



**Himachal Pradesh Power Corporation Limited**  
(A State Government Undertaking)  
**Office of the General Manager**  
Shongtong-Karchham Hydro Electric Project  
Reckong-Peo, Dist. Kinnaur (H.P.)-172107, Phone:- 01786-223310



No. HPPCL/GM/Env./ AFL/2023-24- **3328-30**

Dated:- **12-07-23**

To

✓  
The Deputy Conservator of Forest,  
Kinnaur Forest Division,  
at Reckong Peo, distt. Kinnaur.

**Subject: -**      Diversion of 7.3722 hectare of forest land as Additional Forest Land requirement in already approved Diversion in favour of Shongtong Karchham Hydroelectric Project, Himachal Pradesh Power Corporation under the jurisdiction of Kinnaur Forest Division, Distt. Kinnaur, Himachal Pradesh (Online Proposal No FP/HP/HYD/40611/2019) - Regarding.

Sir,

On the subject cited proposal EDS raised by the Assistant Inspector General of Forests, MoEF & CC, New Delhi vide letter dated 5<sup>th</sup> July 2023. The EDS has been attended and para wise reply of the same is as under:-

S.N	Observations	Reply of the observations
1.	From the monitoring report done by Sub-office (SO), Shimla, it is noticed that out of 08 sites for 128 ha, no plantation work has been started in 4 sites i.e., C-169, C-170, C-172, C-241, and nil survival percentage was recorded in C-176. In addition, the CA site provided by State Govt. is not matching with Plantation General of the particular CA sites. This needs clarification with justification and detail report.	HPCL has deposited the entire CA amount amounting to Rs. 1,74,65,952/- to HP Forest Deptt.  Afforestation work shall be done by the Forest Deptt.



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2.	<p>With regard to Catchment Area Treatment (CAT) Plan, the Nodal Officer (FCA) informed that the utilization/ implementation of CAT plan is Rs. 41,06,94,500 against deposited fund of Rs. 60,40,00,000 for the CAT plan of Shongtong Karchham HEP whereas SO Shimla mentioned in their monitoring report that against the outlay of Rs. 701.95 million for Catchment Area Treatment (CAT) Plan, Rs. 604.4 million has only been deposited in CAMPA account with utilization of Rs. 50.07 lakhs. Therefore, the reason for non-depositing of balance approved amount of CAT plan along-with poor implementation of CAT plan shall be required.</p>	<p>The total outlay against CAT plan as approved by HP Forest Deptt in respect of Shongtong Karchham HEP was Rs. 60,40,00,000/- which was already deposited HPPCL.</p> <p>As far as deposition of funds in CAMPA account as per the revised cost of project is concerned , HPPCL has deposited the remaining amount of Rs.97.55 million .</p> <p>The implementation part is being followed with the Forest Department .</p> <p>The payment details are attached as <b>Annexure-I</b>.</p>
3.	<p>There is a mismatch in dumping sites (DS). As per the component wise break-up provided by User Agency, there are 5 dumping sites whereas 8 number of dumping sites found during site inspection by Sub-office of this Ministry, Shimla. Moreover the muck is not being carried out in the designated site of DS-4. Some quantity of muck has been dumped opposite to DS-4 on the other side of the highway of the bank of river.</p>	<p>Regarding dumping sites, it is submitted that there are 6 dumping sites in Forest Land Diversion proposal of 63.5015 ha. These sites are dumping sites no. 1,2,3,4,5 and 6. Out of above, 5 sites i.e. 2,3,4,5&amp; 6 have been used for dumping of muck. Dumping site 1 could not be used by HPPCL because with time the area got vanished due to change of course by the Satluj river.</p> <p>Area and location wise detail along with actual status of all these sites is attached as <b>Annexure-II</b>.</p> <p>In EMP for Shongtong-Karchham HEP total 8 no. dumping sites have been shown. In this proposal dumping site no. 6 of original FCA proposal has been designated as dumping site no. 8. Additionally 2 job facility areas were proposed as dumping sites with the intention that some dumping may be required for creation of working spaces although no such dumping were carried out in these job facility areas. Area and location wise detail along with actual status of all these sites is attached as <b>Annexure-III</b>.</p> <p>So in total HPPCL has used only 5 dumping</p>



		<p><b>sites i.e. 2,3,4,5 &amp; 6.</b></p> <p>Regarding dumping site no. 4, it is submitted that muck has been dumped in the designated dumping site. HPPCL has not done any dumping opposite to DS-4.</p> <p>As it is evident from the status of dumping sites (<b>Annexure-II</b>) due to landslides in and around the dumping sites and change of river course the capacity of designated sites reduced drastically. To make up for above deficit HPPCL has dumped muck on private land on specific request of the local people.</p> <p>In addition to above, forest land measuring 5.2248 ha at four locations has been requested for diversion in instant proposal for dumping of muck.</p>
4.	<p>It is mentioned in the monitoring report of SO Shimla that the muck disposable capacity of the sites have reduced drastically due to change in course of river landslides nearby designated muck dumping of the project. It was further submitted by the proponent that a committee has been formed to assess the capacity of all the designated dumping sites 8-78/2010-FC I/47836/2023 and the revised muck management plan will be finalized after finalization of land and the same shall be submitted for approval to MoEF&amp;CC. The revised approved muck management plan need to be submitted before consideration of the instant proposal.</p>	<p>Status regarding reduction in the muck dumping capacity and measures to mitigate the same has been clarified above at point No.3. A revised Muck Management Plan reflecting above position has been prepared and draft copy submitted to regional office HP State Pollution Control Board Rampur copy of the same is attached as <b>Annexure-IV</b>.</p> <p>Final copy shall soon be submitted after approval of the HP State Pollution Control Board. The approved copy shall be submitted to the MoEF&amp;CC, New Delhi before Stage-II approval.</p> <p>Undertaking to this affect is attached at <b>Annexure-V</b>.</p>
5.	<p>The condition no. 8 of forest clearance approval dated 14.11.2012 which states that <i>"the entire reservoir created due to submergence shall be declared Reserve Forest under Indian Forest Act. 1927 within six months"</i> has not yet been complied.</p>	<p>The process of declaration of Reservoir area as Reserve Forest under Indian Forest Act 1927 has already been initiated and a formal request has been submitted to Deputy Commissioner Kinnaur. The process shall be concluded well before creation of actual reservoir.</p> <p>Letter to this affect is attached as <b>Annexure-VI</b>.</p>





6.	The condition no. 10 of forest clearance approval dated 14.11.2012 regarding green belt plantation has not yet been complied	The green belt development is to be carried around the reservoir, it will be created after construction of the barrage whose work has been started recently and is expected to be completed by March 2027. Once the reservoir is constructed and settles, green belt plantation shall be done by the HPPCL in consultation with H.P Forest Deptt. Undertaking to this affect is attached as <b>Annexure-VII.</b>
7.	The river basin study on the impact of HEP's on the flora & fauna area in compliance to condition no. 11 of forest clearance approval dated 14.11.2012 has not yet been complied.	The work of cumulative impact assessment (CEIA) was initially taken up by GoHP and studies of all the five river basins was awarded to different consultants. Later on these studies were taken over by GoI. The CEIA study of Satluj basin is being carried out by MoEF&CC GoI through ICFRE Dehradun. GoHP is extending all necessary help towards finalization of the study.
8.	The user agency has now been provided the KML file of diverted forest area in polygon format. However, the total area of given KML is found 68.979 ha instead of 63.5015 ha. Moreover, in the said KML file, the dumping site namely 'Dumping Site-3' has been included which is a part of present diversion proposal. Therefore, it needs clarification whether the dumping site No. 3 was the part of earlier approved proposal and if so, why it is again being proposed for diversion. The correct KML file of 63.5015 ha may also be provided.	Area of old diversion is 63.5015 ha and KML file of the diverted areas has been uploaded accordingly. The compact disc of old diversion is also attached. Dumping site no. 3 was certainly the part of old proposal. One of the proposed new dumping sites is adjacent to the dumping site no. 3 and it has now been corrected as Dumping Site "C" on the online portal. Due to same numbering this confusion was created. As a matter of fact it is otherwise a new dumping site. The new dumping sites have been named as DS- A, DS-B, DS-C and DS-D.
9.	In the present proposal the KML file of Dumping site No. 3 has been uploaded comprising 3.115 ha forest land whereas in the component-wise break-up it is mentioned 1.447 ha . Therefore, the correct KML file based on the component wise breakup as shown in Part-I needs to be uploaded on PARIVESH	KML file of Dumping Site "C" (wrongly written earlier as no. 3) having area 1.447 ha has been uploaded. The compact disc of the same is attached.





