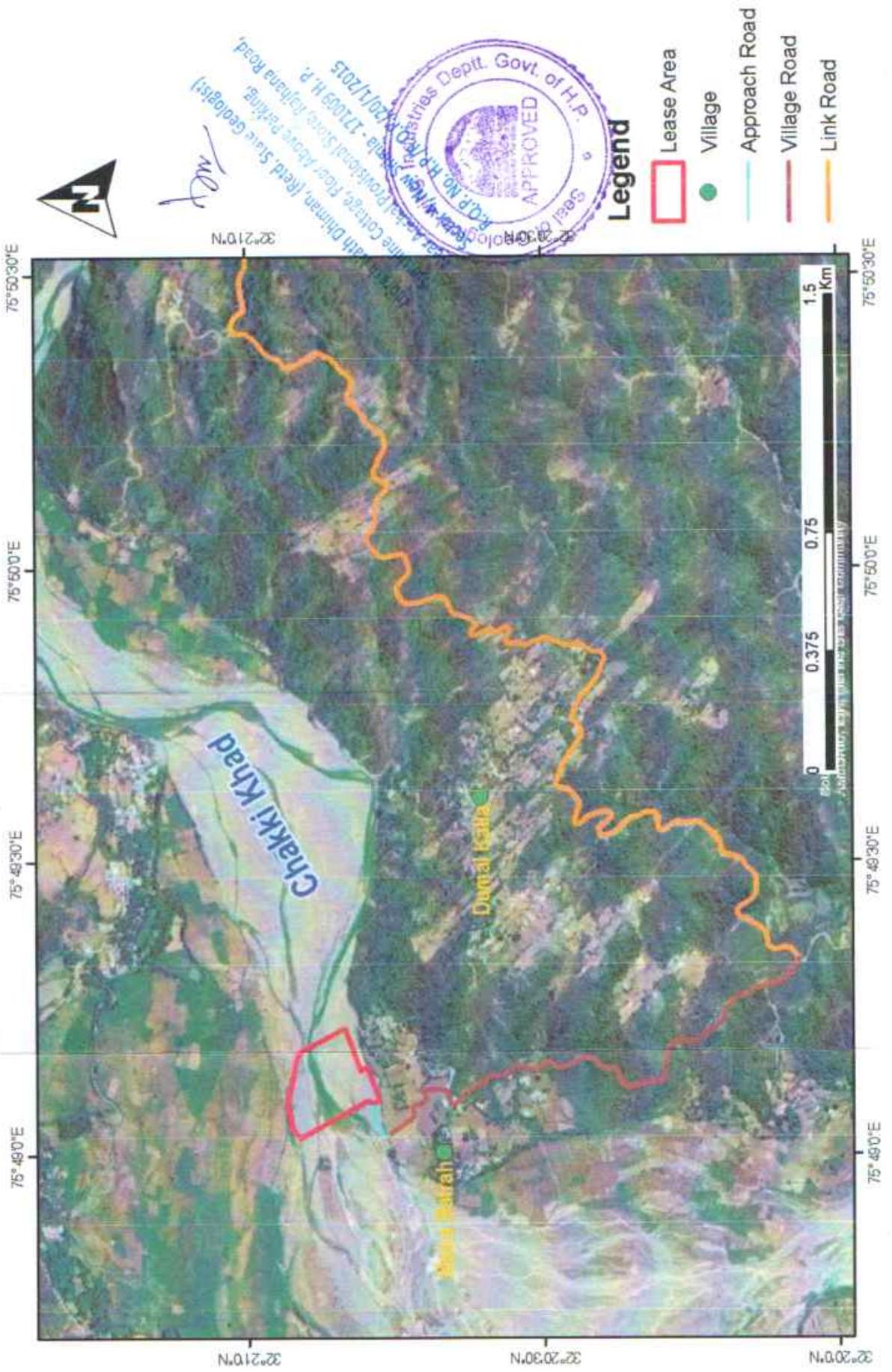
75°52'30\"/>

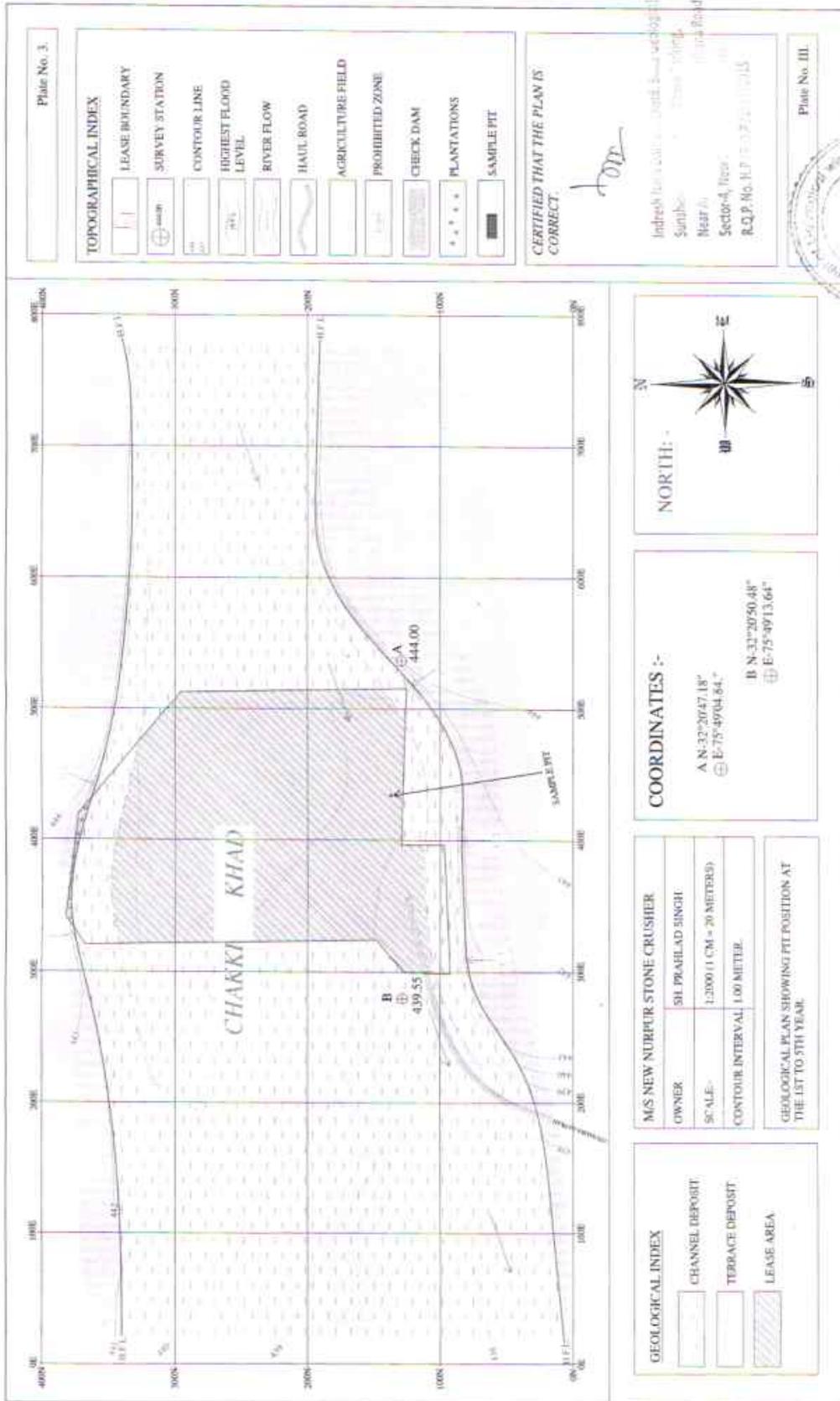
- Legend**
-  Project Site
 -  Buffer 5 Km
 -  Crop Land
 -  Forest
 -  Open Forest
 -  Shrub Land
 -  Water Body

