File No.8-21/2021-FC

Government of India

Ministry of Environment, Forest and Climate Change (Forest Conservation Division)

Indira Paryavaran Bhawan, Jor Bagh Road, Aliganj, New Delhi: 1100 03,

Dated: 2nd September, 2021

To

The Addl. Chief Secretary (Forests), Government of Himachal Pradesh. Shimla.

<u>Sub:</u> Proposal for seeking prior approval of the Central Government under Section 2 of Forest (Conservation) Act, 1980 for non-forestry use of 406.79 ha. of forest land in favour of HPPCL for the construction of Thana Plaun Hydro-Electric Project (191 MW), within the jurisdiction of Mandi & Jogindernagar forest Divisions, District Mandi, Himachal Pradesh. (Online proposal No.FP/HP/HYD/8255/2014)- regarding

Madam/Sir,

I am directed to refer to the Government of Himachal Pradesh's letter No.Ft.48-2883/2014 (FCA) dated 30th July, 2021 on the above mentioned subject seeking prior approval of the Central Government in accordance with Section-2 (ii) of the Forest (Conservation) Act, 1980. After preliminary scrutiny of the proposal the Ministry has observed following shortcomings:

- i. As per analysis done by the DSS cell (Copy enclosed), the total area proposed for diversion and the area of different components submitted in the proposal are at variance with the area included in the KML files. The State govt. may therefore verify the facts and submit the correct component wise data/KML files of the area proposed for diversion.
- ii. The area proposed for Compensatory Afforestation is 815.48 ha whereas the area as per the KML files submitted by State Govt. is 782.17 ha. The same needs to be checked and corrected.
- iii. Area of some of the patches proposed for Compensatory Afforestation is less than 5.0 ha.(details included in DSS report) The smaller areas are difficult for managing and raising successful plantations. The State Govt may therefore explore other areas in this regard.
- iv.It has been observed in DSS analysis(copy attached), that out of total forest area proposed for Compensatory Afforestation, 24 ha of land is classified as very dense forest, 58 ha as moderately dense forest, in terms of forest classes (as per the ISFR 2019). The same is required to be verified and corrected because as per the guidelines of the Ministry, degraded forest lands with a crown density below 40% can be taken up for Compensatory Afforestation.
- v. Since the proposal involves submergence of huge area therefore the total no. of trees involved in the project along with their bifurcation at FRL, FRL-2, FRL-4 meters is also required to be given.

File No.8-21/2021-FC

- vi.Nagru WLS is located at a distance of 4.88 km from the proposed forest area, therefore, comments of the Chief Wildlife Warden, including on notification of ESZ and provisions thereof, may be submitted.
- vii.Date of recommendation in Part-IV is given as 24.03.2024 by the Nodal Officer, therefore the same is required to be revised.
- viii. The State Govt. has not submitted a copy of the approved Detailed Project Report (DPR) of the instant project. The same is required to be submitted.
- ix. In the online Part-1 at Sr. no B-1 it has been mentioned that proposals for diversion of 12.92 ha forest land for the project have been approved in the past. The details of the above proposals along with their linkage with the present proposal is required to be provided.
- x. The proposal involves Non-forest land, therefore the state government will ensure that R&R plan is prepared and submitted in case people are getting displaced due to execution of the project

In view of the above, the State Government is requested to submit the information, as indicated above, for further consideration of the proposal.

Yours sincerely,

Sd/-(Suneet Bhardwaj) Assistant Inspector General of Forests

Copy to: -

- 1. The PCCF (HoFF), Forest Department Himachal Pradesh, Shimla.
- 2. The Regional Officer, MoEF&CC's Integrated Regional Office, Shimla.
- 3. The APCCF-cum-Nodal Officer (FCA), Forest Department, Himachal Pradesh, Shimla.
- 4. User Agency.
- 5. Monitoring Cell, FC Division, MoEF & CC, New Delhi, for uploading.