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10.	KML file of 8 dumping sites along with the status of land as per the latest monitoring report furnished by the SO, Shimla against Stage-II approval granted for 63.5015 ha forest land may also be furnished.	KML files of 6 dumping sites of old diversion and 2 job facility areas (mentioned as dumping sites 6&7 in the EMP) have been uploaded on the portal. The compact disc of KML file is also attached. The status of land of 6 dumping sites as per latest monitoring report is in <b>Annexure II</b> .
11.	With regard to condition no. 15 regarding regeneration of equivalent area of degraded forest land, SO Shimla in the report has mentioned that the staff of Forest department was not present during the site inspection, which has been intimated by SO, Shimla to the State Govt. vide letter dated 09.05.2023. Due to this, the site regenerated could not be visited. The State shall submit a detailed report in this regard.	Pertains to Forest Deptt.

This is for your kind information and further recommendation of the case to higher authority please.

DA: As above.

Yours faithfully


**Dy. General Manager (E&RR),  
Shongtong Karchham HEP,  
HPPCL, Reckong- Peo (HP)**

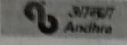

**Copy forwarded to:**

1. The Director (Civil), HPPCL, Himfed Building, BCS, New-Shimla, (H.P.)- 09, for kind information please.
2. The Director (Personnel), HPPCL, Himfed Building, BCS, New- Shimla, (H.P.) - 09, for kind information please.



AGENCY COPY

**यूनियन बैंक**  **Union Bank**  
of India

NEFT / RTGS CHALLAN for CAMPA Funds

Date : 12-07-2023

Agency Name.	SHONGTONG KARCHHAM HYDRO ELECTRIC PROJECT, HPPCL
Application No.	5685100616
MoEF/SG File No.	NA
Location.	HIMACHAL PRADESH
Address.	Shongtong Karchham HEP, HPPCL, Reckong peo, Distt. Kinnaur Kinnaur
Amount(in Rs)	97557500/-


Amount in Words :Nine Crore Seventy-Five Lakh Fifty-Seven Thousand Five Hundred Rupees Only

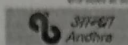
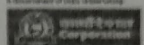
**NEFT/RTGS to be made as per following details;**

Beneficiary Name:	HIMACHAL PRADESH CAMPA
IFSC Code:	UBIN0996335
Pay to Account No.	150705685100616 Valid only for this challan amount.
Bank Name & Address:	Union Bank Of India FCS Centre, 21/1, III Floor, Jelitta Towers, Mission Road, Bengaluru-560027

\* This Challan is strictly to be used for making payment to CAMPA by NEFT/RTGS only

BANK COPY

**यूनियन बैंक**  **Union Bank**  
of India

NEFT / RTGS CHALLAN for CAMPA Funds

Date : 12-07-2023

Agency Name.	SHONGTONG KARCHHAM HYDRO ELECTRIC PROJECT, HPPCL
Application No.	5685100616
MoEF/SG File No.	NA
Location.	HIMACHAL PRADESH
Address:	Shongtong Karchham HEP, HPPCL, Reckong peo, Distt. Kinnaur Kinnaur
Amount(in Rs)	97557500/-

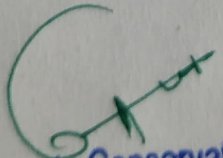
Amount in Words :Nine Crore Seventy-Five Lakh Fifty-Seven Thousand Five Hundred Rupees Only

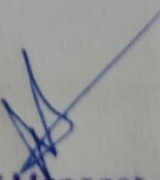
**NEFT/RTGS to be made as per following details;**

Beneficiary Name:	HIMACHAL PRADESH CAMPA
IFSC Code:	UBIN0996335
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Bank Name & Address:	Union Bank Of India FCS Centre, 21/1, III Floor, Jelitta Towers, Mission Road, Bengaluru-560027

\* This Challan is strictly to be used for making payment to CAMPA by NEFT/RTGS only

Note: After making the required payment through challan, if the payment status has not been updated even after 7 working days, then kindly mail a copy of your challan with transaction date and reference id to Email: fcsblr@unionbankofindia.bank, epurse@unionbankofindia.bank, ubin0903710@unionbankofindia.bank

  
Deputy Conservator of Forests,  
Kinnaur Forest Division at R/Peo H.P

  
General Manager,  
Shongtong-Karchham HEP,  
HPPCL, Reckong Peo  
Distt. Kinnaur (HP) 172107





Himachal Pradesh Power Corporation Limited  
(A State Government Undertaking)  
Himfed Bhawan, BCS Shimla-171009  
Phone: 0177-2670716

No. HPPCL/F&A/Banks/2023

7081.

Dated: 12/7/2028.

To

The Branch Manager,  
H. P. State Cooperative Bank Ltd.,  
The Mall, Shimla.

Ref: Loan Withdrawal Application

Sir,

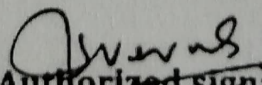
In context to the CCL sanctioned by H.P. State Cooperative Bank Ltd. in favour of HPPCL, it is requested to disburse the funds for Rs. 9,75,57,500/- (Rs. Nine Crore Seventy Five Lakh Fifty Seven Thousand Five Hundred only) through RTGS in Himachal Pradesh CAMPA Account (Challan enclosed as Annexure-"A"). The detail of bank account in which funds are to be transferred is given hereunder:-

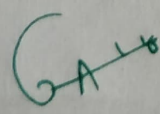
Beneficiary Name	Himachal Pradesh CAMPA
Name of the Bank	Union Bank of India
Bank Branch	FCS Centre, 21/1, III Floor, Jelitta Towers, Mission Road, Mission Road, Bengaluru-560027
IFS Code	UBIN0996335
Bank account No.	150705685100616
Amount:	Rs. 9,75,57,500/- (Rs. Nine Crore Seventy Five Lakh Fifty Seven Thousand Five Hundred only)

Thanking you.

Yours faithfully,

For H.P. Power Corporation Ltd.

  
Authorized Signatory

  
Deputy Conservator of Forests,  
Kinnaur Forest Division at R/Peo H.P.

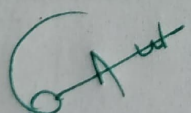
Dy. General Manager  
Shangtong-Karohham HEP,  
HPPCL, Reckong Peo,  
Distt. Kinnaur (H. P.) 172107

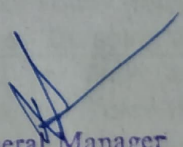


Annexure-II

**Status of 6 no. dumping sites as per original FCA proposal (63.5015 ha of Forest Land approved on 14.11.2012)**

SN	Dumping Sites	Gross Estimated Capacity of Dumping Sites (CUM)	Cumulative Quantities (Cum) at the end of the May 2023		Remarks
			Dumped	Balanced quantity to be dumped	
1	DS-1	3,49,000	Nil	Nil	DS-1 could not be utilized by HPPCL, as the area got vanished due to change of River course by Satluj.
2	DS-2	7,61,645	2,66,738	Nil	Completed. No capacity is left in the site for more dumping.
3	DS-3	2,37,300	203195	34,105	Some capacity is left.
4	DS-4	4,17,900	48401	Nil	Completed. No Capacity is left in the site for dumping
5	DS-5	1,11,750	44758	Nil	Completed. No Capacity is left for Dumping
6	DS-6	1,87,300	1,98,682	Nil	In EMP it is marked as DS-8. The site has been filled to its full capacity.

