

टीएचडीसी इंडिया लिमिटेड THDC INDIA LIMITED

(भारत सरकार एवं उ. प्र. सरकार का संयुक्त उपक्रम)
(A Joint Venture of Govt. of India & Govt. of U.P.)
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सं० टीएचडीसी/ऋ०/सा० एवं पर्या०/फ० - 117/85 - 8

दिनांक : 20-07-2021

सेवा में,

✓ 1.) Shri Pankaj Agarwal, IFS

Deputy Director General of Forests (C)

पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय,

उत्तर केन्द्रीय क्षेत्रीय कार्यालय,

25, सुभाष रोड, देहरादून - 248001

2.) सदस्य - सचिव,

पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय,

आई.ए. डिवीज़न (आर.वी. एवं एच.ई.पी.),

वायु विंग, कमरा सं० 303, इंदिरा पर्यावरण भवन

जोर बाग रोड, नई दिल्ली - 110 003

विषय: 15th Six monthly progress report (Jan'2021 to June'2021) on environmental aspects of Vishnugad Pipalkoti Hydroelectric Project (444 MW) located at Distt. Chamoli, Uttarakhand - reg.

Sir,

In compliance to Point (vii) of Part B: General Conditions of Environment Clearance letter No. J-12011/29/2007-IA.I dtd. 22.08.2007 issued by MoEF&CC, please find enclosed herewith the 15th Six monthly progress report on environmental aspects of Vishnugad Pipalkoti Hydroelectric Project (444 MW) located at Distt. Chamoli, Uttarakhand for your kind perusal and record please.

Thanking You,

Handwritten signature
20/07/2021

(विपिन थपलियाल)

वरि० प्रबंधक (पर्यावरण)

संलग्नक: उपरोक्तानुसार

प्रतिलिपि: सादर सूचनार्थ

1. अधिशासी निदेशक (एम०पी०एस०), टीएचडीसीआईएल, ऋषिकेश
2. महाप्रबंधक (परियोजना), टीएचडीसीआईएल, पीपलकोटी
3. महाप्रबंधक (सामाजिक एवं पर्यावरण), टीएचडीसीआईएल, ऋषिकेश

प्रधान कार्यालय : गंगा भवन, प्रगतिपुरम, बाई पास रोड, ऋषिकेश-249 201

Corporate Office : GANGA BHAWAN, PRAGATIPURAM, BYPASS ROAD, RISHIKESH - 249201

पंजीकृत कार्यालय :- भागीरथी भवन (टॉप टेरिस) भागीरथीपुरम, टिहरी - गढ़वाल - 249201

Regd. Office : Bhagirathi Bhawan (Top Terrace), Bhagirathipuram, Tehri-garhwal-249001

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("हिन्दी को राजभाषा बनाना, भाषा का प्रश्न नहीं अपितु देशभिमान का प्रश्न है")

SIX MONTHLY PROGRESS REPORT ON ENVIRONMENTAL ASPECTS

Period Jan' 2021 to June' 2021

1.	Name of the Project	VISHNUGAD PIPALKOTI HYDRO ELECTRIC PROJECT (444 MW)
2.	Type of the Project	Hydroelectric Project
3.	Clearances OM No. & Date a) Environment Clearance b) Forest Clearance	<p>i) Letter No. J-12011/29/2007-IA.I, Dated 22.08.2007</p> <p>ii) Corrigendum regarding Catchment Area, letter no. J-12011/29/2007-IA.I, Dated 18.01.2008</p> <p>iii) Amendment regarding minimum environmental flow, letter no. J-12011/29/2007-IA-I, Dated 31.05.2011</p> <p>iv) Extension of validity of Environment Clearance till 21.08.2020, letter no. J-12011/29/2007-IA.I, Dated 25.04.2018.</p> <p>v) Extension of validity of Environment Clearance till 21.08.2021, vide MoEF&CC notification no. S.O. 221 (E) Dated 18.01.2021.</p> <p>vi) Extension of validity of Environment Clearance till 31.12.2021, vide vide MoEF&CC notification no. S.O. 2346 (E) Dated 16.06.2021.</p> <p>i) Stage-II Forest Clearance (Final) Letter No. F.No.8-65/2009-FC, Dated 28.05.2013</p>
4.	Locations a) District(s) b) State (s) c) Latitude (Dam Site) d) Longitude (Dam Site)	<p>a) Chamoli</p> <p>b) Uttarakhand</p> <p>c) 79°29'30" E</p> <p>d) 30°30'50" N</p>
5.	Address for Correspondence a) Address of concerned Project Head (with pin code and telephone / fax nos.) b) Address of concerned HOD in Corporate Office (with pin code & telephone/ fax no.)	<p>a) Sh. J.N. Singh, GM (Project), VPHEP, THDCIL, Alaknandapuram, Siyasain, Pipalkoti, Distt. Chamoli (Uttarakhand). Pin code: 246472 Tel (O): 01372-256200 Fax (O): 0137-256203</p> <p>b) Sh. P.K. Naithani, GM (S&E), THDCIL, Bypass Road, Pragatipuram, Rishikesh (Uttarakhand) Pin code: 249201 Tel (O): 0135-2433454 Fax (O): 0135-2439404</p>
6.	Details of Environmental Management Plan	Attached as Annexure - I
7.	Break - up of the Project area (land details) a) Dam and Submergence area	<p>Total land Acquired by Project - 141.568 Ha. (Includes Private & Forest Land)</p> <p>a) Dam and Submergence area</p>