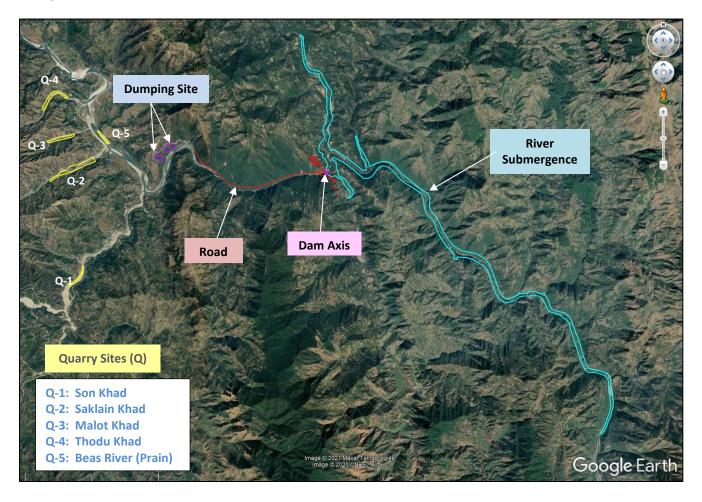
Signed by Suneet Bhardwaj Date: 02-09-2021 15:15:03

Reason: Approved

Proposal No.: FP/HP/HYD/8255/2014

<u>Proposal:</u> Diversion of 406.79 ha of forest land in favour of Himachal Pradesh Power Corporation Ltd., Thana Plaun and Triveni Mahadev HEPs, HPPCL, Sujanpur Tihra, Distt. Hamirpur, HP for the construction of Thana Plaun HEP (191MW) within the jurisdiction of Jogindernagar and Mandi Forest Divisions, Distt. Mandi, Himachal Pradesh.

Analysis on Land under Diversion



1. Proposed forest land for diversion falls under Mandi district of Himachal Pradesh State and its component-wise area (software calculated) details is given below:

S.No.	Commonweat Name		ea in Ha. RIVESH)	Calculated
	Component Name	Forest Land (ha.)	Non-Forest Land (ha.)	Area of KML File (Ha.)
1	Quarry Sites Q1 (Son Khad)			4.10
2	Quarry Sites Q2 (Saklain Khad)			20.49
3	Quarry Sites Q3 (Malot Khad)	45.94	0	7.72
4	Quarry Sites Q4 (Thodu Khad)			9.50
5	Quarry Sites Q5 (Beas River (Prain))			4.12
6	Dumping Sites 1	10.25	0	3.92
7	Dumping Sites 2	10.35	0	6.09
8	Project Colony	0	6	••••
9	Submergence Area	309.43	27.46	352.31
10	Road & Job facility Area	30.87	1.07	6.72 (only road area)

11	Dam Body, Components and requisite job facility ar	10.2	2.97	0.02 (only Dam Axis Area)
	Total	406.79	37.5	415.01

(Note: The discrepancy found in the KML file area is highlighted with Cyan color.)

- 2. Complete component wise KML file of entire project area (including both Forest & Non-forest area) is not available.
- 3. **Nagru WLS** is located at a distance of 4.88 km from the proposed forest area.



- 4. Proposed area for diversion falls in High Conservation Value (HCV) Zone based on Decision Rule 1 (due to hydrological rule) and not in High Conservation Value(HCV) Zone based on Decision Rule 2.
- 5. Out of total forest area proposed for diversion, 51 ha of land is classified as moderately dense forest, 92 ha as open forest, 99 ha of land as water and remaining 172 ha of land as Non-Forest (land without tree cover) in terms of forest classes (as per the ISFR 2019) based on the interpretation of satellite data period 2017-2018.
- 6. Observation based on Google Earth: Some small constructions are visible in the proposed quarry sites.