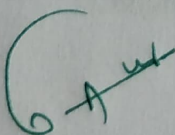
  
Deputy Conservator of Forests,  
Kinnaur Forest Division at R/Peo H.P

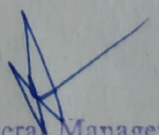
  
Dy. General Manager  
Shongtong-Karchham HEP,  
HPPCL, Reckong Peo,  
Distt. Kinnaur (H. P.) 172107



**Status of 8 no. dumping sites as per approved EMP of STKHEP**

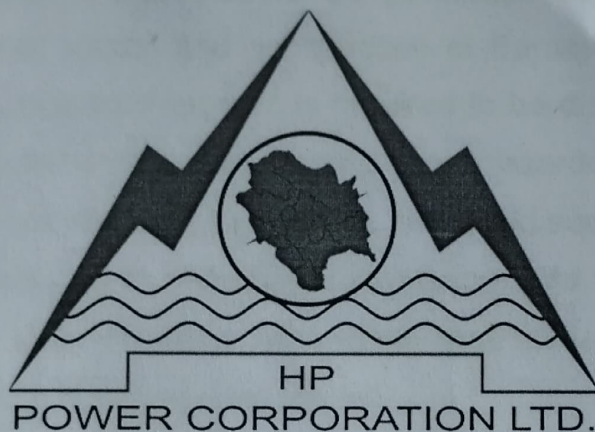
SN	Dumping Sites	Gross Estimated Capacity of Dumping Sites as per EMP (CUM)	Cumulative Quantities (Cum) at the end of the May 2023		Remarks
			Dumped	Balanced quantity to be dumped	
1	DS-1	3,49,000	Nil	Nil	DS-1 could not be utilized by HPPCL, as the area got vanished due to change of River course by Satluj.
2	DS-2	7,61,645	2,66,738	Nil	Completed. No capacity is left in the site for more dumping.
3	DS-3	2,37,300	203195	34,105	Some Capacity is left.
4	DS-4	4,17,900	48401	Nil	Completed. No capacity is left in the site for more dumping.
5	DS-5	1,11,750	44758	Nil	Completed. No capacity is left in the site for more dumping.
6	DS -6	25750	Nil	Nil	Marked in EMP as DS- 6 whereas, in FC case the area is diverted as job facility. Presently being used as a job facility for Power House and not utilized as Dumping site.
7	DS -7	1,11,600	Nil	Nil	Marked in EMP as DS- 7 whereas, in FC case the area is diverted as job facility. Not utilized as a dumping site.
8	DS-8	1,87,300	1,98,682	Nil	In the Forest Diversion case it is Shown as DS-6. The dumping site has been filled to its full capacity.

  
 Deputy Conservator of Forests,  
 Kinnaur Forest Division at R/Peo H.P

  
 Dy. General Manager  
 Shimla-Karchham HEP,  
 HPPCL, Reckong Poo,  
 Distt. Kinnaur (H. P.) 172107



# HIMACHAL PRADESH POWER CORPORATION LIMITED



## **Draft Muck Management Plan** For **Shongtong Karchham HEP (450 MW)** Prepared by WAPCOS Ltd.

**Reckongpeo Distt, Kinnaur**



## MUCK MANAGEMENT PLAN

### 1. INTRODUCTION

A large quantity of muck is expected to be generated as a result of tunneling operations, construction of roads, and construction of Barrage etc. Muck generated from excavation of any project component is required to be disposed off in a planned manner so that it takes least possible space and is not hazardous to the surroundings and environment. The muck disposal sites cause increased sedimentation in the rivers (though insignificant compared to natural sedimentation) and totally spoils the visual aesthetics of the area. It is of prime importance that these sites will have to be rehabilitated as soon as the disposal sites are full.

### 2. MUCK GENERATION

A large quantity of muck is expected to be generated as a result of tunneling operations, construction of roads, and construction of Barrage etc. The total quantity of muck to be generated is about 2.364 Mm<sup>3</sup>. This includes 0.234 Mm<sup>3</sup> of open excavation and 2.13 Mm<sup>3</sup> of underground excavation. The component wise details of muck to be generated are given in Table-1. The break-up of muck generation by open and underground excavation is given in Table-2. Details of component wise muck already generated and balance to be generated is given in Table-3. The excess muck has to be dumped at nine (9) number sites.

**Table-1: Component wise detail of muck to be generated**

S. No.	Component description	Quantity (Cum)
<b>A</b>	<b>Barrage Complex</b>	
	Diversion Tunnel	68,804
	Adits	61826
	Descending Chamber	405248
	Main Feeder Tunnel & Branch Feeder Tunnels	31072
	Silt Flushing Tunnel and intake tunnels	143183
	Barrage including stilling Basin & Intake structure	187844
	<b>Sub Total</b>	<b>897977</b>
<b>B</b>	<b>HRT &amp; Adits</b>	
	Adits	130169
	HRT	840934
	<b>Sub Total</b>	<b>971103</b>
<b>C</b>	<b>PHC</b>	
	MAT adit-4 to power house bottom VT & Adit to TH	47529



S. No.	Component description	Quantity (Cum)
	crown	
	Power House cavern and bus Ducts	136749
	TH Cavern & cable tunnel	53590
	Surge Gallery , Surge Chamber , Draft Tube, Adit to DT Gate chamber & Gate Grooves / Shaft	42295
	TRT and Appurtenant works	38540
	<b>Sub Total</b>	<b>318703</b>
<b>D</b>	<b>Surge Shaft, BVC&amp; Pressure Shaft</b>	
	<b>Adits and Surge shaft</b>	<b>117428</b>
	BVC	19819
	Pressure shaft s	27861
	Road to surge Shaft	10195
	<b>Sub Total</b>	<b>175304</b>
	<b>Grand total (A+B+C+D)</b>	<b>23,633,087.0</b>

**Table-2: Bifurcation of Component wise muck to be Generated from Open and Underground excavation**

S. No.	Name Of Component	Quantity of muck Excavated (m <sup>3</sup> )		
		Open Excavation	Underground Excavation	Total
1	River Diversion works	-	68804	68804
2	Diversion Barrage	187844	467074	654918
3	Intake Sedimentation Chamber and flushing tunnels (Silt Flushing Tunnel and intake tunnels, Main Feeder Tunnel & Branch Feeder Tunnels)	-	174255	174255
4	HTR and Construction	10,810	960293	971103.
5	Surge Shaft		117428	127623
6	Pressure shaft and valve chamber	-	47680	47680
7	Power House Complex	21,000	259163	280163
8	TRT Outfall	4700	33840	38540
	<b>Roads</b>	10195	-	10195
	<b>Total</b>	<b>2,34,549</b>	<b>21,28,537</b>	<b>23,63,086</b>

**Table-3: Details of component wise muck generated till date and balance to be generated**

S. No	Component Description	Quantity of Muck (CUM)		
		Total	Generated	Balance
1	Barrage complex	8,97,977	5,42,020	3,55,957.00
2	Head Race Tunnel	9,71,103	6,98,141	2,72,962.00
3	Power House complex	3,15,613	2,71,067	44,546.00
4	Surge Shaft	1,75,304	88,045	87,259.00
	<b>Total</b>	<b>23,59,997</b>	<b>15,99,273</b>	<b>7,60,724.00</b>

**3. MUCK DISPOSAL**

Considering a swelling factor of 40%, the quantity of muck to be generated is 2.3 Mm<sup>3</sup>. About 0.141 Mm<sup>3</sup> of muck shall be used as backfill, while 0.117 Mm<sup>3</sup> of muck shall be used as a construction material/protection works. The balance, i.e. (2.3- 0.141 -0.117) 2.042 Mm<sup>3</sup> of muck shall be disposed at designated sites. The details of muck disposal sites and component wise muck disposal is given in Table-4. The muck disposal sites are shown in Figure-1.

**Table-4: Component-wise details of Muck utilized**

S. No.	Description of items	Backfill & wire crates	Construction material (Aggregate & sand)
1	Barrage Area Filling & Wire crates	103120.00	60000.00
2	HRT (shotcrete)		10422.00
3	Power House Complex		2864.00
4	Surge Shaft, BVC etc.		19728.00
5	Aggregate and sand under R & R scheme		10000.00
6	Protection works in Dumping area	38060.0	14853.00
	<b>Total</b>	<b>1,41,180.00</b>	<b>1,17,867</b>