	(forest & non-forest) b) Others	Forest: 28.478 Ha. Non-Forest: - b) Others (Exclusive of above 'a') Forest: 71.912 Ha. Non-Forest: 31.639 Ha. (Private) Transferred to Project by PWD : 9.539 Ha.
8.	Breakup of the Project affected population with enumeration of those losing houses / dwelling units only, agricultural land only, both dwelling units and agricultural land and landless laborers / Artisans. a) SC /ST /Tribal's b) Others	Attached as Annexure - II
9.	Financial details a) Project cost as originally planned and subsequent revised estimates and the years of price reference. b) Actual expenditure incurred on the Project so far. c) Allocations made for Environmental Management Plan.	a) Investment approval to the project amounting to Rs. 2491.58 Cr at March, 2008 Price Level was accorded by CCEA on 21.08.2008. Revised RCE of Rs. 3860.35 Cr (including IDC & FC) at Feb'19 PL has been vetted by CEA on 20.03.2020. b) The expenditure incurred on VPHEP Project till June' 2021 is Rs. 2265.68 Cr. c) Rs. 76.24 Crs (As per EMP of VPHEP formulated during Nov., 2009)
10.	Forest Land requirements a) Status of approval for diversion of forest land for non -forestry use b) The status of clear felling in forest land	a) Vide letter no. F.No.8-65/2009-FC dated 28.05.2013, stage-II Forest clearance was accorded by MoEF, GoI. b) The details of 812 Number of Tree Felling is under: Dam - 555, Approach Road (TRT to Siyasain to Durgapur) – 200, Approach Road (Siyasain Road to Dhobi Ghat) – 07 & Dumpyard (Siyasain) - 50
11	Status of construction a) Date of commencement (actual and/planned) b) Date of completion (actual or planned)	a) 17.01.2014 b) Planned: 16.07.2018 (54 months from date of commencement of construction work). Revised: The completion of the Project is expected in June-2024.
12.	Reason for the delay if the project is yet to be started.	NIL
13.	Details of site visit a) By Monitoring Committee	a) Vide order dated 17.10.2014, District

	<p>b) By Regional Office</p>	<p>Magistrate, Chamoli has constituted the Environment Monitoring Committee. Second meeting of committee was conducted on 22.02.2016.</p> <p>Based on the suggestions of the Additional Director, MoEF&CC, R.O. Dehradun (Jan' 2017 visit), the Multi-Disciplinary Committee has been re-constituted vide MoEF&CC letter no. J-12011/29/2007-IA-I dated 10.10.2017.</p> <p>The reconstituted Multi-Disciplinary Committee (MDC) under the chairmanship of PCCF-HoFF, Uttarakhand has visited the project site on 28.07.2018. The 2nd meeting of reconstituted MDC under the chairmanship of PCCF-HoFF, Uttarakhand was held on 28.02.2020 at Van Bhawan, Dehradun.</p> <p>The R&R Monitoring Committee has been constituted by District Magistrate, Chamoli on 09.11.2009.</p> <p>a) Dr. S.C. Katiyar, Addl. Director (S), MoEF&CC, North Central Regional Office, Dehradun visited the VPHE Project on 09.01.2017 & 10.01.2017.</p> <p>b) Dr. S. C. Garkoti, Advisor, MoEF&CC, New Delhi along with Dr. S. C. Katiyar, Addl. Director (S), MoEF&CC, North Central Regional Office, Dehradun has visited the VPHEP site on 02.08.2017 & 03.08.2017.</p> <p>c) Dr. S.C. Katiyar, Addl. Director (S), MoEF&CC, North Central Regional Office, Dehradun has visited the VPHE Project on 28.07.2018.</p> <p>d) Sh. Pankaj Agarwal, Addl. PCCF and Dr. S. C. Katiyar, Addl. Director, MoEF&CC, Regional Office, Dehradun has visited the VPHE Project on 11-12 Nov 2018.</p> <p>e) Dr. Krishnendu Mondal, Scientist – C, MoEF&CC, Regional Office, Dehradun has visited the VPHEP Project on 12-13 Oct' 2020.</p>
<p>14.</p>	<p>Brief Note on the status of Compliance of the conditions stipulated by MoEFCC</p>	<p>A brief note on status of conditions stipulated by MOEF is enclosed as Annexure - III.</p>

ENVIRONMENTAL MANAGEMENT PLAN
(PHYSICAL ACHIEVEMENT IN REPORTING PERIOD)

S. NO.	PLAN	ACHIEVEMENT
1	Development of Herbal Garden	<ul style="list-style-type: none"> • Based on recommendations of HRDI, Mandal, Gopeshwar, Herbal garden has been developed in the VPHEP colony over an area of 1800 sqm. approx. Also, two nos. dedicated manpower/gardener has been deployed for the maintenance of Herbal Garden. • Approx. Rs. 18.43 lakhs have been incurred on various works related to the development of the Herbal Garden. • Medicinal plants like Harad (Terminalia Chebula), Lemon Grass (Cymbogogonfelxuosus), Sarpghandha (Rauvolfia Serpentiina), Aloe Vera etc. planted.
2	Road Side Plantation	<ul style="list-style-type: none"> • Requisite funds have been deposited under CAMPA for implementation. • Matter is under persuasion with CAMPA and State Forest Deptt. for start of works.
3	Wildlife Protection (related to NDBR & KWLS)	<ul style="list-style-type: none"> • Wildlife Protection: <ul style="list-style-type: none"> – Two (02) nos. Watch Towers have been installed at identified locations at Powerhouse and TBM sites nearby the boundary of KWLS. – Ten nos. Camera Traps were procured on the recommendation of E&S panel. Out of which,08 nos. Camera Traps handed over to Forest Department (Nanda Devi National Park) for installation in NDBR on 20.03.2018 and has been installed in NDBR by Forest Department at appropriate location. Balance 02 nos. of Camera Traps have been handed over to Forest officials on 12.06.2019. – Controlled Blasting techniques are being practiced and the same is being monitored by construction contractor through Central Institute of Mining & Fuel Research (CIMFR), Roorkee. Report up to Apr' 2021 have been received. – Environment Awareness was spread amongst villagers during Band Vikas Mela being held every year in Pipalkoti during December month. – Environment Awareness Program has been organized at GIC, Gadora, Chamoli during Feb' 2020 in the presence of noted Environmentalist Sh. Jagat Singh Chaudhary alias "<i>Jungli Ji</i>". – Awareness Programs are being organized from time to time. The awareness programs will be organised once the COVID-19 situation gets normal.
4	Compensatory Afforestation in 120.27 Ha	<ul style="list-style-type: none"> • Compensatory Afforestation and other works (Roadside Plantation, construction of 4 feet high pillar etc.) is being done by the State Forest Department, GoUK. Requisite funds have already been deposited by THDCIL in CAMPA. However, the funds yet to be released by the CAMPA to the concerned Forest Deptt. • THDCIL is continuously pursuing the issue with Senior Forest Officials at Dehradun and at Divisional Level. • Issue was also discussed in the meeting of Multi-Disciplinary Committee constituted by MoEF&CC, New Delhi under the chairmanship of PCCF-HoFF, GoUK held on 28.02.2020 at Van Bhawan, Dehradun.