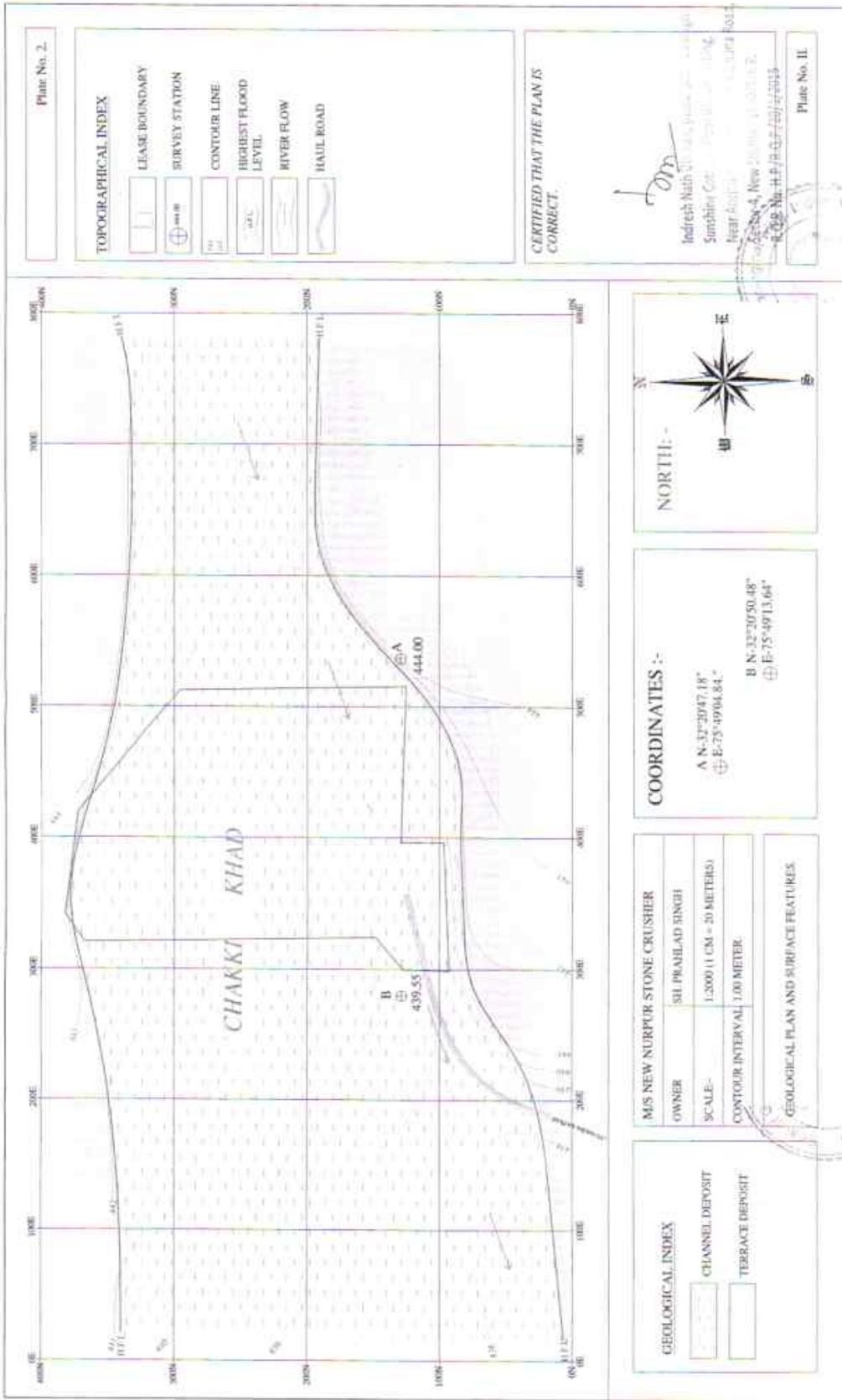


Indresh Kumar
 Sunshine Cottage, Floor Above Parking,
 Near Anchari Postoffice, Store, Rajhara Road,
 Sector-4, New Shimla - 171009 H. P.
 R.Q.P. No. H.P./R.Q.P./20/1/2015

Location Map for Extraction of sand, stone and bajri over an area situated in khasra no. 154/1/11, PLATE No. 1 Measuring 04-99-19 hectares (Private Land, River Bed) falling in Mauza Maira Doomal, Mohal Maira Batrah, Tehsil Nurpur, District Kangra, Himachal Pradesh.