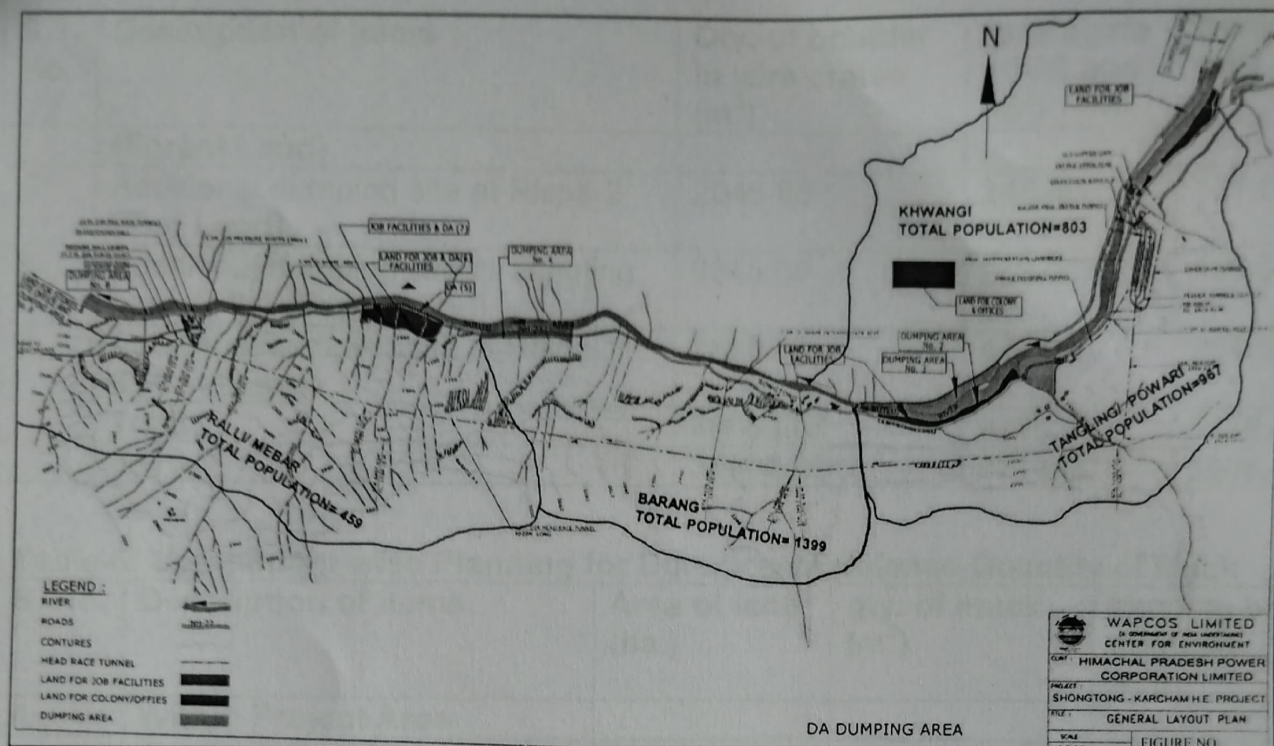


Figure-1 Location of Muck Dumping Sites

Normally, muck is disposed in low-lying areas or depressions. Trees, if any, are cut before muck disposal, however, shrubs, grass or other types of undergrowth in the muck disposal at sites perish. The total area earmarked for muck disposal is 10.0944 ha.

The detail of muck dumping sites along with much utilization are given in Table-5. The component wise planning for disposal of balance quantity of muck is given in Table-6.

Table-5: Details of Muck Dumping sites along with utilization of muck

S. No.	Description of items	Qty. of boulder in wire crates (m <sup>3</sup> )	Aggregate 10-20 mm (m <sup>3</sup> )	Sand (m <sup>3</sup> )
1	Dumping site No. 3	6078.13	2214.71	1183.83
2	Dumping site No. 4	10226.58	4777.34	2522.87
3	Additional dumping site adjoining to dumping site No- 3 ( <b>Forest land</b> )	5664.06	643.00	341.00
4	Additional dumping site near Adit No. 2 ( <b>Forest land</b> )	2683.59	250.00	132.00
5	Additional dumping site at Thopan( <b>Pvt. Land</b> )	2250.00	582.00	307.00
6	Additional dumping site at Rispa-2	3867.19	332.78	172.13



S. No.	Description of items	Qty. of boulder in wire crates (m <sup>3</sup> )	Aggregate 10-20 mm (m <sup>3</sup> )	Sand (m <sup>3</sup> )
	<b>(Forest Land)</b>			
7	Additional dumping site at Rispa-2 (Pvt. Land)	2046.88	245.60	127.04
8	Additional dumping site at Tangling near Adit-1 (Forest Land)	2345.00	256.00	135.00
9	Additional dumping site at Rispa-1 (Private Land).	2898.44	414.99	214.65
	<b>Total</b>	<b>38059.87</b>	<b>9716.42</b>	<b>5135.52</b>
	<b>Say</b>	<b>38060.00</b>	<b>9716.00</b>	<b>5508.00</b>

Table-6: Component-wise Planning for Dumping of Balance Quantity of Muck

S. No.	Description of items	Area of land (ha.)	qty. of muck (m <sup>3</sup> )	Muck to be dumped from
<b>A</b>	<b>Within Project Area</b>			
1	Dumping site No. 3	0-89-28	183063.00	Barrage Head Race Tunnel Power House Complex & Surge Shaft
2	Army reclamation site No. 4	2-45-84	20,4545	...do....
3	Dumping site adjoining to dumping site No- 3 (Forest land)	1-44-70	83,423	...do....
4	Dumping site near adit No. 2 (Forest land)	0-29-60	45,271	...do....
5	Dumping site at Tangling near Adit-1 (Forest Land)	03-39-18	18,500	Barrage Head Race Tunnel (Adit-1)
6	Pvt. Land near DS -3.	1-10-97	1,00,236.71	-do-
	<b>Sub Total</b>	<b>09-59-57</b>	<b>6,35,038.71</b>	
<b>B</b>	<b>Out of Project Area</b>			
1	Dumping site at Thopan (Pvt. Land) -9 Km	0-54-62	(72074-27396) = 44,678	...do....
2	Additional Dumping site at Rispa-1 (Pvt. Land) - 19 Km.	7-32-12	(443137-36409.96) = 1,06,727.04	Barrage Head Race Tunnel
3 (i)	Dumping site at Rispa-2 (Pvt. Land) - 19 Km.	0-25-60	1,21,660	...do....
(ii)	Dumping site at Rispa-2 (Forest Land) - 19 Km.	5- 22-25	2,04,482	...do....



S. No.	Description of items	Area of land (ha.)	qty. of muck (m <sup>3</sup> )	Muck to be dumped from
	<b>Sub Total</b>	<b>13-34-59</b>	<b>4,77,547</b>	
	<b>Grand Total A + B</b>	<b>21-83-19</b>	<b>11,12,585</b>	

Muck generated from excavation of any project component is required to be disposed in a planned manner so that it takes a least possible space and is not hazardous to the environment. In the hilly area, dumping is done after creating terraces thus usable terraces are developed. The overall idea is to enhance/maintain aesthetic view in the surrounding area of the project in post-construction period and avoid contamination of any land or water resource due to muck disposal. It is always preferable to dump the mucks within the project area. The Dumping site near DS-3 is not usable as the Forest Clearance is yet to be received. The additional mucks to be generated are proposed to be transported outside of project area and dumped identified dumping sites. The contractor shall charge for carrying of muck @Rs.99/m<sup>3</sup>/km. The details of muck handling charges are given in Table-7 below:

**Table-7: Details of Muck Handling charges**

S. No.	Name of the disposal site	Quantity (m <sup>3</sup> )	Amount (Rs. lakh)
1	Dumping site at Thopan (Pvt. Land) -9 Km	44,678	398.0
2	Additional Dumping site at Rispa-1 (Pvt. Land) - 19 Km.	1,06,727	2007.5
3 (i)	Dumping site at Rispa-2 (Pvt. Land) - 19 Km.	1,21,660	2288.4
(ii)	Dumping site at Rispa-2 (Forest Land) - 19 Km.	2,04,482	3846.3
	<b>Total</b>		<b>8540.3</b>

There are two muck dumping sites no.1 and 6, which are un-utilized as on date.

#### 4. MUCK MANAGEMENT PLAN

Suitable retaining walls shall be constructed to develop terraces so as to support the muck on vertical slope and for optimum space utilization. Loose muck would be compacted layer wise. The muck disposal area will be developed in a series of terraces of boulder crate wall and masonry wall to protect the area/muck from flood water during

monsoons. In-between the terraces, catch water drain will be provided.

The terraces of the muck disposal area will be ultimately covered with fertile soil and suitable plants will be planted adopting suitable bio-technological measures. The basic aim and objectives of the muck management plan are to:

- Protect these areas from soil erosion
- Develop these areas by afforestation
- Develop them into parks, gardens etc.
- Utilize the maximum quantity of muck for development of infrastructure of the project
- Develop these areas in harmony with the landscape of the project area.

Various activities proposed as a part of the management plan are given as below:

- Land acquisition for muck dumping sites
- Civil works (construction of retaining walls, boulder crate walls etc.)
- Dumping of muck
- Levelling of the area, terracing and implementation of various engineering control measures e.g., boulder, crate wall, masonry wall, catch water drain.
- Spreading of soil
- Application of fertilizers to facilitate vegetation growth over disposal sites.