		<ul style="list-style-type: none"> In the said meeting, DFO, Badrinath Forest Division (Nodal Officer) appraised that slow progress is due to non-inclusion of activities in the Annual Plan of Operation (APO) by Forest Department. The Chairman - MDC, PCCF-HoFF, has directed the concerned Forest officials to take all-out efforts to for early completion of these activities. Till Mar'21 Compensatory Afforestation works in 31.5 Ha areas has been completed by State Forest Department. Balance 90 Ha area is to be done by Forest Department.
5	Catchment Area Treatment Plan	<ul style="list-style-type: none"> Total Implementation value for CAT is Rs. 47 Crs., the total amount of Rs. 47 Crs stands deposited by THDCIL in CAMPA fund. DFO Badrinath Forest Division is the Nodal Officer for CAT Plan. Vide letter dtd. 30.12.2017, Final approval has been granted to DPR along with Micro plans for CAT Plan of VPHEP by Forest Deptt., GoUK. State Forest Deptt., Uttarakhand is executing activities as per approved DPR. An expenditure of Rs. 23.18 Cr (approx.) has been made by Forest Deptt. till June' 2021 under CAT Plan of VPHEP. Issue of slow progress of CAT Plan was also discussed in the meeting of Multi-Disciplinary Committee constituted by MoEF&CC, New Delhi under the chairmanship of PCCF-HoFF, GoUK held on 28.02.2020 at Van Bhawan, Dehradun. In the said meeting, DFO, Badrinath Forest Division (Nodal Officer) appraised that slow progress is due to non-inclusion of activities in the Annual Plan of Operation (APO) by Forest Department. The Chairman - MDC, PCCF-HoFF, has directed the concerned Forest officials to take all-out efforts to for early completion of these activities. DFO Badrinath, Nodal Officer has been requested for earliest completion of works under CAT Plan of VPHEP.
6	Muck Management Plan	<ul style="list-style-type: none"> Dumping of muck is being done at designated / identified area & well above the high flood level. Engineering measures such as construction of gabion faced reinforced earth wall with uniaxial geo-grid reinforcement are adopted at dumping site. Benches are being developed to discontinue the slopes in dumpyard. Work of plantation of Vetivar (<i>Chrysopogon Zizanioides</i>) grass as slope stabilization measure at Siyasain dumping site (DY-4) has been started in September 2018. Plantation in approx. 10,000 sqm. area has been completed at DY-4. M/s HCC Ltd. has been instructed to ensure necessary reclamation works at all Disposal sites. Details of muck till June' 2021, is as under; <ul style="list-style-type: none"> ➤ Muck generated (Approx.) = 20.93 Lacs m³ ➤ Muck utilized (Approx.) = 3.51 Lacs m³ ➤ Muck dumped (Approx.) = 17.42 Lacs m³
7	Fish Management Plan	<ul style="list-style-type: none"> The Consultancy Services for preparation & supporting Implementation of Fish Management Plan for VPHEP have been awarded to Directorate of Coldwater Fisheries Research (ICAR-DCFR), Bhimtal. For framing the appropriate fish management plan, ICAR-DCFR has conducted a series of fish survey and water sampling work along River Alaknanda from Vishnupyarag to Karan Prayag. Final Report has been received from ICAR-DCFR. ICAR-DCFR has recommended to construct Snow Trout Fish

		<p>Hatchery. A MoU has been signed with M/s UPRNN for a total value of 268.26 lakhs for construction of Fish Hatchery nearby Jaisal Nala at some part of DY-5 area. Construction work is under progress.</p> <ul style="list-style-type: none"> • Also, A one week training on Aquatic Biodiversity in Feb’ 2020, was conducted for the Executives of Environment Deptt. at College of Fisheries, GB Pant University of Agriculture & Technology (GBPUAT), Pantnagar by HRD, Rishikesh.
8	Green Belt Development Plan (Plantation of approx 12500 trees)	<ul style="list-style-type: none"> • Green Belt Development is being implemented under the Consultancy of noted Environmentalist Sh. Jagat Singh Chaudhary alias “Junglee”. Broad Leaved, Fast Growing plant species have also been planted as suggested by “Jungli Ji” and Forest Deptt. • Till June’ 2021, cumulatively 8500 nos. (approx.) trees are planted. Maintenance of plants is being done regularly.
9	Restoration of Quarry Site	<ul style="list-style-type: none"> • Till June’ 2021, no Quarry site has been opened for excavation / mining. • All statutory clearances for Gadi Quarry have been obtained. The Form MM-10 for operating Gadi Quarry has been issued on 28.05.2021 after signing of Lease Deed. The Quarry site will be operational after Monsoon season and after obtaining CTE/CTO from UKPCB. • The quarrying is yet to commence. However, the quarry areas will to be restored after completion of quarrying operations.
10	Solid Waste Management	<p>VPHEP COLONY</p> <ul style="list-style-type: none"> – Organic Waste – An electrical composter has been procured for composting of organic waste. – Inorganic Waste is stored and transported through THDCIL vehicle for handing over to Nagar Panchayat, Chamoli for safe disposal. • Necessary infrastructure for SWM facility constructed nearby the VPHEP colony area. • Roadside Bins (Separate bins for Organic and Inorganic Waste) etc. have been procured and installed at appropriate locations for proper collection of waste. • Additionally, 01 nos. dumper has been procured through CSR and donated to Nagar Panchayat – Pipalkoti. As per mutual agreement Nagar Panchayat – Pipalkoti is collecting the solid waste of VPHEP for safe disposal. <p>M/S HCC LTD. – WORKER/LABOR CAMPS</p> <ul style="list-style-type: none"> • Necessary provisions have been kept for Waste Collection, Handling, Segregation, Disposal process under the contractor’s EMP. • Separate bins are placed at labor camps and construction sites for biodegradable and non-biodegradable wastes. • The waste collected is handed over to Nagar Palika / Panchayat. • Wastes (Hazardous/E-waste/others) being stored in storage yard for safe disposal and handed over to authorized vendors only.
11	Road Construction	<ul style="list-style-type: none"> • During Road Construction all precautionary measures for soil erosion, slope stability, drainage to be taken care as per Indian Standards

