<u>DIVERSION OF 0.6806 HA. OF FOREST LAND FOR CONSTRUCTION OF LOWER IKU SMALL</u> <u>HYDRO PROJECT 1 MW IN DISTRICT KANGRA (H.P.)</u>

FILE NO.

: FP/HP/HYD/41472/2019

DATE OF PROPOSAL

CHECK LIST SERIAL NUMBER - 10

CERTIFICATE FOR MINIMUM USE OF FOREST LAND

This is to certify that the forest area involved in the construction of Lower Iku Small Hydro Project (1 MW) in District Kangra is unavoidable and barest minimum forest area i.e. 0-68-06 ha is proposed for diversion.

For M/s Sanjeev Hydro Projects (P) Ltd.

Sanjeev Hydro Projects (2) Ltd.

Authorised Signati

Authorised Signatory

Place: Dharamshala

Dated:

Countersigned by:

Divisional Forest Officer Dharamshala Forest Division

DIVERSION OF 0.6806 HA. OF FOREST LAND FOR CONSTRUCTION OF LOWER IKU SMALL HYDRO PROJECT 1 MW IN DISTRICT KANGRA (H.P.)

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ALTERNATE SITES CONSIDERED TO MINIMISE THE USE OF FOREST LAND FOR CONSTRUCTION OF LOWER IKU SMALL HYDRO ELECTRIC PROJECT (1 MW)

ALTERNATIVE-I

The proposed project is situated on the left bank of the Iku Khad. The alternative involves construction of diversion structure at $EL \pm 1225$ m on Iku Khad. The water conductor shall consist of surface De-Silting Tank, Water Conducting System, Forebay Tank and surface Power House on the left bank of Iku Khad. The gross head available for power generation shall be around 115 m. Surface powerhouse shall be located on the left bank of the Iku Khad.

Feature considered:

- Forest land involved to the tune of 0.6806 hectares.
- Entire alignment of the Project falls on the left bank of the Iku Khad.
- Gross head is fully utilized, resulting in more power generation.
- Less felling of trees i.e. 24 number of trees is involved in the proposal.

ALTERNATIVE-II

This alternative involves construction of diversion structure on Iku Khad at $EL \pm 1225$ m and the Water Conductor System involving of about 630 m length passing through a loose rock on the right bank of the khad. Geologically, this alternative is not appropriate for the safety of the Project components.

Feature Considered:

- Forest land involved to the tune of 0-76-00 hectares.
- It is difficult for construction of water conductor system on the right bank as it passes through loose rock
- Gross head available also decreases, resulting in less power generation.
- The Project cost increases in this alternative.
- Felling of 62 number of trees is involved in the proposal.

ALTERNATIVE-III

This is mainly right bank alternative and involves construction of diversion structure at 11 1225 m on the Iku Khad. Water of Iku Khad shall be diverted through 1110 m long Pressurised Power Part from De-Silting cum Forebay Tank. The Power House shall be constructed on the right bank of Iku Khad new to the Iku Khad and thus it would not be safe. The net head available shall also be less. In this alternative is Power Channel shall be pressurized and the area in question is vulnerable to land slides.

Features Considered:

- Entire alignment falls on right bank of Iku Khad.
- Forest land involved to the tune of 0-72-25 hectares.
- The Power House and Power Channel shall not be safe
- More felling of trees i.e. 105 is involved in the proposal.

Keeping in view all the above three alternative, the **alternative-I**, which is more suitable and environmental friendly, has been finally adopted.

For M/s Sanjeev Hydro Projects (P) Ltd.