For stabilization of muck dumping areas following measures of engineering and biological measures have been proposed

#### **Engineering Measures**

- Wire crate wall
- Boulder crate wall
- R.C.C
- Catch water Drain

#### **Biological Measures**

- Plantation of suitable tree species and soil binding species
- Plantation of ornamental plants
- Barbed wire fencing

Muck generally lacks nutrients and therefore, are difficult to re-vegetate. However, if no attempts to vegetate the slopes are made, the muck could slide lower down during rain and may eventually wash off the check dams also. Since, top soils are not available in



large quantities in Himalayas, it may not be possible to apply a thin layer of soil over the muck. Bio-fertilizer technique developed by National Environmental Engineering Research Institute (NEERI) can be adopted in the proposed project. NHPC has successfully used this technique in Uri hydroelectric project. Similar approach can be utilized in the proposed project as well. In this process, the unused excavated material is piled and stacked with proper slopes at the designated muck disposal sites. The slopes are broken up by creating benches across them. This is done to provide stability to the slopes and also to provide ample space for planting of trees that would further help in holding and consolidating biotechnological approach. The traditional methods of afforestation of these areas would be supplemented with the use of fungus, i.e. Vesicular Arbuscular Mycorrhizae (VAM) and nitrogen fixing bacteria that form partnership with plant roots. These grow on plant roots and provide water and nutrition especially phosphorus to plants at faster rate. The seeding of plants would be inoculated with VAM and nitrogen fixing bacteria before planting. It has been found that plants inoculated with bio-fertilizers grow at faster rate especially in the medium where the soil/rock is devoid of nutrients.

The afforestation with suitable plant species shall be done. About 1000-1200 trees/ha shall be planted. Major species recommended for plantation are listed in Table-8.

**Table-8: Species recommended for plantation over muck disposal site**

Botanical Name	Local Name
<b>Trees</b>	
<i>Populus ciliate</i>	Popular
<i>Pinus roxburghii</i>	Chir
<i>Cedrus deodara</i>	Deodar
<i>Salix acutifolia</i>	Bhains
<b>Shrubs</b>	
<i>Artemisia nilgarica</i>	Kunja
<i>Berberis aristata</i>	Kingor
<i>Berberis lyceum</i>	Kingor
<i>Rosa Moschata</i>	Ban gulab

## 5. BUDGET

The total expenditure required for stabilization of muck disposal sites for 402 MW has been estimated to be in the order of Rs. 1650.3 lakh, say Rs. 16.50 crore whereas the



total expenditure required for 450 MW has been estimated to the tune of Rs.94.92 crore including haulage for transportation of muck for the balance works. The details for the revised Muck Management Plan for 450 MW are given in Table-9.

**Table-9: Break-up of cost for Muck Management Plan**

S. No.	Items	Cost (Rs. lakh)
1.	Construction of check dams along river banks @ Rs. 250 lakh/ km for a stretch of 3.0 km.	750
2.	PCC cladding @ Rs. 1689/m <sup>2</sup> for 16,000 m <sup>2</sup>	32.0
3.	Preparation of muck disposal site @ Rs.5 lakh/ha for 10.09 ha	50.5
4.	Provision of 15 cm soil layer over an area 10.09 ha @ Rs. 4 lakh/ha	41.0
5.	Development of vegetation (10 ha) @5 lakh/ha	50.0
6.	Barbed wire fencing @30000/ha (10ha)	3.0
7.	Watch and ward 5 no. @ Rs. 7000 p.m.	21.0
8.	Maintenance of vegetation (Table-10 to 17)	3.93
9.	Muck transportation charges for dumping muck outside the project area	8540.3
	<b>Total</b>	<b>9491.73</b>

**Table-10: Cost of Afforestation over muck disposal sites**

S.No.	Particular	Area (ha)	Unit Rate (Rs/ha)	Amount (Rs.)
1.	1 <sup>st</sup> year Maintenance (Refer Table-11)	10.0	7010	70100
2.	2 <sup>nd</sup> year Maintenance (Refer Table-12)	10.0	6035	60350
3.	3 <sup>rd</sup> year Maintenance (Refer Table-13)	10.0	5020	50200
5.	4 <sup>th</sup> year Maintenance (Refer Table-14)	10.0	5020	50200
6.	5 <sup>th</sup> year Maintenance (Refer Table-15)	10.0	3265	32650
7.	6 <sup>th</sup> year Maintenance (Refer Table-16)	10.0	2725	27250
8.	7 <sup>th</sup> year Maintenance (Refer Table-17)	10.0	2725	27250
			<b>Total</b>	<b>318000</b>
9.	Contingencies (5% of Total Cost)			15900
	<b>Total</b>			<b>333900</b>
10.	Departmental Charges @ 17.5%			58432
	<b>Grand Total</b>			<b>392332</b>



**Table-11: Maintenance cost for 1<sup>st</sup> year (25% mortality)**

S. No.	Activity	Quantity	Unit Rate (Rs.)	Unit	Total Cost (Rs.)
1.	Re-digging of pits 45x45x45 cms	110	267.336	per hundred	294.07
2.	Re-digging of pits 30x30x30 cms	165	133.632	per hundred	147.00
3.	Filling of pits 45x45x45 cms	110	153.168	per hundred	168.48
4.	Filling of pits 30x30x30 cms	165	106.872	per hundred	117.56
5.	Planting of polythene bags plants	175	122.22	per hundred	134.44
6.	Planting of Naked root plants	100	103.044	per hundred	113.35
7.	Carriage of polythene bags plants over a distance of 2 km up hills	175	122.136	per hundred	134.35
8.	Carriage of Naked root plants over a distance of 2 km	100	19.74	per hundred	21.71
9.	Nursery cost of plants	275	5.16	per plants	1419.00
10.	Repair of fence	180	0.9	per Rmt	162.00
11.	Repair of inspection path			L/S	387.60
12.	Repair of soil and moisture conservation works			L/S	546.00
<b>Total:</b>					<b>3645.56</b>
Added 42.85% on account of increase on wage rate					1560.30
<b>Total:-</b>					<b>5205.86</b>
Add Tribal increase - 25%					1301.47
<b>Grand Total:-</b>					<b>6507.33</b>
<b>Or Say:-</b>					<b>6510.00</b>

**Table-12: Maintenance cost for 2<sup>nd</sup> year (25% mortality)**

S. No.	Activity	Quantity	Unit Rate (Rs.)	Unit	Total Cost (Rs.)
1.	Re-digging of pits 45x45x45 cms	88	267.336	per hundred	235.26
2.	Re-digging of pits 30x30x30 cms	132	133.632	per hundred	176.39
3.	Filling of pits 45x45x45 cms	88	153.168	per hundred	134.79
4.	Filling of pits 30x30x30 cms	132	106.872	per hundred	141.07
5.	Planting of polythene bags plants	140	122.22	per	171.11

S. No.	Activity	Quantity	Unit Rate (Rs.)	Unit	Total Cost (Rs.)
				hundred	
6.	Planting of Naked root plants	100	103.044	per hundred	103.04
7.	Carriage of polythene bags plants over a distance of 2 km up hills	140	122.136	per hundred	170.99
8.	Carriage of Naked root plants over a distance of 2 km	80	19.74	per hundred	15.79
9.	Nursery cost of plants	220	5.16	per plants	1135.20
10.	Repair of fence	180	0.9	per Rmt	162.00
11.	Repair of inspection path			L/S	387.60
12.	Repair of soil and moisture conservation works			L/S	546.00
<b>Total:</b>					<b>3379.24</b>
					1446.32
Added 42.85% on account of increase on wage rate					
<b>Total:-</b>					<b>4825.56</b>
					1206.39
Add Tribal increase - 25%					
<b>Grand Total:-</b>					<b>6031.95</b>
<b>Or Say:-</b>					<b>6035.00</b>

Table-13: Maintenance cost for 3<sup>rd</sup> year (25% mortality)

S.No.	Activity	Quantity	Unit Rate (Rs.)	Unit	Total Cost (Rs.)
1.	Re-digging of pits 45x45x45 cms	66	267.336	per hundred	176.44
2.	Re-digging of pits 30x30x30 cms	99	133.632	per hundred	132.30
3.	Filling of pits 45x45x45 cms	66	153.168	per hundred	101.09
4.	Filling of pits 30x30x30 cms	99	106.872	per hundred	105.80
5.	Planting of polythene bags plants	105	122.22	per hundred	128.33
6.	Planting of Naked root plants	60	103.044	per hundred	61.83
7.	Carriage of polythene bags plants over a distance of 2 km up hills	105	122.136	per hundred	128.24
8.	Carriage of Naked root plants over a distance of 2 km	60	19.74	per hundred	11.84
9.	Nursery cost of plants	165	5.16	per plants	851.40