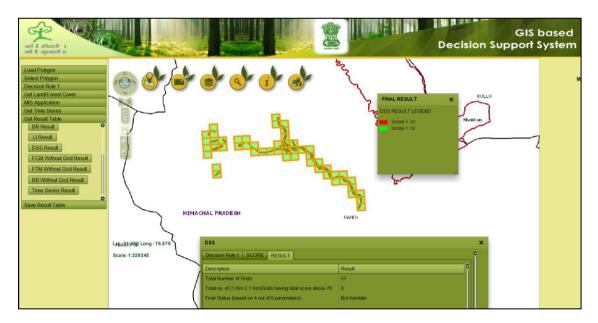
Decision Rule no. 1:

Whether forms part of:

- I. Hydrological Layer:
 - a. Major River: Yes (Beas)
 - b. Wetland (Area more than 10 ha.):N/A
 - c. Water bodies (irrigation/Hydropower/water storage):N/A
- II. Very Dense Forest patch (>1 sq km): N/A
- III. Remnant Forest Type:N/A
- IV. Protected area/Tiger Reserves/Tiger corridors: N/A
- V. Wild life Species: N/A

Decision Rule no.2: (analysis is carried out using Without 50% rule)

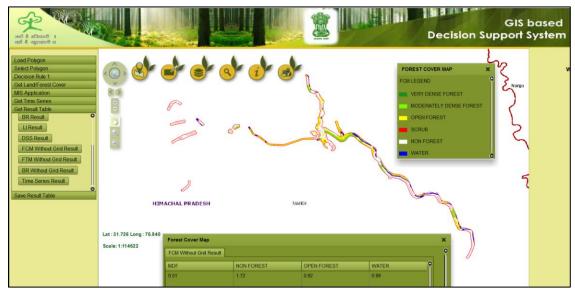
DESCRIPTION	RESULT
Total Number of Grids	51
Total no. of (1 Km X 1 Km)Grids having total score above 70	0
Final Status (based on 4 parameters)	Not in High Conservation Value (HCV) zone



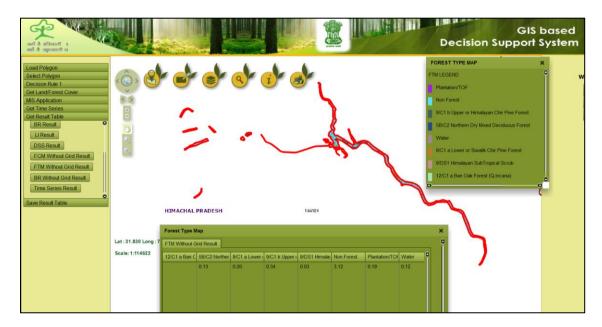
<u>Final Result</u>: In High Conservation Value (HCV) zone as per Decision Rule 1 (falling within 250m buffer of Beas river) and Not in High Conservation Value (HCV) zone based on Decision rule 2.

<u>Forest Cover:</u> In terms of standards followed in ISFR 2019 (interpretation of satellite data period 2017-2018) regarding forest density classes:

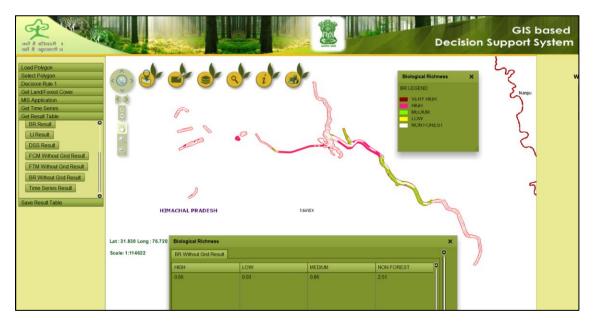
- I. Very Dense Forest (Canopy density 70% & above): 00 ha.
- II. Moderately dense Forest (canopy density 40-70%): 51 ha.
- III. Open Forest (canopy density 10-40%): 92 ha.
- IV. Water: 99 ha.
- V. Non-Forest: 172 ha.



<u>Forest Type:</u> 5B/C2 Northern Dry Mixed Deciduous Forest: 13 ha, 9/DS1 Himalayan Sub Tropical Scrub: 3 ha, 9/C1a Lower or Siwalik Chir Pine Forest: 20 ha, 9/C1b Upper or Himalayan Chir Pine Forest: 34 ha, Plantation/TOF: 19, Water: 12 ha & Non-Forest: 312 ha.