COORDINATES :-

A N-32°30'47.18"
E-75°49'04.84"

B N-32°30'50.48"
E-75°49'13.64"

M/S NEW NURPUR STONE CRUSHER

OWNER	SH. PRAHLAD SINGH
SCALE-	1:2000 (1 CM = 20 METERS)
CONTOUR INTERVAL	1.00 METER

GEOLOGICAL PLAN AND SURFACE FEATURES.

GEOLOGICAL INDEX

- CHANNEL DEPOSIT
- TERRACE DEPOSIT

8/18/23, 4:26 AM

Annexure R-6/3

DownloadPfdFile (5)-1.jpg



HP State Environment Impact Assessment Authority
HPSEIAA Secretariat, Himachal Pradesh
Ministry of Environment Forest & Climate Change, Government of India,
at Department of Environment Science & Technology,
 Paryavaran Bhawan, Near US Club, Shimla-1
 Ph: 0177-2656579, 2659008 Fax: 2659009

F. No. HPSEIAA/2015/365 -1688-62

Dated: 04/07/2023

To

Sh. Prahlad Singh Pro. M/s New Nurpur Stone Crusher
 M/s New Nurpur Stone Crusher, S/o S. Sudershan Singh,
 R/o V.P.O. Kandwal, Tehsil Nurpur, Himachal Pradesh 176201

Sub: Extension of Validity period of Environmental Clearance- reg.

Sir/ Madam,

This has a reference to your online application No. SIA/HP/MIN/297987/2023 dated 1/3/2023 for seeking extension of validity period of environmental clearance granted vide EC letter No. HPSEIAA/2015/365/M/s New Nurpur Stone Crusher dated 01/06/2016 for the project under Environment Impact Assessment Notification, 2006. The application has been examined as per prescribed procedure in the light of provisions under the Environment Impact Assessment Notification, NO. SO-1533 (F) dated 14, September 2006 on the basis of application submitted for extension of period of validity, the application is considered in accordance with office memorandum issued by Ministry of Environment & Forests & Climate Change (IA) vide F.NO. 1A3-22/ 28/2022-1A.111 (E 181584) dated 13-12-2022 and the period of validity is extended till the period of validity of GoHP approved Mining Plan without change in location and with following conditions:

1. The terms and conditions of Environmental Clearance letter shall remain same as imposed in EC letter as referred above.
2. The implementation of terms and conditions shall be sole responsibility of project proponent during the extended period of EC and after the project is commissioned or made functional.
3. The capital cost under CER, the activities to be specified by DEST, GoHP, The project proponent shall take up matter with Director EST for this purpose within one month from issuance of this letter.

[Signature]
 Member Secretary,
 State Environment Impact Assessment Authority,
 Himachal Pradesh, Shimla-171001

Endst No. AA

Dated the Shimla 2023

Copy to following for further necessary action:

1. The Secretary, MoEF&CC, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi- 110003.
2. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-Cum-Office Complex, East Arjun Nagar, New Delhi- 110032.
3. The Chairman, State Pollution Control Board, Shimla-9.
4. The Director, Env., Sci. Tech., Paryavaran Bhawan, US Club, Shimla-1.
5. The Advisor (IA), Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi- 110003.
6. The Regional Officer, MOEF&CC, at Shimla, HP.
7. Monitoring Cell, MOEF&CC, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi- 110003.
8. Guard File