S.No.	Activity	Quantity	Unit Rate (Rs.)	Unit	Total Cost (Rs.)
10.	Repair of fence	200	0.9	per Rmt	180.00
11.	Repair of inspection path			L/S	387.60
12.	Repair of soil and moisture conservation works			L/S	546.00
<b>Total:</b>					<b>2810.88</b>
Added 42.85% on account of increase on wage rate					1203.05
<b>Total:-</b>					<b>4013.93</b>
Add Tribal increase - 25%					1003.48
<b>Grand Total:-</b>					<b>5017.41</b>
<b>Or Say:-</b>					<b>5020.00</b>

**Table-14: Maintenance cost for 4<sup>th</sup> year (25% mortality)**

S.No.	Activity	Quantity	Unit Rate (Rs.)	Unit	Total Cost (Rs.)
1.	Re-digging of pits 45x45x45 cms	66	267.336	per hundred	176.44
2.	Re-digging of pits 30x30x30 cms	99	133.632	per hundred	132.30
3.	Filling of pits 45x45x45 cms	66	153.168	per hundred	101.09
4.	Filling of pits 30x30x30 cms	99	106.872	per hundred	105.80
5.	Planting of polythene bags plants	105	122.22	per hundred	128.33
6.	Planting of Naked root plants	60	103.044	per hundred	61.83
7.	Carriage of polythene bags plants over a distance of 2 km up hills	105	122.136	per hundred	128.24
8.	Carriage of Naked root plants over a distance of 2 km	60	19.74	per hundred	11.84
9.	Nursery cost of plants	165	5.16	per plants	851.40
10.	Repair of fence	200	0.9	per Rmt	180.00
11.	Repair of inspection path			L/S	387.60
12.	Repair of soil and moisture conservation works			L/S	546.00
<b>Total:</b>					<b>2810.88</b>
Added 42.85% on account of increase on wage rate					1203.05
<b>Total:-</b>					<b>4013.93</b>
Add Tribal increase - 25%					1003.48

S.No.	Activity	Quantity	Unit Rate (Rs.)	Unit	Total Cost (Rs.)
Grand Total:-					5017.41
Or Say:-					5020.00

Table-15: Maintenance cost for 5<sup>th</sup> year (25% mortality)

S. No.	Activity	Quantity	Unit Rate (Rs.)	Unit	Total Cost (Rs.)
1.	Re-digging of pits 45x45x45 cms	44	267.336	per hundred	117.63
2.	Re-digging of pits 30x30x30 cms	66	133.632	per hundred	88.20
3.	Filling of pits 45x45x45 cms	44	153.168	per hundred	67.39
4.	Filling of pits 30x30x30 cms	66	106.872	per hundred	70.54
5.	Planting of polythene bags plants	70	122.22	per hundred	85.55
6.	Planting of Naked root plants	40	103.044	per hundred	41.22
7.	Carriage of polythene bags plants over a distance of 2 km up hills	70	122.136	per hundred	85.50
8.	Carriage of Naked root plants over a distance of 2 km	40	19.74	per hundred	7.90
9.	Nursery cost of plants	110	5.16	per plants	567.60
10.	Repair of fence	200	0.9	per Rmt	180.00
11.	Repair of inspection path			L/S	258.00
12.	Repair of soil and moisture conservation works			L/S	258.00
Total:					1827.52
Added 42.85% on account of increase on wage rate					782.18
Total:-					2609.69
Add Tribal increase - 25%					652.42
Grand Total:-					3262.12
Or Say:-					3265.00



Table-16: Maintenance cost for 6<sup>th</sup> year (25% mortality)

No.	Activity	Quantity	Unit Rate (Rs.)	Unit	Total Cost (Rs.)
1.	Re-digging of pits 45x45x45 cms	44	267.336	per hundred	117.63
2.	Re-digging of pits 30x30x30 cms	66	133.632	per hundred	88.20
3.	Filling of pits 45x45x45 cms	44	153.168	per hundred	67.39
4.	Filling of pits 30x30x30 cms	66	106.872	per hundred	70.54
5.	Planting of polythene bags plants	70	122.22	per hundred	85.55
6.	Planting of Naked root plants	40	103.044	per hundred	41.22
7.	Carriage of polythene bags plants over a distance of 2 km up hills	70	122.136	per hundred	85.50
8.	Carriage of Naked root plants over a distance of 2 km	40	19.74	per hundred	7.90
9.	Nursery cost of plants	110	5.16	per plants	567.60
10.	Repair of fence	150	0.9	per Rmt	135.00
11.	Repair of inspection path			L/S	130.00
12.	Repair of soil and moisture conservation works			L/S	130.00
<b>Total:</b>					<b>1526.52</b>
Added 42.85% on account of increase on wage rate					653.35
<b>Total:-</b>					<b>2179.87</b>
Add Tribal increase - 25%					544.97
<b>Grand Total:-</b>					<b>2724.83</b>
<b>Or Say:-</b>					<b>2725.00</b>

**Table-17: Maintenance cost for 7<sup>th</sup> year (25% mortality)**

S. No.	Activity	Quantity	Unit Rate (Rs.)	Unit	Total Cost (Rs.)
1.	Re-digging of pits 45x45x45 cms	44	267.336	per hundred	117.63
2.	Re-digging of pits 30x30x30 cms	66	133.632	per hundred	88.20
3.	Filling of pits 45x45x45 cms	44	153.168	per hundred	67.39
4.	Filling of pits 30x30x30 cms	66	106.872	per hundred	70.54
5.	Planting of polythene bags plants	70	122.22	per hundred	85.55
6.	Planting of Naked root plants	40	103.044	per hundred	41.22
7	Carriage of polythene bags plants over a distance of 2 km up hills	70	122.136	per hundred	85.50
8.	Carriage of Naked root plants over a distance of 2 km	40	19.74	per hundred	7.90
9.	Nursery cost of plants	110	5.16	per plants	567.60
10.	Repair of fence	150	0.9	per Rmt	135.00
11.	Repair of inspection path			L/S	130.00
12.	Repair of soil and moisture conservation works			L/S	130.00
			<b>Total:</b>		<b>1526.52</b>
					653.35
			<b>Total:-</b>		<b>2179.87</b>
					544.97
			<b>Grand Total:-</b>		<b>2724.83</b>
			<b>Or Say:-</b>		<b>2725.00</b>

#### 10. PRESENT STATUS OF MUCK MANAGEMENT

The total quality of muck generated and dumped in various dumping sites as on 31.10.2021 is 1.64 Mm<sup>3</sup>. The balance quality of muck to be dumped is 0.71 Mm<sup>3</sup>. The amount spent till date on account of Muck Management in the ShongtongKarchham HEP is 1634.71 lakh. The details are given in Table-10 & 11



**Table-10: The details of Muck Generation and dumping as on date**

S. No.	Description	Quantity (m <sup>3</sup> )
1	Total Quantity of muck to be generated	23,63,087.00
2	Quantity of muck generated and dumped up to 31.01.2022	16,46,459.00
3	Balance to be excavated /generated	7,16,628.00
4	With swelling factor @ 40%	10,03,279.20
5	Consumption of muck (Utilization/ recycling)	2,59,047.00
6	Balance to be dumped	7,44,232.20

**Table-11: Expenditure Details on Muck Management Plan**

Description	Amount (Rs. lakh)
Total Expenditure on protection works provided at Muck disposal sites till date	1634.71
Total Expenditure incurred for haulage of muck beyond project area (i/c applicable GST)	14030.18
Balance expenditure to be done on account of Muck Disposal	9487.8
<b>Total</b>	<b>25152.69</b>

## 7. RESPONSIBILITY

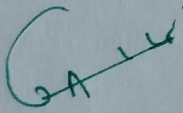
The Muck Management Plan, specifies mitigation measures to be covered as a part of Annual and periodic activity plans for project implementation. An abstract of muck management plan for the project has been prepared and presented in Table-12

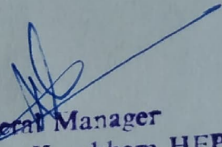
**Table-12: Abstract of Muck Management Plan (MMP)**

S. No.	Impact	Mitigation Measures	Responsibility
1	Muck generation due to excavation activities	Stabilization of Muck disposal sites	Contractor/ Project Proponent
2	Disposal of Muck at various Muck dumping sites	Leveling of sites before dumping	Contractor/ Consultant
		Catch water drain	Contractor/ Consultant
		Plantation on the top soil after levelling of site and laying of soil cover	Consultant
3	Spillage of Mucks	Construction of retaining walls	Contractor
4	Fugitive emission due to	Regular sprinkling of water	Contractor