		<ul style="list-style-type: none"> • Regular Water Sprinkling is being done for dust suppression. • Provision for water drainage along the road line is provided where ever required.
12	Sanitary Facility Labor Camp	<ul style="list-style-type: none"> • HCC has constructed the camps for its staff / workers and for PRW workers at Helang for the persons engaged at Dam site activities and also at Haat & Batula (Haat-Kauria Road) for the Power House activities. • Also, HCC has hired various private accommodations / hotels for accommodating the officers and workers at site. • The total number of staff / workers presently residing in these accommodations is 701. • All the accommodations are provided with Toilets, Bathrooms and community mess. Septic cum Soak pit tank have also been constructed at camp sites for safe disposal of sewage.
13	Fuel	<ul style="list-style-type: none"> • Community kitchen for labor / worker at camps being run on LPG. • Usage of approx. 9526 nos. LPG cylinders have been reported by the contractor up to June' 2021.
14	Public Health Delivery Plan	<p>Public Health Delivery system</p> <p>– VPHEP, THDCIL</p> <ul style="list-style-type: none"> • At VPHEP Complex, a Dispensary is operational with adequate number of beds. • Medical Staff includes Doctor, Nurse, Para medical staff, Dresser etc. • Additional facilities by engaging staff on contractual basis deputed. Ambulance deployed. • The Medical Facilities are extended free of cost among Project Affected people apart from local Population as well. <p>– M/s HCC</p> <ul style="list-style-type: none"> • 01 nos. First Aid Centres operational at each at Power House, TBM and Dam site. • 01 nos. Dispensary located at Swami Vivekanand Hospital, Mayapur, Pipalkoti. • Para Medical Staff & facilities deployed at First Aid Centers. • Ambulance facilities available at Power House, TBM and Dam. • Necessary treatment including required vaccination is being given to labors from time to time.
15	Environmental Monitoring Plan	<p>The monitoring on Environment Parameters (Air/Water/Noise/Effluents/Indoor Air/Emissions from DG Sets/Emissions from Vehicles/Noise from Construction Machinery/Meteorology etc.) to be monitored by the construction contractor. Blasting is being done in a controlled manner and monitoring of the same is being done through the reputed organization <i>Central Institute of Mining and Fuel Research, Roorkee</i>. Various monitoring includes;</p> <p>Monitoring of Air/Water/Noise etc. by contractor: The monitoring being conducted at different time intervals. Report from M/s HCC for Ambient Air, Indoor Air, Drinking water, Effluent water & Noise level monitoring conducted during the period Jan'21 to Mar' 21 has been received and all parameters are found within the permissible limits.</p>

		<p>Monitoring of Incidence of Water Related Diseases: MoU signed with CMO, District Hospital Gopeshwar Chamoli in 2015 for a period of 04 years. Monitoring of water related diseases was carried out and various HIV awareness programs have been organized in affected villages as per MoU through CMO, District Hospital Gopeshwar Chamoli.</p> <p>A Fresh MoU has been signed with CMO, District Hospital Chamoli on 23.05.2020 for further 03 years. Quarterly Monitoring reports upto Mar' 21 have been received.</p> <p>Ecological Monitoring: MoU was signed with Post Graduate College, Gopeshwar for a period of 4 years. Annual Progress Report for the years 2015-16, 2016-17, 2017-18 & 2018-19 has been received. A Fresh MoU has been signed with Post Graduate College, Gopeshwar on 19.05.2020 for further 03 years. Monitoring is under progress.</p> <p>River Water Quality Monitoring: Monitoring is being conducted at regular intervals through M/s PCRI BHEL Haridwar. Last set conducted recently during Oct' 2020, Parameters within permissible limits.</p> <p>Meteorological Monitoring: Automatic Weather Stations (AWS) for Recording of Temperature, Wind Speed & Direction, Humidity & Rainfall has been installed at PH Site/Colony during mid-February 2016. AWS at Dam Site has been installed on 26.04.2016 at HCC Camp, Helang. An AWS dismantled from MJ-JT HEP is proposed to be reinstalled at Siyasain, VPHEP colony campus.</p>
16	ISO 14001 & OHSAS 18001	<ul style="list-style-type: none"> • VPHEP project unit is ISO 9001:2015, ISO 14001:2015 & OHSAS 18001 certified unit.
17	Archaeological Management Plan	<p>As per the EMP, following actions are to be taken, i.e.</p> <ul style="list-style-type: none"> • The Laxmi Narayan Temple at Village Haat is to be preserved through ASI Dehradun. • A 10 Member Committee comprising 8 Members from Village Haat has been constituted by DM, Chamoli and 1st meeting of committee was held on 17.01.2015. • ASI Dehradun was requested vide letters dated 11.02.2016, 01.06.2016, 05.09.2016 and 26.12.2016 for visit and consultancy. • Meanwhile, the ASI team has visited the project on 21.02.2016. It was discussed with ASI team to provide the Action Plan and consent for executing the work. • Thereafter, the ASI team visited the project on 18th March 2017 for site visit and assured that the necessary proposal shall be prepared and submitted very soon. • A preliminary report has been obtained from ASI Dehradun. • A meeting under the chairmanship of District Administration in presence of representative from ASI and The

		<p>World Bank has been conducted between THDCIL and the representatives from Haat village on 23.04.2019 at VPHEP for protection and beautification works of Laxmi Narayan Temple at village Haat. The preliminary report of ASI Dehradun along with further protection plan suggested by The World Bank has also been shared and discussed with the Temple Committee and others during the meeting.</p> <ul style="list-style-type: none">• Drawings as per the suggestions of the World Bank have been issued by Design Department, THDCIL, Rishikesh.• Necessary action has been initiated at various levels of department. <p>Further, Remains of Archaeological importance also need to be preserved or conserved.</p> <ul style="list-style-type: none">• An Archaeological Chance Find Card has also been issued to the contractor to report Chance finds, if any.• No chance finds reported till date. <p>An Archaeological museum is proposed to be opened in the project area for display of Archaeological findings, if any.</p>
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STATUS OF CONDITIONS ON ENVIRONMENT CLEARANCE