[Signature]
 Member Secretary,
 State Environment Impact Assessment Authority,
 Himachal Pradesh, Shimla-171001

Annexure R-6/4

3

1
C15

29/08/2021

वा अदागत जनाप पसठडी0एम0 साखि वहादूरनूरपुर जिला काँगड़ा हि0पु0



मिस्तरन अना
मिस्तर 27
रुप

महाशराम फु श्री ज्ञानचन्द फु पातु साकन महाल मैरा बटराह
करतार सिंह फु श्री कश्मीरचन्द फु श्री पातु साकन महाल मैरा बटराह
मौजा मैरा हुमल तल्लीनूरपुर जिला काँगड़ा हि0पु0।

प्राथीगण

वनाम

1. धर्म वीर सिंह फु स्वदेश सिंह निवासी काडपाल,
2. मान सिंह फु अमर सिंह निवासी नरैनपुर तल्ली व जिलाफानकोट
3. महिन्द सिंह फु गुल्लोराम साकन वटराह मौजा मैरा हुमल, तल्ली
नूरपुर जिला काँगड़ा हि0पु0।
4. तुप्तादेवी पत्नी मलकियतसिंह निवासी गोंव टाका डा0 वाडा तल्ली
व जिला फानकोट

ehsildar nurgur
Distt. Kangra H.P.

5. वन मण्डल अधिकारी वन मण्डल फानकोट तल्ली व जिला फानकोट

प्रीत्यादीगण

Tejinder
Nurgur

विषय:- प्रार्थना-पत्र वापत दिव्याये जाने निशान्द ही वजीरया तल्ली-
दार साखि/ नायब तल्लीलदार साखि नूरपुर जिलाकाँगड़ा
वापत भूमि छा तानम्बर 59 मि खतानीनम्बर 118 मि खतरा -
नम्बरान 30, 34, 35, 36, 40, 41, 42, 65, 153, 154, वाक्या
महाल मैरा बटराह मौजा मैरा हुमल तल्लीनूरपुर जिला काँगड़ा
जमाबन्दी साल 2015-2016

12/6
Sub Divisional Magistrate
Nurgur, Distt. Kangra (H.P.)

EXAMINER
[Signature]

(33)

Head of the Surveying Department
University Centre, Patna Office

कक्षागत आदेशिका तहसीलदार कार्यालय नरसपुर

क्रमांक २१४/२-३ दिनांक १२-६-२०२० वर्ष प्रायः पत्र आनी
महोदय उक्त कक्षा कार्यालय तहसीलदार कार्यालय नरसपुर तहसील
महोदय उक्त कक्षा कार्यालय तहसीलदार कार्यालय नरसपुर तहसील
कार्यालय तहसीलदार कार्यालय नरसपुर तहसील
दिनांक १२-६-२०२० वर्ष प्रायः पत्र आनी

महोदय उक्त कक्षा कार्यालय तहसीलदार कार्यालय नरसपुर तहसील
कार्यालय तहसीलदार कार्यालय नरसपुर तहसील
दिनांक १२-६-२०२० वर्ष प्रायः पत्र आनी

महोदय उक्त कक्षा कार्यालय तहसीलदार कार्यालय नरसपुर तहसील
कार्यालय तहसीलदार कार्यालय नरसपुर तहसील
दिनांक १२-६-२०२० वर्ष प्रायः पत्र आनी

महोदय उक्त कक्षा कार्यालय तहसीलदार कार्यालय नरसपुर तहसील
कार्यालय तहसीलदार कार्यालय नरसपुर तहसील
दिनांक १२-६-२०२० वर्ष प्रायः पत्र आनी

महोदय उक्त कक्षा कार्यालय तहसीलदार कार्यालय नरसपुर तहसील
कार्यालय तहसीलदार कार्यालय नरसपुर तहसील
दिनांक १२-६-२०२० वर्ष प्रायः पत्र आनी

ATTENDING
EXAMINER
02/06/2020

49

efore Tehsildar Nurpur cum AC 1st Grade Nurpur Distt. Kangra HP

Case No.	Date of Institution	Date of Decision
9/07/2021	12-6-2020	2-7-2021

In Case

Mahashu Ram s/o Sh. Guran Chand R/o Maia Bala
Teh. Nurpur Distt Kangra HP

Applicant

Vs

Bharam Viji Singh s/o Swadesh Singh & Others R/o
Maha & Munga Maia Bala Teh Nurpur Distt
Kangra (HP)

Respondent

Application under section 107 of HP Land Revenue Act.