10/18

	Impact	Mitigation Measures	Responsibility
o.	increased movement near dumping sites	Vehicle dumping	
	Maintenance after Plantation / Biological treatment of the designated dumping sites	Watering, guarding of saplings, replacement of dead/ dried plants	Project Proponent

  
Deputy Conservator of Forests,  
Kinnaur Forest Division at R/Peo H.P

  
Dy. General Manager  
Shongtong-Karchham HEP,  
HPCL, Reckong Pco,  
Distt. Kinnaur (H. P.) 172107





**HIMACHAL PRADESH POWER CORPORATION LIMITED**

*(A- State Government Undertaking)*

**General Manager**

**Shongtong-Karchham HEP (450 MW) Reckong Peo**

**Distt. Kinnaur (H.P)-172107**

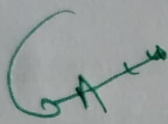
**Fax: 01786-223174 Tel: 01786-223310 Email: -skhep.hppcl@gmail.com**

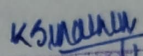


1/1

**UNDERTAKING**

I Er. K.S. Thakur GM Shongtong Karchham HEP, HPPCL Reckong Peo do hereby undertake that approved copy of Muck Management plan shall be submitted to MOEF & CC New Delhi before Stage-II approval.

  
Deputy Conservator of Forests,  
Kinnaur Forest Division at R/Peo H.P

  
General Manager,  
Shongtong-Karchham HEP  
HPPCL, Reckong Peo  
Distt. Kinnaur (HP) 172107



HIMACHAL PRADESH POWER CORPORATION  
(A State Government Undertaking) **Annexure - 17**  
General Manager

Shongtong-Karchham HEP (450 MW) Reckong Peo  
Distt. Kinnaur (H.P.)-172107

Fax: 01786-223174 Tel: 01786-223310 Email: skhep.hppcl@gmail.com

No. HPPCL/STKHEP/ ENVT./FC /2022-23- 3182 - 83.

Dated:-06-07-2023

To,

✓ The Divisional Forest Officer,  
Recong Peo Distt. Kinnaur (HP).

**Subject:** Diversion of 63.5015 Ha of forest land for the construction of Shongtong Karchham HEP, being constructed by HPPCL, in District Kinnaur of Himachal Pradesh-  
**Declaration of Reserve Forest under Indian Forest Act, 1927 -thereof.**

Sir,

Regarding subject cited above, it is submitted that 63.5015 Ha of forest land has been diverted in favour of Shongtong-Karchham HEP, HPPCL vide letter dated 14-11-2012 (copy enclosed as per Annexure-I). Condition no. 8 of this letter states that "the entire reservoir created due to submergence shall be declared Reserve Forest under Indian Forest Act, 1927 within six months. However, regulated fishing shall be allowed. Nodal Officer shall submit compliance report in this regard".

The said declaration of reserve Forest under Chapter-II, Section-20 of Indian Forest Act 1927 can only be done by the state Government. Thus, it is requested to kindly declare the Barrage Reservoir Area submergence in respect of Shongtong-Karchham HEP (450MW) as Reserve Forest at the earliest, please. Detail of land falling in the submerged area is attached as per Annexure-II & III.

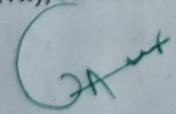
An early action in the said matter is solicited, please.

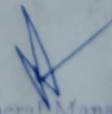
Yours faithfully

DA:- As above

**K. S. N. N. N.**  
General Manager  
Shongtong-Karchham HEP  
HPPCL, Reckong Peo  
Distt. Kinnaur (H.P.).

CC:- The Director (Civil), HPPCL, Himfed Building, BCS, Shimla-09 for information please.

  
Deputy Conservator of Forests,  
Kinnaur Forest Division at R/Peo H.P

  
Dy. General Manager  
Shongtong-Karchham HEP,  
HPPCL, Reckong Peo  
Distt. Kinnaur (H.P.) 172107





HIMACHAL PRADESH POWER CORPORATION LIMITED

(A State Government Undertaking)

General Manager

Shongtong-Karchham HEP (450 MW) Reckong Peo

Distt. Kinnaur (H.P.)-172107

Fax: 01786-223174 Tel: 01786-223310 Email: -skhep.hppcl@gmail.com



2/2

No. HPPCL/STKHEP/ ENVT./FC /2022-23- 3160 - 8)

Dated:-06-07-2023

To,

✓  
The Deputy Commissioner  
Recong Peo Distt. Kinnaur (HP).  
Email:-dc-kin-hp@nic.in

**Subject:** Diversion of 63.5015 Ha of forest land for the construction of Shongtong Karchham HEP, being constructed by HPPCL, in District Kinnaur of Himachal Pradesh-  
**Declaration of Reserve Forest under Indian Forest Act, 1927 -thereof.**

Sir,

Regarding subject cited above, it is submitted that 63.5015 Ha of forest land has been diverted in favour of Shongtong-Karchham HEP, HPPCL vide letter dated 14-11-2012 (copy enclosed as per Annexure-I). Condition no. 8 of this letter states that "the entire reservoir created due to submergence shall be declared Reserve Forest under Indian Forest Act, 1927 within six months. However, regulated fishing shall be allowed. Nodal Officer shall submit compliance report in this regard".

The said declaration of reserve Forest under Chapter-II, Section-20 of Indian Forest Act 1927 can only be done by the state Government. Thus, it is requested to kindly declare the Barrage Reservoir Area submergence in respect of Shongtong-Karchham HEP (450MW) as Reserve Forest at the earliest, please. Detail of land falling in the submerged area is attached as per Annexure-II & III.

An early action in the said matter is solicited, please.

Yours faithfully

DA:- As above

KSIMKUV  
General Manager  
Shongtong-Karchham HEP  
HPPCL, Reckong Peo  
Distt. Kinnaur (H.P.).

CC:- The Director (Civil), HPPCL, Himfed Building, BCS, Shimla-09 for information please.

8/2  
Deputy Conservator of Forests,  
Kinnaur Forest Division at R/Peo H.P.

Dy. General Manager  
Shongtong-Karchham HEP,  
HPPCL,  
Distt. Kinnaur (H.P.)-172107



**HIMACHAL PRADESH POWER CORPORATION LIMITED**

*(A- State Government Undertaking)*

**General Manager**

**Shongtong-Karchham HEP (450 MW) Reckong Peo**

**Distt. Kinnaur (H.P)-172107**


Fax: 01786-223174 Tel: 01786-223310 Email: -skhep.hppcl@gmail.com

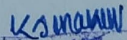


7/1

**UNDERTAKING**

I Er. K.S. Thakur GM Shongtong Karchham HEP, HPPCL Reckong Peo do hereby undertake that the work of Green Plantation shall be done by HPPCL in consultation with HP Forest Department as and when the reservoir is created and the construction activities are stopped.

  
Deputy Conservator of Forests,  
Kinnaur Forest Division at R/Peo H.P

  
General Manager  
Shongtong-Karchham HEP  
HPPCL, Reckong Peo  
Distt. Kinnaur (HP) 172107



No. UC.(S-K HEP)/ 8845  
H.P. Forest Department.

Dated, R/Peo, the 31.3.2018

From:

Divisional Forest Officer,  
Kinnaur Forest Division.

To:

The General Manager,  
Shongtong-Karchham HEP. at Reckong Peo.

Subject: Shongtong Karchham HEP- Progress report on activities implemented under "Regeneration of Equal amount of degraded forest" thereof.

Sir,

Please refer to your letter No. HPPCL/GM-STKHEP/Forest-X/2018- 5849-51 dated 01.12.2018, on the subject cited above.

As desired the final progress report alongwith "Utilization certificate on Form GFR-19A" on activities implemented under "Regeneration of Equal amount of degraded forest" for the year as mentioned below is sent herewith for favour of information and necessary action please.

Year.	Amount Utilized during the year.	Remarks.
2016-17	Rs. 60,51,300	Progress report attached.
2017-18	Rs. 76,22,900	Progress report attached.
Total.	Rs. 1,36,74, 200	Amount of Rs. 1,36,73,737/- has been fully utilized as per progress report for the year 2016-17 & 2017-18. The Utilization certificated is attached.

Encl :- As above.