Biological richness: High: 85 ha, Medium: 95 ha, Low: 3 ha & Non-Forest: 251 ha.



Compensatory Afforestation (CA) Land

- 1. CA land has been proposed over degraded forest land which falls in Mandi district of Himachal Pradesh State. All the CA sites are located on sloped surface.
- 2. The total calculated CA area of the KML files is found 782.17 ha whereas the total area proposed for CA is 815.48 ha.
- 3. There are 34 CA sites whose area (software calculated) is less than 5 ha, out of which 24 are isolated CA sites and the remaining sites shares its boundary with the other proposed CA sites.
- 4. The KML file of the CA sites, which are found incorrect, is highlighted with cyan color in the Table given below.
- 5. Forest density classes of proposed CA sites (based on interpretation of satellite data period 2017-18) as per ISFR 2019, are as follows:

S.No.	Patch No. (as per PARIVESH)	Name of PF/RF	Range	Compartment No.	Given Area (ha.)	Calculated Area (ha.)	VDF	MDF	OF	Scrub	Non- Forest
1	1	Ropa Padhar	Jogindernagar	Near Ropa Padhar	7.03	7.04	0	0	1	0	6
2	2	Bambola	Kataula	Near Village	29.29	8.74	1	1	0	0	7
3				Bambola		16.99	2	1	2	0	12
4						3.56	0	1	0	0	3
5	3	Solang	Kataula	Near Village	10.2	4.13	0	0	2	0	2
6				Solang		6.07	0	0	0	0	6
7	4	Suran	Kataula	Near Village	20.47	17.64	2	9	7	0	0
8				Suran		2.83	0	0	0	0	3
9	5	Jamnu	Pangna	Near Village	117.8	16.83	0	0	0	0	17
10				Jamnu		10.28	0	0	0	0	10
11						28.08	0	0	0	0	28
12						38.76	0	0	2	2	35
13						1.21	0	0	0	0	1
14	6	Kot/114	Pangna	Near Village Kot	11.73	11.73	0	0	0	3	9
15	13	Koon	Kangoo	Near Village Koon	5	0.05	0	0	0	0	0.05
16	14	Naval	Jai-Devi	Near Village Naval	6	6.96	0	0	0	0	7
17	15	Fatehpur	Jai-Devi	Near Village Fatehpur	10	10.00	0	0	0	0	10
18	16	Bhalana	Jai-Devi	Near Village Bhalana	5	5.00	0	0	1	0	4
19	17	Shaishdhar	Jai-Devi	Near Village Shaishdhar	5	5.00	0	0	0	0	5
20	7	Sawindhar	Pangna	Near Village	78.47	3.80	0	0	0	1	4
21				Sawindhar		3.32	0	0	0	0	3
22						8.33	0	0	1	0	7
23						14.48	0	0	0	0	14
24						32.44	0	0	0	0	32
25						16.10	0	0	0	0	16
26	8	Batwada	Kangoo	Near Village Batwada	8	8.09	0	0	0	0	8

30	12	Khanokhar	Kangoo	Kunaila Near Village Khanokhar	6	5.99	0	0	0	0	6
29	11	Kunaila	Kangoo	Near Village	6	6.15	0	0	0	0	6
28	10	Gamoh	Kangoo	Near Village Gamoh	9	0.17	0	0	0	0	0.17
27	9	Gamoh	Kangoo	Near Village Gamoh	7	7.28	0	0	0	0	7