Whereas the report has been received from FKG0 Sadwan in above case after demarcation. The demarcation is agreed to both the parties on the spot. Both the parties have given their statements. No further action is required in this case. The demarcation is finalized, the case file be consigned to GRR after due completion.

Announced



Sudhli Negi
AC 1st Grade Nurpur
1st Grade
Nurpur (Kangra)

2578
31/07/2021
03/08/2021
03/08/21
03/08/21
03/08/21
03/08/21

S.S.C.
2

29/08/2021

3

वा अदालत जनाप एस0डी0एम0 सावित्र पट्टनूरपुर जिला काँगड़ा हि0पू0



दि 0 अग 29/08/2021
110m 027
82

महाशुराम पुत्र श्री ज्ञानचन्द पुत्र पालु साकन महाल मैरा बटराह
करतार सिंह पुत्र श्री कशीरचन्द पुत्र श्री। पालु साकन महाल मैरा बटराह
मौजा मैरा हुमल तल्लीनूरपुर जिला काँगड़ा हि0पू0।

प्राथीग्या

वनाम

1. धर्म वीर सिंह पुत्र स्वदेश सिंह निवासी काडपाल,
2. मान सिंह पुत्र अमर सिंह निवासी नरैनपुर तल्लील व जिलापठानकोट
3. महेन्द्र सिंह पुत्र गूलोराम साकन वटराह मौजा मैरा हुमल, तल्लील नूरपुर जिला काँगड़ा हि0पू0।
4. तृप्तादेवी पत्नी मलकियतसिंह निवासी गौप टाका डा0 वाज तल्लील व जिला पठानकोट
5. वन मण्डल अधिकारी वन मण्डल पठानकोट तल्लील व जिला पठानकोट

प्रीतिदीग्ग्या

Tejinder
Tejinder
Sub Divisional Magistrate
Murpur, Distt. Kangra (H.P.)

विषय:-

प्राथीग्या-एक वापत दिल्पाये जाने निशाचर ही वजरीया तल्लील-
दार सावित्र/ नायब तल्लीलदार सावित्र नूरपुर जिलाकाँगड़ा
वापत भूमि का तानम्बर 59 मि. खतौचीनम्बर 118 मि. खतरा -
नम्बरान 30, 34, 35, 36, 40, 41, 42, 65, 153, 154, वाक्या
महाल मैरा बटराह मौजा मैरा हुमल तल्लीलनूरपुर जिला काँगड़ा
जमाबन्दी साल 2015-2016

12/8/2021
Sub Divisional Magistrate
Murpur, Distt. Kangra (H.P.)

दरजा
03/8/21

~~_____~~

 03/08/21

2578	
03/08/21	RS
31/07/2021	10-0
03/08/21	10-0
10	
03/08/2021	2000
04/08/2021	



VAKALATNAMA

IN THE COURT OF Hon'ble National Green Tribunal

IN THE MATTER OF O.A. NO. 1034 of 2024

K Sanjeev Dogra Plaintiff/ Appellant/ Petitioner/Complainant

VERSUS

State of Himachal Pradesh & ORS. Defendant/ Respondent/ Opposite Party

KNOW ALL TO whom these presents shall come that I/We R-5,6,7,8,9,16,18,19,20
22,23

the above-named respondents do hereby appoint

ATUL SHUKLA

Enrollment Number- UP 05469/01

Off: D-51, Sector 52, Noida UP-201301

Mob: (+91) 9212738299

(Hereinafter called the advocates) to be my/our Advocate(s) in the above-noted cause, to do all the following acts, deeds and things or any of them, that is to say: -