Sanjeev Hydro Propolis Pvt. Ltd

Authorised Signatory

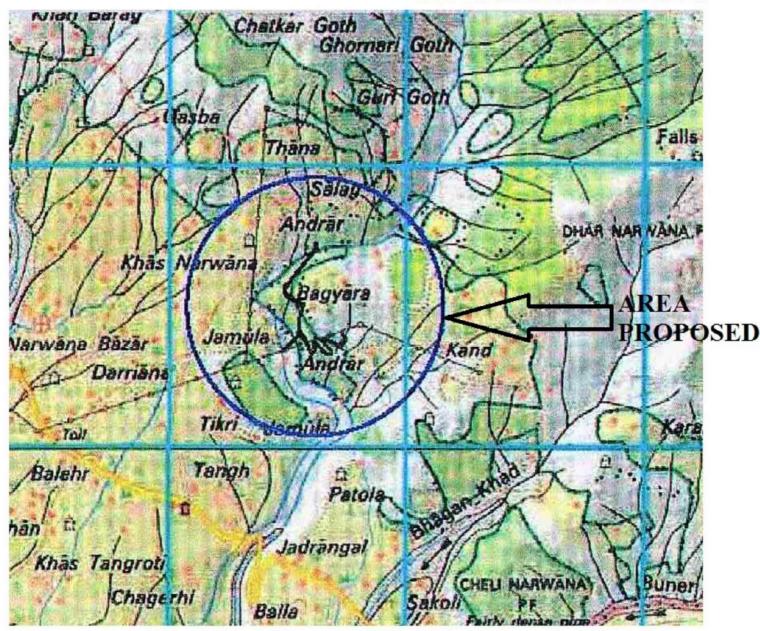
Place: Dharamshala

Dated:

LOWER IKU SMALL HYDRO PROJECT (1 MW) TEHSIL DHARAMSHALA, DISTRICT KANGRA (H.P.)

ALTERNATIVE - I

SOI TOPO: 52 D/8



FEATURES CONSIDERED
AREA INVOLVED 0.6806 ha
TREES INVOLVED 24 No.

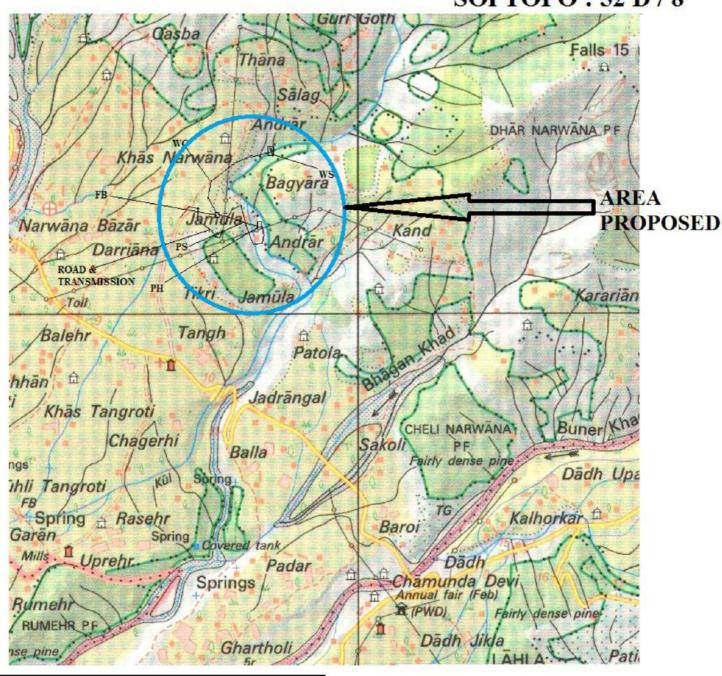
Director AND

Divisional Forest Officer, Dharamshala Forest Division. DHARAMSHALA.

LOWER IKU SMALL HYDRO PROJECT (1 MW) TEHSIL DHARAMSHALA, DISTRICT KANGRA (H.P.)

ALTERNATIVE - II

SOI TOPO: 52 D/8



| FEATURES CONSIDERED | | | | | |
|---------------------|---------|--|--|--|--|
| AREA INVOLVED | 0.76 ha | | | | |
| TREES INVOLVED | 62 No. | | | | |

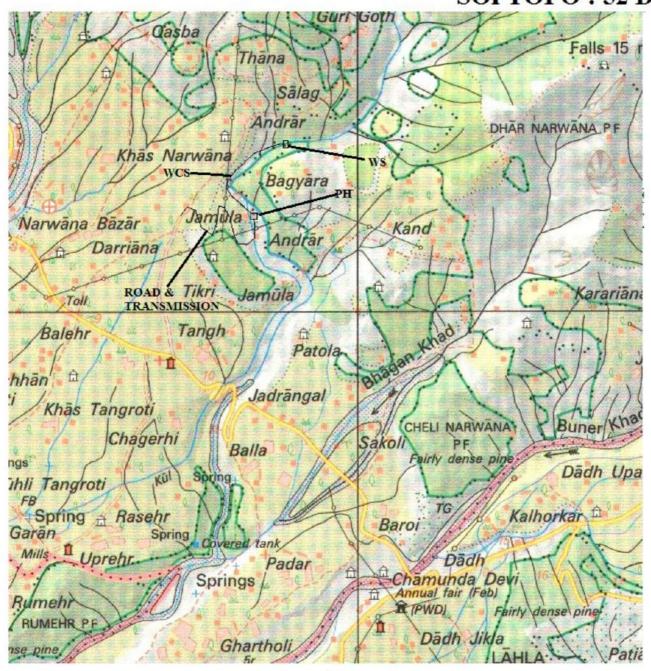
Director Hydro Projects (P) LL

Divisional Forest Officer, Oharamshala Forest Division, OHARAMSHALA.