SL. NO.	BRIEF DESCRIPTION OF CONDITIONS	STATUS AS ON JUNE' 2021
MoEF&CC LETTER Dated: 22.08.2007		
PART - A: SPECIFIC CONDITIONS		
1.	6202 hectare degraded Catchment Area of high category to be treated. CAT as has been proposed should be completed in three years.	<ul style="list-style-type: none"> • Total Implementation value for CAT is Rs. 47 Crs., the total amount of Rs. 47 Crs stands deposited by THDCIL in CAMPA fund. DFO, Badrinath Forest Division is the Nodal Officer for CAT Plan. DPR for CAT along with micro plans has been approved during December 2017. • Forest Deptt. is executing activities as per approved DPR. An expenditure of Rs. 23.18 Cr (approx.) has been made by Forest Deptt. till June' 2021 under CAT Plan of VPHEP. • Matter was also discussed in the 2nd meeting of Multi-Disciplinary Committee constituted by MoEF&CC, New Delhi under the chairmanship of PCCF-HoFF, GoUK held on 28.02.2020 at Van Bhawan, Dehradun. • In the said meeting, DFO, Badrinath Forest Division (Nodal Officer) appraised that slow progress is due to non-inclusion of activities in the Annual Plan of Operation (APO) by Forest Department. • The Chairman - MDC, PCCF-HoFF, has directed the concerned Forest officials to take all-out efforts to for early completion of these activities. • DFO Badrinath, Nodal Officer has been requested for earliest completion of works under CAT Plan of VPHEP.
2.	346 project affected families are likely to lose their agriculture land. All the PAFs would be compensated as per the rates that would be assessed and decided by the district authorities. Over and above these compensation, the PAFs will be given" land for land" or "Vocation / job" or "financial assistance "in addition to various rehabilitation benefits as per the NRRP - 2003.	<p>Land Compensation as assessed & decided by Land Acquisition Officer is being disbursed through Special Land Acquisition Officer (SLAO) in accordance to the provisions of LA Act. About 94% PAF's have received payment from SLAO.</p> <p>Besides SLAO Payment, Project is extending various other benefits to the Project Affected Families in accordance to the R&R Policy of Project, framed based on NRRP-2007 & considering the World Bank Operational Policy.</p> <p>The Affected Families are getting cash benefits in the form of various Grants.</p>

		Apart from above, Project is complying with the Social Obligation & the details are annexed at Annexure A-1 .
3.	A Monitoring Committee for R & R should be constituted which must include representatives of project - affected persons from SC/ST category and a woman beneficiary.	Monitoring Committee has been constituted by DM, Chamoli; vide Order No. 725/26-MB (2008-09), Dt. 09.11.2009.
4.	All the equipment which are likely to generate high noise levels are to be fully mollified (Noise reduction measures) in view of the proximity of the project to Nanda Devi Biosphere Reserve.	<p>The PUC certificate for the Light, Heavy Vehicles including for hired one and other construction equipment are being undertaken as per prevailing Guidelines, Rules and acts & renewed from time to time.</p> <p>The controlled blasting is being undertaken involving non electric delay detonation technique.</p> <p>Blasting is done during day time at pre-notified time only. Blast pattern & vibration is monitored by Central Institute of Mining and Fuel Research (CIMFR), Roorkee.</p> <p>No blasting is done during night & no disturbance is created for wild life habitat.</p> <p>Monitoring Agencies M/s PCRI-BHEL, Haridwar and M/s Haryana Test House, Panipat recognized by MoEF&CC has been engaged to monitor the Environmental Parameters that includes Noise as well. The monitoring is being conducted at regular intervals as stipulated. The last set of monitoring was conducted through M/s PCRI-BHEL, Haridwar in Oct' 2020 and also monitoring was conducted through M/s Haryana Test House, Panipat by M/s HCC during Mar' 2021. Reports have been received and all parameters are within permissible limit.</p>
5.	Minimum Water Flow of 15.65 Cumecs (Revised by letter dtd. 31.05.2011) should be released downstream during lean season.	MEFR shall be ensured as per latest Gazette Notification dtd. 10.10.2018 of MoWR,RD&GR, GoI.
6.	Consolidation and compilation of the muck should be carried out in the muck dump sites and the dump sites should be above high flood level.	<p>Dumping of muck is being done at designated / identified area & well above the high flood level.</p> <p>Engineering measures such as construction of gabion faced reinforced earth wall with uniaxial geo-grid reinforcement are adopted at dumping site. Benches are being</p>

		<p>developed to discontinue the slopes in dumpyards.</p> <p>Biological measures such as formation of Micro –benches (kyaries), laying of top soil, plantation of vetivar grass, manuring etc. are also being undertaken at site for slope stabilization. Plantation of Vetivar (<i>Chrysopogon Zizanioides</i>) in approx. 10,000 sqm area has been completed till June’ 2021 at DY- 4.</p>
7.	<p>The project area is situated in close proximity to Nanda Devi Bio-Sphere Reserve, the possibility of the endemic flora cannot be ruled out completely. Hence suggested the plantation of those species which come under Rare, Endangered and Threatened (RET) category, if any, should be planted during the implementation of CAT and Compensatory Afforestation Works.</p>	<p>The Implementation of CAT Plan & Compensatory Afforestation are being undertaken by State Forest Department, Uttarakhand.</p> <p>State Forest Department is executing the plantation of appropriate species as per their approved DPR of CAT Plan of VPHEP.</p> <p>Matter was also discussed in the 2nd meeting of Multi-Disciplinary Committee constituted by MoEF&CC, New Delhi under the chairmanship of PCCF-HoFF, GoUK held on 28.02.2020 at Van Bhawan, Dehradun. The Chairman - MDC, PCCF-HoFF, has directed the Nodal Officer, Forest Deptt. to take immediate necessary action and expedite the matter.</p>
8.	<p>Commitment made during public hearing should be fulfilled.</p>	<p>The status towards Commitments made during Public Hearing is annexed as <i>Annexure – A</i>.</p>
<p>PART - B: GENERAL CONDITIONS</p>		
1.	<p>Adequate free fuel arrangement should be made for the labour force engaged in the construction works at project cost so that indiscriminate felling of trees is prevented.</p>	<p>Contractor is running Community mess for its employees & work force.</p> <p>As per contractor report, approx. 9526 nos. Commercial LPG Cylinders have been utilized in the Community Mess up to June’ 2021.</p>
2.	<p>Fuel depot may be opened at the site to provide the fuel (kerosene / wood / LPG). Medical facilities as well as recreational facilities should also be provided to the labors.</p>	<ul style="list-style-type: none"> • Community Kitchen established in Camps for Contractors Employees & Workforce. • 01 nos. First Aid Centres operational at each at Power House, TBM and Dam site. • 01 nos. Dispensary located at Swami Vivekanand Hospital, Mayapur, Pipalkoti. • Para Medical Staff & facilities deployed at First Aid Centers. • Ambulance facilities available at Power House, TBM & Dam area. • Necessary treatment including required vaccination is being given to labors from time to time. • Recreational facilities have been provided at labor camps by the contractor.