- To act, appear and plead in the above-noted cause on my/our behalf, in this Court or in any other Court/ Tribunal in which the same may be tried or heard and also in the Appellate Court subject to payment of fees separately for each Court by me/us.
- To sign, file, verify and present pleadings, appeals, cross-objections or petitions for executions, review, revision, withdrawal, compromise or other petitions or affidavits or other documents as may be deemed necessary or proper for the prosecution of the said cause in all its stages subject to payment of fees for each stage.
- To file and take back documents, to admit and/or deny the documents of opposite party.
- To withdraw or compromise the said case or submit to arbitration any differences or disputes that may arise, touching or any manner relating to the said case.
- To take execution proceedings.
- To deposit, draw and receive money, cheques, cash and grant receipt thereof and to do all other acts and things which may be necessary to done for the progress and in the course of the prosecution of the said case.
- To appoint and instruct any other Legal Practitioner authorizing him to exercise the power and authority hereby conferred upon the Advocate whatever he may think fit to do so and to sign the power of attorney on our behalf.

AND I/we the undersigned do hereby agree to ratify and confirm all, acts done by the Advocate or his substitute in the matter as my/our own acts, as if done by me/us to all intents and purposes.

AND I/we undertake that I/we or my/our duly authorized agent would appear in the Court on all hearings and will inform the Advocate for appearance when the case is called.

AND I/we undersigned do hereby agree not to hold the Advocate or his substitute responsible for the result of the said case. The adjournment & other costs whenever ordered by the Court shall be of the Advocate which he shall receive and retain for himself.

AND I/we the undersigned do hereby agree that in the event of the whole or part of the fee agreed by me/us to be paid to the Advocate remaining unpaid he shall be entitled to withdraw from the prosecution of the said case until the same is paid.

IN WITNESS WHEREOF I/we do here unto set my/our hand these presents the contents of which have been understood by me/us on this date -

Accepted subject to the terms of the fees.

ADVOCATE YASHOVARMAN
1019, Naurang House, K.G Marg, New Delhi-110001
(+91) 97169 11111, 85889 94219
e-mail: officeofyashovarma@gmail.com

Atul Shukla
Advocate(s)

Yashovarma
YASHOVARMAN SINGH CHANDEL
ENROLMENT NO : D-4027/2023

Client(s)

ATUL SHUKLA
UP 05469/01
Advocate

AMAN PARTH SHARMA
HIM/380/2011

E.No. UP05469/01
Off: E-7, 15th Floor, Wegmans Business Park, Knowledge Park III, Gt. Noida City, U.P - 201301R Mob: 9212738299, Email- legalconsultants74@gmail.com

D/19/6/18/2021
RASHAV KUMJAN

D/19/6/5/2023
AKRITI SINGH

D/19/9/8/2023
SIDDHANT TIANKUR

1) New Nurpur stone crusher Partner Parlad Singh *RF*
 M/s New Nurpur Stone Crusher
 R-6, 20
 Partner

2) Pawan Singh Prop. m/s Mahadev stone crusher *R-19*
 For Mahadev Stone Crusher
 Pawan Singh Prop.

3) Subash Singh Partner m/s Nandi stone crusher *R-9, 16*
 M/s Nandi Stone Crushing Co
 Subash Singh Partner

4. Rohin Sahu Prop SHIVA Stone Crusher *R-8, 18*
 Shiva Stone Crusher
 Rohin Sahu Prop.

5 Dharmvir Singh Prop New Shiva Stone Crusher *R-7*
 For New Shiva Stone Crusher
 Dharmvir Singh Proprietor

6. Ashok Andolia Prop. m/s Ankur stone crusher *R-5, 23*
 For ANKUR STONE CRUSHER

7 *m/s* Diamond Enterprises Partner Arvind Kumar Gulwadia *R-22*
 Prop.

For Diamond Enterprises
 Arvind Kumar Gulwadia
 Partner