LOWER IKU SMALL HYDRO PROJECT (1 MW) TEHSIL DHARAMSHALA, DISTRICT KANGRA (H.P.)

ALTERNATIVE - III

SOI TOPO: 52 D/8



| FEATURES CONSIDERED | | | | | | |
|---------------------|---------|--|--|--|--|--|
| AREA INVOLVED | | | | | | |
| TREES INVOLVED | 105 No. | | | | | |

Director Any Compacts (P) Lie

Divisional Forest Officer, Oharamshala Forest Division. OHARAMSHALA.

<u>DIVERSION OF 0.6806 HA. OF FOREST LAND FOR CONSTRUCTION OF LOWER IKU SMALL</u> HYDRO PROJECT 1 MW IN DISTRICT KANGRA (H.P.)

FILE NO.

: FP/HP/HYD/41472/2019

DATE OF PROPOSAL

CHECK LIST SERIAL NUMBER - 11

UNDERTAKING FOR PAYMENT OF COST OF COMPENSATORY AFFORESTATION

It is to certify that I, Sanjeev Kumar, Authorised Signatory for M/s Sanjeev Hydro Projects (P) Ltd. having its office at VPO Sauhora, Tehsil & District Kangra – 176001, have applied for diversion of 0-68-06 ha. of forest area for the purpose of execution of Lower Iku Small Hydro Power Project 1 MW in District Kangra.

I, hereby undertake to pay the entire amount for compensatory afforestation in lieu of the forest area diverted for execution of Lower Iku Small Hydro Power Project 1 MW, as per prevailing wage rates at the time of plantation.

For M/s Sanjeev Hydro Projects (P) Ltd.

Sanjeev Hydro Projects (P) Ltd.

Authorised Signatory

Place: Dharamshala

Dated:

Countersigned by:

Divisional Forest Officer Dharamshala Forest Division

<u>DIVERSION OF 0.6806 HA. OF FOREST LAND FOR CONSTRUCTION OF LOWER IKU SMALL</u> <u>HYDRO PROJECT 1 MW IN DISTRICT KANGRA (H.P.)</u>

FILE NO.

: FP/HP/HYD/41472/2019

DATE OF PROPOSAL

CHECK LIST SERIAL NUMBER - 12

UNDERTAKING FOR THE PAYMENT OF NET PRESENT VALUE OF FOREST AREA

It is to certify that I, Sanjeev Kumar, Authorised Signatory for M/s Sanjeev Hydro Projects (P) Ltd. having its office at VPO Sauhora, Tehsil & District Kangra – 176001, have applied for diversion of 0-68-06 ha. of forest area for the purpose of execution of Lower Iku Small Hydro Power Project 1 MW in District Kangra.

I hereby undertake to pay the revised Net Present Value (NPV) of the above forest land as per prevailing rates.

For M/s Sanjeev Hydro Projects (P) Ltd.

Place: Dharamshala

Dated:

Authorised Signatory

Countersigned by:

Divisional Forest Officer Dharamshala Forest Division

DIVERSION OF 0.6806 HA. OF FOREST LAND FOR CONSTRUCTION OF LOWER IKU SMALL HYDRO PROJECT 1 MW IN DISTRICT KANGRA (H.P.)

FILE NO.

: FP/HP/HYD/41472/2019

DATE OF PROPOSAL

CHECK LIST SERIAL NUMBER - 12

UNDERTAKING FOR THE PAYMENT OF ADDITIONAL **NET PRESENT VALUE OF FOREST AREA**

It is to certify that I, Sanjeev Kumar, Authorised Signatory for M/s Sanjeev Hydro Projects (P) Ltd. having its office at VPO Sauhora, Tehsil & District Kangra - 176001, have applied for diversion of 0-68-06 ha. of forest area for the purpose of execution of Lower Iku Small Hydro Power Project 1 MW in District Kangra.

I hereby undertake to pay the additional amount of NPV, if so determined as per decision of the Hon'ble Supreme Court.

For M/s Sanjeev Hydro Projects (P) Ltd.

Sanjeev Hydro Projects (P) Ltd.