3.	All the labourers to be engaged for construction works should be thoroughly examined by health personnel and adequately treated before issuing them work permit.	Pre-Employment Medical checkup is undertaken before induction and issuing Work Permit to the labours. Also, Medical examination & vaccination of workmen is done from time to time. Treatment as & when required is also administered.
4.	Restoration of construction area including dumping site of excavated materials should be ensured by leveling, filling up of burrow pits, landscaping etc. The area should be properly treated with suitable plantation.	Proper re-vegetation provisions exist in EMP and will be ensured after accomplishment of Dumping activity & at appropriate time. Biological measures such as formation of Micro –benches (kyaries), laying of top soil, plantation of vetivar grass, manuring etc. are also being undertaken at site for slope stabilization. Plantation of Vetivar (<i>Chrysopogon Zizanioides</i>) in approx. 10,000 sqm area has been completed till June’ 2021 at DY- 4.
5.	Financial provision should be made in the total budget of the project for implementation of the above suggested safeguard measures.	Budget Provisions of Rupees 76.24 Crores have been earmarked towards implementation of Environment Management Plan (EMP) by Project.
6.	A Multi-Disciplinary Committee should be constituted with representatives from various disciplines of forestry, ecology, wildlife, soil conservation, NGO etc. to oversee the effective implementation of the suggested safeguard measures.	District Magistrate, Chamoli, vide order dated 17.10.2014, constituted the Environment Monitoring Committee under the Chairmanship of Chief Development Officer (CDO), District Chamoli. The 1st Meeting was undertaken on 20.03.2015. The 2nd Meeting of committee was conducted on 22.02.2016. Based on the suggestions of the Additional Director, MoEF&CC R.O. Dehradun (Jan 2017 visit), the Multi Disciplinary Committee has been re-constituted vide MoEF&CC letter no. J-12011/29/2007-IA-1 dated 10.10.2017. The 1st meeting of Multi-Disciplinary Committee under the chairmanship of PCCF-HoFF, GoUK held on 28.07.2018 at Project site. The 2nd meeting of Multi-Disciplinary Committee was held on 28.02.2020 under the chairmanship of PCCF-HOFF, GoUK at Van Bhawan. Dehradun. The Chairman - MDC, PCCF-HoFF, has suggested that Forest Deptt. and THDCIL should jointly work together as a team for successful implementation of EMP.

		The 3 rd meeting of reconstituted MDC was scheduled to be held on 10.07.2021 at VPHEP, Pipalkoti, but due to some unforeseen circumstances PCCF-HoFF has postponed the meeting. Fresh date will be shortly given by PCCF-HoFF for organizing the 3 rd meeting.
7.	Six monthly monitoring reports should be submitted to the Ministry and its Regional Office, Lucknow for review.	Last Six Monthly report was submitted to concerned office vide letter dated 15.01.2021.
OTHER CONDITIONS		
4.	Officials from Regional Office MOEF, Lucknow who would be monitoring the implementation of environmental safeguards should be given full cooperation, facilities and documents / data by the project proponents during their inspection.	Full Logistic supports as and when required will be ensured by Project. a) Dr. S.C. Katiyar, Addl. Director (S), MoEF&CC, North Central Regional Office, Dehradun visited the VPHE Project on 09.01.2017 & 10.01.2017. b) Dr. S. C. Garkoti, Advisor, MoEF&CC, New Delhi along with Dr. S. C. Katiyar, Addl. Director (S), MoEF&CC, North Central Regional Office, Dehradun has visited the VPHEP site on 02.08.2017 & 03.08.2017. c) Dr. S.C. Katiyar, Addl. Director (S), MoEF&CC, North Central Regional Office, Dehradun has visited the VPHE Project on 28.07.2018. d) Sh. Pankaj Agarwal, Addl. PCCF and Dr. S. C. Katiyar, Addl. Director, MoEF&CC, Regional Office, Dehradun has visited the VPHE Project on 11-12 Nov 2018. e) Dr. Krishnendu Mondal, Scientist – C, MoEF&CC, Regional Office, Dehradun has visited the VPHEP Project on 12-13 Oct’ 2020.
5.	The responsibility of implementation of environmental safeguards rests fully with the THDC Ltd. & Government of Uttarakhand.	THDCIL ensures Implementation of environmental safeguards as applicable.
6.	In case of change in the scope of the project, project would require a fresh appraisal.	There is no change in Project Scope.
MoEF&CC LETTER Dated: 25.04.2018		
1.	The project proponent (PP) should ascertain that there shall not be any	Retaining structure of suitable load bearing capacity has been developed at each dumping sites, so that there shall not be any wash off during rainy season.