Deputy Conservator of Forests,  
Kinnaur Forest Division at R/Peo H.P

Yours faithfully,

Divisional Forest Officer,  
Kinnaur Forest Division.  
At Reckong Peo.

Dy. General Manager  
Shongtong-Karchham HEP,  
HPPCL, Reckong Peo,  
Distt. Kinnaur (H. P.) 172107

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## FORM GFR 19-A

[See Government of India's Decision (1) below Rule 150]  
Form of Utilization Certificate


Sr. No.	Letter No. & date of sanction scheme	Total Amount sanctioned
1.	HPPCL/GM-STKHEP/Forest-X/2011  Demand Draft No. 630174 dated 21.4.2011	1,36,73,737/-
	Total	1,36,73,737/-

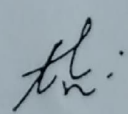
Certified that **Rs. 1,36,73,737-** (Rs. One Crore, thirty six lac, seventy three thousand seven hundred & thirty seven) only grants-in-aid sanctioned under head "Shongtong-Karchham HEP" fund during the financial year 2011-12 in favour of Divisional Forest Officer, Kinnaur at Reckong Peo under this Ministry/Department letter No. given in the margin and Rs. \_\_\_\_\_ Nil \_\_\_\_\_ on account of unspent balance of the previous year, an amount of **Rs. 1,36,73,737/-** only has been utilized for the purpose of "Regeneration of Equal amount of degraded forest" (As per progress report enclosed) for which it was sanctioned and .....nil..... amount is lying balance for utilization.


2. Certified that I have satisfied myself, that the conditions on which the grants-in-aid was sanctioned have been duly fulfilled/are being fulfilled and that I have exercised that following checks to see that the money was actually utilized for the purpose for which it was sanctioned.

Kinds of checks exercised:-

1. 100% by concerned beat Guard, Block Officer & Range Forest Officer.
2. 50% by Assistant Conservator of Forests.
3. 25% and randomly by DFO Kinnaur

  
Deputy Conservator of Forests,  
Kinnaur Forest Division at R/Peo H.P

  
Divisional Forest Officer,  
Kinnaur Forest Division,  
Reckong Peo.

  
Dy. General Manager  
Shongtong-Karchham HEP,  
HPPCL, Reckong Peo,  
Distt. Kinnaur (H. P.) 172107



Progress report on activities implemented under "Regeneration of Equal amount of degraded forest" under Shongtong-Karchham HEP. during the year 2016-17.

Sr.No.	Name of Activity.	Name of Beat.	Name of Area.	Phy. Ach.	Financial Ach.
1.	New plantation.	Lippa.	C-216	10 ha.	625000
2.	New plantation.	Pangi.	C-234	5 ha.	312500
3.	New plantation.	Rogi.	C-245	10 ha.	625000
4.	New plantation.	Rarang.	UF-Thopan	10 ha.	625000
5.	New plantation.	Moorang.	UF-Shurting.	10 ha.	625000
6.	New plantation.	Leo.	UF-Chulling.	5 ha.	312500
7.	New plantation.	Kalpa.	C-239	10 ha.	625000
8.	Total.			60 ha.	37,50,000
9.	Cost of Plants in Nurseries.			66000 No.	14,85,000
10.	Cost of material i.e. B/wire etc.				Rs. 8,16,300/-
	Grand Total item No. 8, 9, 10				Rs. 60,51,300/-

*fl:*

Divisional Forest Officer,  
Kinnaur Forest Division,  
Reckong Peo.

*Am*  
Deputy Conservator of Forests,  
Kinnaur Forest Division at R/Peo H.P

*fl*  
Dy. General Manager  
Shongtong-Karchham HEP,  
HPPCL, Reckong Peo,  
Distt. Kinnaur (H. P.) 172107

4/6

Progress report on activities implemented under "Regeneration of Equal amount of degraded forest" under Shongtong-Karchham HEP. during the year 2017-18.

Sr.No.	Name of Activity.	Name of Beat.	Name of Area.	Phy. Ach.	Financial Ach.
1.	New plantation.	Rarang.	UF-Rarang.	15 ha.	937500
2.	New plantation.	Pangl.	C-237	5 ha.	312500
3.	New plantation.	Rogi.	C-244	10 ha.	625000
4.	New plantation.	Rarang.	UF-Khadra.	10 ha.	625000
5.	New plantation.	Moorang.	C-197	10 ha.	625000
6.	New plantation.	Skibba.	C-187	5 ha.	312500
7.	New plantation.	Kalpa.	C-240	10 ha.	625000
8.	Total.			65 ha.	40,62,500
9.	Cost of Plants in Nurseries.			71500 No.	16,08,750
10.	Maint. Of old plantation- 2016-17			60 ha.	Rs. 5,28,000
11.	Cost of material.				Rs. 14,23,650
	Grand Total item No. 8,9,10,& 11.				Rs. 76,22,900/-

*SL:*  
Divisional Forest Officer,  
Kinnaur Forest Division,  
Reckong Peo.

*GA*  
Deputy Conservator of Forests,  
Kinnaur Forest Division at R/Peo H.P

*[Signature]*  
Dy. General Manager  
Shongtong-Karchham HEP,  
HPPCL, Reckong Peo,  
Distt. Kinnaur (H. P.) 172107



5/6

No. UC.(S-K HEP)/7805  
H.P. Forest Department.

Dated, R/Peo, the 31.3.2017

From:

Divisional Forest Officer,  
Kinnaur Forest Division.

To:

The General Manager,  
Shongtong-Karchham HEP. at Reckong Peo.

Subject: Shongtong Karchham HEP- Progress report on activities implemented under "Regeneration of Equal amount of degraded forest" threof.

Sir,

Please refer to your letter No. HPPCL/GM-STKHEP/Forest-X/2017-12678-682 dated 16.3.2017, on the subject cited above.

As desired the final progress report alongwith 'Utilization certificate on Form GFR-19A' on activities implemented under "Regeneration of Equal amount of degraded forest" for the year as mentioned below is sent herewith for favour of information and necessary action please.

Year.	Amount Utilized during the year.	Remarks.
2016-17	Rs. 60,51,300	Progress report attached.
Total.	Rs. 60,51,300	Amount of Rs. 60,51,300/- has been utilized as per progress report for the year 2016-17 & 2017-18. The Utilization certificated is attached. The remaining amount will be fully utilized during 2017-18.

Encl :- As above.

Deputy Conservator of Forests,  
Kinnaur Forest Division at R/Peo H.P

Yours faithfully,

Divisional Forest Officer,  
Kinnaur Forest Division.  
At Reckong Peo.

Dy. General Manager  
Shongtong-Karchham HEP,  
HPPCL, Reckong Peo.  
Dist. Kinnaur H.P. 172107  
Scanned with CamScanner

## FORM GFR 19-A

[See Government of India's Decision (1) below Rule 150]  
Form of Utilization Certificate

Sr. No.	Letter No. & date of sanction scheme	Total Amount sanctioned
1.	HPPCL/GM-STKHEP/Forest-X/2011  Demand Draft No. 630174 dated 21.4.2011	1,36,73,737/-
	Total	1,36,73,737/-

Certified that **Rs. 60,51,300/-** (Rs. Sixty lac, fifty one thousand three hundred ) only grants-in-aid sanctioned under head "Shongtong-Karchham HEP" fund during the financial year 2011-12 in favour of Divisional Forest Officer, Kinnaur at Reckong Peo under this Ministry/Department letter No. given in the margin and Rs. \_\_\_\_\_ Nil on account of unspent balance of the previous year, an amount of **Rs. 60,51,300/-** only has been utilized for the purpose of "Regeneration of Equal amount of degraded forest" (As per progress report enclosed) for which it was sanctioned and **Rs. 76,22,437/-** amount is lying balance for utilization.

2. Certified that I have satisfied myself, that the conditions on which the grants-in-aid was sanctioned have been duly fulfilled/are being fulfilled and that I have exercised that following checks to see that the money was actually utilized for the purpose for which it was sanctioned.

Kinds of checks exercised:-

1. 100% by concerned beat Guard, Block Officer & Range Forest Officer.
2. 50% by Assistant Conservator of Forests.
3. 25% and randomly by DFO Kinnaur

*th:*  
Divisional Forest Officer,  
Kinnaur Forest Division,  
Reckong Peo.

*Aut*  
Deputy Conservator of Forests,  
Kinnaur Forest Division at R/Peo H.P

*✓*  
Dy. General Manager  
Shongtong-Karchham HEP,  
HPPCL, Reckong Peo,  
Distt. Kinnaur (H.P.) 171007