Authorised Signato

Authorised Signa

Place: Dharamshala

Dated:

Countersigned by:

Divisional Forest Officer Dharamshala Forest Division

<u>DIVERSION OF 0.6806 HA. OF FOREST LAND FOR CONSTRUCTION OF LOWER IKU SMALL HYDRO PROJECT 1 MW IN DISTRICT KANGRA (H.P.)</u>

FILE NO.

: FP/HP/HYD/41472/2019

DATE OF PROPOSAL

CHECK LIST SR. NO. 13

UNDERTAKING TO SUBMIT FRA CERTIFICATE

It is to certify that I, Sanjeev Kumar, Authorised Signatory for M/s Sanjeev Hydro Projects Pvt. Ltd. having its office at VPO Sauhora, Tehsil & District Kangra – 176001, have applied for diversion of 0-68-06 ha. of forest area for the purpose of execution of Lower Iku Small Hydro Power Project 1 MW in District Kangra.

I, hereby undertake to submit the FRA Certificate complete in all respect before the final approval of the Forest Clearance case of the said Project.

For M/s Sanjeev Hydro Projects (P) Ltd.

Place: Kangra

Dated: 17-02-2022

Authorised Signatory

Authorises Signator

Countersigned by :-

Divisional Forest Officer, Dharamshala Forest Division

JOINT INSPECTION REPORT

We the undersigned have jointly inspected the areas Proposed for Diversion of M/s Vishavkarma Hydel Power. VPO Gaggal, Tehsil and District Kangra. Himachal Pradesh, for setting up 1 MW Lower Iku Small Hydro Project on Iku Khad, a tributary of Banganga then Beas River downstream of Village Kand, Gram Panchayat Kand Kardiyana, Tehsil Dharamshala, Distt. Kangra, Himachal Pradesh on 27.09.2017.

The project requires a total area of 00-68-06 hectare, for different components viz., Intakes. Desilting Tank, Channel, Forebay, Water Conductor System, Power House, Switchyard, Tail Race Channel and Muck Dumping Sites, approach road to Power House and Transmission Line from Power House to near HPSEBL 33 KV Line.

The details of Forest Land area as under:

| Sr. No. | Component / Description | Mohal | Khasra Ar No. | | | Forest Land F (sqm) | | Total area to be Required (in hectare) | | Classification of Forest Land | | |
|------------|---------------------------------------|---------|------------------|--------|---------|---------------------------|-----|--|-----|--------------------------------|--|--------------------------------|
| | 1 | | | Length | Breadth | | | | | | | |
| 1 | Intake / Trench Weir | Bagiarr | a 820 / 1 | 20 | 8 | | L60 | 0-01- | | Gair Mumkin Khad | | |
| 2 | Conveyancy Channel | Bagiarr | a 819/1 | 20 | 2 | | 40 | 0-00-40 | | Jungle Mehfuza Gair Mehduda | | |
| 3 | De-Silting Tank | Bagiarr | a 819/2 | 2 20 | 8 | 1 | 160 | 0-01-60 | | | | Jungle Mehfuza Gair Mehduda |
| 4 | Water Conductor System / Pipe Line | Bagiarr | a 819/3 | 245 | 2 | 4 | 190 | 0-04-90 | | | | Jungle Mehfuza Gair Mehduda |
| 5 | Water Conductor System / Pipe Line | Bagiarr | a 876/1 | 241 | 2 | | 182 | 0-04-82 | | Charagah Darakhtan | | |
| 6 | Water Conductor System / Pipe Line | Bagiarr | a 826/3 | 3 143 | 2 | | 286 | 0-02-86 | | Charagah Bila Darakhtan | | |
| 7 | Forebay Tank | Bagiarr | a 826/2 | 2 10 | 10 | | 100 | 0-01-00 | | Charagah Bila Darakhtan | | |
| 8 | Spillway | Bagiarr | a 826/ | 38 | 2 | | 76 | 0-00- | | Charagah Bila Darakhtan | | |
| 9 | Penstock | Bagiarr | a 826/1 | 117 | 2 | 100- | 234 | 0-02- | | Charagah Bila Darakhtan | | |
| 10 | Penstock | Bagiarr | a 858/: | 3 | 2 | | 6 | 0-00- | | Gair Mumkin Rasta | | |
| 11 | Penstock | Bagiarr | a 1063 / | 26 | 2 | | 52 | 0-00- | | Jungle Mehfuza Gair Mehduda | | |
| 12 | Power House | Bagian | a 1063/ | 20 | 15 | | 300 | 0-03- | | Jungle Mehfuza Gair Mehduda | | |
| 13 | Tail Race | Bagiarr | a 1063/ | 8 | 2 | | 16 | 0-00-16 | | Jungle Mehfuza Gair Mehduda | | |
| 14 | Road | Bagiarr | a 1063 / | 653.25 | 4 | 2 | 613 | 0-26- | -13 | Jungle Mehfuza Gair Mehduda | | |