	<p>wash off during the rainy season beyond the retaining wall, PP should monitor the silt flow at the downstream and upstream of the river during monsoon season. Similarly, PP should provide adequate width having intermittent retaining bunds so that silt is collected at the retaining bunds during rainy season and silt is let out in to the river.</p>	<p>Terraces at dumpyards has been developed and benches are being developed to discontinue the slopes in dumpyards.</p> <p>Also, to control silt wash off Biological measures such as formation of Micro –benches (kyaries), laying of top soil, plantation of vetivar grass, manuring etc. are also being undertaken at site.</p>
2.	<p>The PP should opine that as and when any active dumps/muck disposal sites are getting inactive, intermediate measures like both engineering and biological to be carried–out so that no silt is going into the downstream of the river.</p>	<p>Benches are being developed to discontinue the slopes in dumpyards.</p> <p>Engineering measures such as construction of gabion faced reinforced earth wall with uniaxial geo-grid reinforcement are adopted at dumping site.</p> <p>Biological measures such as formation of Micro –benches (kyaries), laying of top soil, plantation of vetivar grass, manuring etc. are also being undertaken at site for slope stabilization. Plantation of Vetivar (<i>Chrysopogon Zizanioides</i>) in approx. 10,000 sqm area has been completed till June’ 2021 at DY- 4.</p>
3.	<p>The PP should ensure that in case of generation of any top soil, a site exclusively for topsoil dumping and also make commitment that collection of topsoil and prevention of the same be made so that nutrient value of the soil is retained and utilized subsequently at the time of plantation, reclamation of muck dumps, etc.</p>	<p>Necessary provision has been made and same is being complied with. Topsoil generated from different sites, if any is being used for biological stabilization measures at Dumping site.</p>
4.	<p>There should be benching of dumps of appropriate height and stabilization of slopes so that spoils of muck etc. are not created during rainy season. In critical</p>	<p>Benches are being developed to discontinue the slopes in dumpyards. Engineering measures such as construction of gabion faced reinforced earth wall with uniaxial geo-grid reinforcement are adopted at dumping site.</p>

	areas, use of geo-textile along the slopes and provision of garland drains on the toe of dumps are to be provided for better stabilization and biological measures. This has to be strictly adhered to.	
5.	All the terms and conditions of the Environmental Clearance stipulated in Letter J-12011/29/2007-IA.I dated 22.08.2007, 18.01.2008 and 30.11.2011 remains unchanged.	Details of the same are provided above.

ANNEXURE-A

COMMITMENTS OF PROJECT DURING PUBLIC HEARING ON 09.01.2007

S. No	ISSUES RAISED	STATUS AS ON JUNE, 2021
1	Negative impact on Environment due to Project's Activities shall not take place and provisions shall be made as per the standards and approval from competent level shall be obtained.	As per Environmental studies undertaken, no significant impacts have been noticed. However, EMP envisages precautionary measures in order to prevent occurrence of negative impacts and action is being taken accordingly.
2	Geological structures around the project area shall not be affected, In this regard, permission from concerned department shall be taken after Detailed investigations and implementation of recommendations shall be ensured.	<ul style="list-style-type: none">• Work is being undertaken only in areas where approval has been accorded by concerned authorities / agencies.• No Incidence or deviation noticed during Reporting period• Work in project area is done with due precautions such as mechanical excavation, controlled blasting, vibration monitoring etc.
3	Minimum water flow shall be ensured in river Alaknanda in such a way that the aquatic fauna is not adversely affected and also there is no impact on water quality.	MEFR shall be ensured as per latest Gazette Notification dtd. 10.10.2018 of MoWR,RD&GR, GoI.
4	There shall be no negative impact on Area's Forest resources, Flora, Fauna and life style of the people, due to Project's activities. In this regard, proper appropriate measures shall be taken and permission from concerned department shall be taken.	<ul style="list-style-type: none">• Environment Management measures are properly taken care off. Entry of workforce is restricted in forest area.• Contractor is running Community mess for workforce.• Labors camps have been constructed at different locations and in isolation from local villagers. Meanwhile hired accommodation and community mess is being provided by contractor.• Nevertheless awareness programmes are being conducted to safeguard flora and fauna.
5	During all stages of Project, Local people shall be given job opportunities on priority basis.	Based on the requirement, direct & indirect job opportunities are being extended among local people on priority basis at THDCIL & Contractors Level. Employment opportunities includes:

		<ul style="list-style-type: none"> • Direct/Indirect job opportunities in THDCIL & with Contractor • Award of petty Contracts • Hiring of Vehicles • Allocation of Shops <p>Details are indicated at <i>Annexure-A1</i> under Employment.</p>
6	<p>Arrangements as per standards/policy shall be ensured for Project Affected Persons and Complete compensation of the acquired land shall be released to the concerned in time.</p>	<p>Land Compensation as assessed & decided by Land Acquisition Officer is being disbursed through Special Land Acquisition Officer (SLAO) in accordance to the provisions of LA Act. About 94% PAF's have received payment from SLAO.</p> <p>Besides SLAO Payment, Project is extending various other benefits to the Project Affected Families in accordance to the R&R Policy of Project, framed based on NRRP-2007 & considering the World Bank Operational Policy.</p> <p>The Affected Families are getting cash benefits in the form of various Grants.</p> <p>Apart from above, Project is complying with the Social Obligation & the details are as per <i>Annexure-A1</i>.</p>
7	<p>The explosives in construction related activities shall be used only in avoidable situations in minimum required quantity.</p>	<ul style="list-style-type: none"> • Explosive used in avoidable situations only & in minimum quantity. • The controlled blasting is being undertaken involving non electric delay detonation technique • Blasting is done during day time only and at pre-notified time. Blast pattern & vibration is monitored by Central Institute of Mining and Fuel Research (CIMFR), Roorkee.
8	<p>Various facilities developed for the project shall be available for the people of the area and community development works shall be carried out in nearby villages.</p>	<p>Various facilities, awareness programmes etc. under Community Development have been made available for the Project Affected Villages including surrounding villages that comprise of;</p> <p>Construction of Pathways, Waiting shelters, Community buildings, Road widening, Hill side slope protection works, Solar street lights for villages, furniture & sports kits for community, water supply schemes, Teaching aids & furniture to schools, Construction of additional classrooms & toilets, promotion of sports & cultural activities, awareness camps on social & environmental aspects, health camps & awareness camps on HIV</p>