S.No.	Patch No. (as per PARIVESH)	Name of PF/RF	Range	Compartment No.	Given Area (ha.)	Calculated Area (ha.)	VDF	MDF	OF	Scrub	Non- Forest
				Near village							
1	1	Aran	Darang	Aran	4.53	4.55	0	0	0	0	5
2						2.59	0	0	1	0	2
3	2	Arnehad	Kataula	H43F1	21.84	8.45	0	0	3	0	6
4	_	7111101100	Ratadia	111311	21.01	4.47	0	0	4	0	1
5						6.40	0	1	4	0	2
6						11.16	0	0	0	0	11
7	3	Bodandhar	Kataula	H43F1	106.63	38.63	2	8	8	0	21
8		Doddilalial	Ratadia	114311	100.03	53.72	1	5	9	0	39
9						3.24	0	2	1	0	1
10						10.60	0	0	0	0	11
11						17.47	0	0	3	1	13
12	4	Badaun	Kataula	H43F1	78.64	9.71	0	0	0	1	9
13						16.67	0	0	0	5	12
14						24.19	0	2	0	0	22
15			Panarsa	H43F2	25.56	11.49	0	0	0	0	11
16	5	Banaul				3.00	0	0	0	0	3
17	, ,	Dallaul	Fallalsa	11431 2	23.30	4.85	0	0	1	0	4
18	5 6					6.23	0	0	3	0	3
19	6	Basa	Darang	H43E13	5.58	5.58	0	4	0	0	1
20						3.26	0	1	0	0	3
21						4.62	0	0	0	0	5
22						8.01	0	0	0	0	8
23	19	Tihri	Kataula	H43F1	47.08	3.96	0	0	1	0	3
24						3.48	0	0	0	0	3
25						10.52	0	0	3	0	7
26						13.51	0	0	4	0	9
27	20	11-6	L.: D	1142545	40	9.71	0	0	0	0	10
28	20	Hafwana	Jai-Devi	H43E15	18	9.47	0	0	1	0	8
29						4.37	0	0	0	0	4
30						3.40	0	0	0	0	3
31	13	Nagdhar	Panarsa	H43F2	22.09	5.74	0	3	0	0	3
32]	="				4.13	0	0	0	0	4
33	1					4.45	0	0	0	0	4
				H43F1 &							
34	14	Nandal	Kataula	H43E13	5.18	5.18	0	0	0	0	5

35	15	Segli	Kataula	H43F1	4.29	4.28	0	0	0	0	4
36	16	Suhada	Kataula	H43F1	47.24	38.83	15	18	2	0	4
37	10	Sullaua	Kataula	П4ЭГІ	47.24	8.42	1	1	5	0	2
38						7.69	0	0	0	0	8
39	17	Suma	Panarsa	H43F2	37.63	3.32	0	0	0	0	3
40	17 Suma 18 Thatta 7 Brogla 8 Halgarh 9 Jhai 10 Katindhi					26.62	0	0	0	0	26
41	18	Thatta	Panarsa	H43F2	2.67	2.67	0	0	1	0	1
42	7	Brogla	Darang	H43E13	3.4	3.40	0	0	0	0	3
43	Ω	Halgarh	Kataula	H43F1	7.94	3.81	0	0	0	0	4
44	. 8	Паіваі ІІ	Nataula	П43Г1	7.54	4.13	0	1	0	0	3
45	9	Jhai	Sadar(Mandi)	H43E14	3.56	3.56	0	0	1	0	2
46	10	Katindhi	Sadar(Mandi)	H43E13	3.88	3.89	0	0	0	0	4
47						4.85	0	0	0	0	5
48	11	Kundakh	Kataula	114254	14.48	3.64	0	0	0	0	4
49	11	Kulluakii	Kataula	H43F1		3.48	0	0	0	0	3
50						2.51	0	0	0	0	3
51	12	Massad	Danarca	114252	13.27	6.72	0	0	2	0	4
52	12	Masad	Panarsa	H43F2	13.27	6.56	0	0	0	0	7
		To	otal		473.49	475.14	19	46	57	7	346

7. Out of total forest area proposed for CA, 24 ha of land is classified as very dense forest, 58 ha as moderately dense forest, 73 ha as open forest, 13 ha of land as scrub and remaining 614.22 ha of land as Non-Forest (land without tree cover) in terms of forest classes (as per the ISFR 2019).

Submitted for your kind consideration.

Shivani Sood STA, DSS Cell