Senjeavithero Public Fvt. Ltd.

| | Total Land Required | | | | | | 0-68-06 | ha |
|----|---------------------|----------|-------------|----|----|------|---------|--------------------------------|
| 22 | Dumping Site - VII | Bagiarra | 1063 / 7 | 11 | 10 | 110 | 0-01-10 | Jungle Mehfuz Gair Mehduda |
| 21 | Dumping Site - VI | Bagiarra | 1063 / 8 | 10 | 10 | 100 | 0-01-00 | Jungle Mehfuza Gair Mehduda |
| 20 | Dumping Site - V | Bagiarra | 1063 / 9 | 10 | 10 | 100 | 0-01-00 | Jungle Mehfuza Gair Mehduda |
| 19 | Dumping Site - IV | Bagiarra | 1063 / 5 | 11 | 11 | 121 | 0-01-21 | Jungle Mehfuza Gair Mehduda |
| 18 | Dumping Site - III | Bagiarra | 826 / 4 | 10 | 11 | 110 | 0-01-10 | Charagah Bila Darakhtan |
| 17 | Dumping Site - II | Bagiarra | 876 / 2 | 10 | 10 | 100 | 0-01-00 | Charagah Darakhtan |
| 16 | Dumping Site - I | Bagiarra | 819/4 | 10 | 10 | 100 | 0-01-00 | Jungle Mehfuzi Gair Mehduda |
| 15 | Transmission Line | Bagiarra | 1063 / 6 | 70 | 15 | 1050 | 0-10-50 | Jungle Mehfuza Gair Mehduda |

The width of the transmission line proposed to be acquired is 15 m and the height is 11 meter.

The Joint Inspection team has examined all the alternatives with a view to avoid / minimize the use of forest land and we have come to the conclusion that land of the above Khasra Nos. of forest land is the minimum required land for the construction of Lower Iku Small Hydro Project and so is absolutely essential.

D.F.O

Dharamshala

S.D.O (Civil)

Dharamshala

Authorised Signatory

M.s Vishavkarma Hydel Power

Authorised Signator

DIVERSION OF 0.6806 HA. OF FOREST LAND FOR CONSTRUCTION OF LOWER IKU SMALL HYDRO PROJECT 1 MW IN DISTRICT KANGRA (H.P.)

FILE NO.

: FP/HP/HYD/41472/2019

DATE OF PROPOSAL:

CHECK LIST SERIAL NUMBER - 19

CERTIFICATE FOR NON VIOLATION OF FCA 1860

It is to certify that I, Sanjeev Kumar, Authorised Signatory for M/s Sanjeev Hydro Projects (P) Ltd. having its office at VPO Sauhora, Tehsil & District Kangra – 176001, have applied for diversion of 0-68-06 ha. of forest area for the purpose of execution of Lower Iku Small Hydro Power Project 1 MW in District Kangra.

I, hereby ensure that there is no violation of FCA, 1860 and no construction activity shall be started at the proposed site till the area is not diverted in the name of M/s Sanjeev Hydro Projects Private Limited.

For M/s Sanjeev Hydro Projects (P) Ltd.

Authorised Systal Av

Xuthorised Signatory

Place : Dharamshala

Dated:

CERTIFICATE OF NON AVAILABILITY OF NON FOREST LAND FOR COMPENSATORY AFFORESTATION IN RESPECT OF VISHAVKARMA HYDRO POWER FOR CONSTRCTION OF LOWER IQU SMALL HYDRO PROJECT (1MW) IN TEHSIL DHARAMSHALA OF DISTT KANGRA WITHIN JURISDICTION OF DHARAMSHALA FOREST DIVISION.

As per report of Sub Divisional Officer (Civil) Dharamshala vide letter no. 200/SDK dated 29-05-2018, it is certified that there is no- non forest land available in Mohal Bagiarra (Kand Kardiyana) Tehsil Dharamshala District Kangra H.P. for raising compensatory afforestation.

As such the compensatory afforestation shall be done on above land in non forest land on double the area required for the <u>construction</u> of Lower Small Hydro Project (1MW) in Tehsil Dharamshala of Distt Kangra H.P.

No. 2304 /DRA

Dated : 08/06/2018

Kangra at Dharmshala