		AIDS, Pulse Polio etc.
9	A Comprehensive Disaster Management Plan shall be prepared for the project and the recommendations of the Plan shall be complied.	A Comprehensive Disaster Management Plan has been prepared.
10	THDC shall ensure the development of Affected villages Forest Rehabilitation, as per directions of Uttarakhand Government and with the help of Local People.	<ul style="list-style-type: none"> • The development activities like construction of pathway, minor water supply schemes etc. under affected villages are being executed through involvement of local people. • A provision of involving local population also exists under CAT plan.
11	Labors and their families, working in the construction works of the Project shall be properly vaccinated.	Medical examination of workforce is done prior to induction and properly vaccinated whenever needed. Medical camps are also organized for labors.
12	The proper development of religious places and Shamshan Ghats nearby the river bank shall be ensured.	The aspect has been covered under Community Development activities at Point No. 8 above.
13	The treatment of sewage generated by the Labors engaged in construction works of the Project shall be ensured by means of Septic Tank and soak pits.	At each camp site; One Community latrine per 20 persons was provided. Each camp is equipped with septic cum soak pits. The effluent is being disposed-off in septic cum soak tanks.
14	In order to provide all necessary Project related information to local people, a Public Information Centre shall be established and completed information shall be provided to the people.	Project has established Public Information Centers (PIC`s) at two locations under Project area. Necessary information related to Technical, Social & Environmental aspects are displayed and are available in PIC`s.
15	Complete details related to the project shall be published through Press and the views /opinions of the people shall properly solve.	<p>Project related information is being published in the local newspapers from time to time.</p> <p>Grievance Redress Mechanism resolves the issues of affected population in accordance to R&R Policy of VPHEP.</p>

ANNEXURE-A1

SOCIAL RESPONSIBILITIES:

CONSTRUCTION OF COMMON PROPERTY RESOURCES:

In addition to the compensation / Grants provided by SLAO/ THDCIL, common property resources like Pathways, Drinking water facility, Street Light, Primary School, Panchayat Ghar, Anganwari Kendra etc has been constructed at self resettlement sites.

LOSS OF FUEL & FODDER:

Each entitled house hold in the affected habitation is being paid 100 days of Minimum Agriculture Wages per year for a period of 5 yrs. On the recommendations of the World Bank, THDCIL has increased disbursement of Fuel & Fodder Grants from 5 years to 8 years. The amount is paid as a grant / assistance towards the loss of fuel and fodder. Around 2700 households are getting benefited through this assistance.

COMMUNITY DEVELOPMENT WORKS:

Under Community development various works have been taken up in the Project affected villages ie; construction of Pathways, Waiting shelters, Community buildings, Road widening, Hill side slope protection works, Solar street lights for villages, furniture & sports kits for community, water supply schemes, Teaching aids & furniture to schools, Construction of additional classrooms & toilets, promotion of sports & cultural activities, awareness camps on social & environmental aspects, health camps & awareness camps on HIV AIDS, Pulse Polio etc.

LIVELIHOOD ACTIVITIES:

Various activities have also been taken up to create livelihood opportunities. These are Dairy Development, Poultry, Tailoring & Stitching, Wool Knitting, Bee Keeping, Mushroom cultivation, vermin composting to promote organic farming, plantation etc. Awareness programs for Project affected people are also organized with the help of various State Govt. Deptts ie; Horticulture, Agriculture, Tourism, Animal Husbandry etc to give awareness on various schemes, subsidies, technical assistance etc to convince local youth to opt for self employed income generation activities. Around 500 beneficiaries are benefited through these programs.

On the recommendations of the World Bank, the work towards “Engagement of Specialized Agency to help Prepare Livelihood Development / Employment Generation Plan & its Implementation in relation to VPHEP” awarded on M/s Mirda Renergy & Development Pvt. Ltd, New Delhi commenced on 03.01.2020. The agency has completed Draft Base line survey/final base line survey & Submitted draft strategy report on 31.03.2021.

VOCATIONAL TRAININGS:

Apart from above, Vocational Trainings in hotel management, Excavator operator, Electrician, Fitter, Refrigerating & Air Conditioning and other skill enhancement activities, etc. are also

undertaken, in coordination with various institutes like GMR Foundation, Dr. Reddy Foundation, and Industrial Training Institutes in nearby areas. Around 300 beneficiaries are benefited through these programs.

EDUCATION:

To promote Education the Project has undertaken various activities ie; Scholarship to Project affected Meritorious/Poor/ Girls students, Construction of additional class rooms & toilets, providing teaching aids & uniform, Assistance for getting admission in ITIs, assistance to schools for cultural activities etc. Around 1400 students having approx. 800 girls have been benefitted through scholarship program of THDCIL till Academic year 2018-19. The above assistance has been kept on hold as the schools are presently closed due to COVID-19 pandemic.

HEALTH:

The project is helping PAPs by facilitating them to THDCILs Dispensaries (Allopathy & Homeopathy) established in the Project Campus. OPD / IPD facility including medicines is given free of cost to PAPs. In addition to this Medical health camps are organized in project affected villages and Ambulance facility is also provided to the needy PAPs free of cost. The Health camps have been immensely beneficial for local population & nearby areas that include people from project affected villages of Project. Approx. 18000 beneficiaries having approx 5000 females have been administered treatment in Allopath and approx. 24600 benefitted in Homeopathy.

1 Hopper Dumper Tipper TATA ACE 1.8 CUM has been handed over to Nagar Panchyat, Pipalkoti, District Chamoli on the 9th June, 2020 through SEWA, THDCIL, Rishikesh under Corporate Social Responsibility (CSR). The vehicle is used for transportation of Garbage to Disposal sites under their control. The Garbage generated at THDCIL, Project Complex, VPHEP is also being addressed by Nagar Panchayat, Pipalkoti.

EMPLOYMENT:

Keeping in view that the Hydro Projects are capital intensive with the State of the Art Technology and therefore do not offer much employment opportunity, particularly in unskilled category, the option of providing job with THDCIL as per policy is not considered as a rehabilitation option. However, as on date around 1118 persons have been provided direct / indirect employment opportunities in Project HCC / THDCIL/ Contractors/ Hiring of vehicles/Lease land for various purposes etc.