

Himachal Pradesh Power Corporation Limited

(A State Govt. Undertaking) Corporate Identity Number (CIN) :- U40101HP2006SGC030591 Sawra Kuddu HEP (111MW), HPPCL, Hatkoti, Tehsil Jubbal, Distt. Shimla H.P.-171206

No: HPPCL/GM-SKHEP/Env/2017-18- 5670-73 Dated :- 08-12-17 To

> Dr. S. C. Katiyar, Scientist 'D'. Govt. of India, Ministry of Environment Forest & Climate Change, Regional Office, Pearson road, FRI campus, Dehradun-248006.

Subject: - Submission of Six Monthly Environment Safeguards Compliance status report for the reporting period 01-04-2017 to 30-09-2017.

Sir,

DA: As Above.

Enclosed please find herewith Six Monthly Environment Safeguards Compliance status report for the reporting period ending 01-04-2017 to 30-09-2017 in respect of Sawra Kuddu HEP(111MW).

This is for your information please.

Yours faithfully,

General Manager,8/12/17 Sawra Kuddu HEP, HPPCL, Hatkoti.

Copy to the following along with enclosure for information please:-

- 1. The Chief Environment Specialist, Himfed Bhawan, HPPCL, Near BCS, New Shimla-9.
- 2. The Dy. General Manager (HRT), Sawra Kuddu HEP, HPPCL, Hatkoti.
- The Sr. Manager(IT), HPPCL, Himfed Bhawan, HPPCL, Near BCS, New Shimla-9 for uploading of report on HPPCL website w.r.t. Chief Environment Specialist office letter No. HPPCL/ESMU-2/IKHEP/Vol-V/2016-1327-32 Dated 22-03-2016. DA: CD containing Soft Copy of Report.

Telephone No.- 01781-239167, 01781-238143, Fax No. 01781-239208 Email Address:- agm.hrt@gail.com, progress.skhep@gmail.com Website Address:-<u>www.hppcl.gov.in</u>



Compliance Status Report of Environment Safeguards

Six monthly Environment Compliance

Reporting Period: w.e.f. 01-04-2017 to 30-09-2017

Submission: -December, 2017.

ADB	Asian Development Bank
AY	Academic Year
Bigha	Unit for measuring land (One Bigha = about 752sqmtr)
Biswa	Unit for measuring land (One Biswa = about 40 sqmtr)
CA	Compensatory Afforestation
CAMPA	Compensatory Afforestation Management and Planning Agency
CAT	Catchment Area Treatment
СВО	Community Based Organization
CES	Chief Environment Specialist
СМО	Chief Medical Officer
CSR	Corporate Social Responsibility
DC	Deputy Commissioner
DFO	Divisional Forest Officer
DGM	Deputy General Manager
distt.	District
DPR	Detailed Project Report
ECR	Environment Compliance Report
EIA	Environment Impact Assessment
EMP	Environment Management Plan
FRL	Full Reservoir Level
GoHP	Government of Himachal Pradesh
GoI	Government of India
HCC	Hindustan Construction Company (Ltd)
HDPE	High-Density Poly-Ethylene
HEP	Hydro-Electric Project
HFL	Highest Flood Level
HoP	Head of Project
HP	Himachal Pradesh
HPCEDIP	Himachal Pradesh Clean Energy Development Investment Programme
HPFD	Himachal Pradesh Forest Department
HPPCL	Himachal Pradesh Power Corporation Limited
HPPWD	Himachal Pradesh Public Works Department
HPSEB	Himachal Pradesh State Electricity Board
HPSFDC	Himachal Pradesh State Forest Development Corporation
ITI	Industrial Training Institute
LADA	Local Area Development Agency
LADC	Local Area Development Committee
LADF	Local Area Development Fund
LWSS	Lift Water Supply Scheme
M	Meter
MM	Mahila Mandal(Women's Group)
MoEF	Ministry of Environment & Forests
Msl	Ministry of Environment & Porests Mean Sea Level
MW	Mean Sea Level Megawatt
NPV	Negawatt Net Present Value
NRRP	National Rehabilitation and Resettlement Plan
PAA	Project Affected Area
PAF	Project Affected Family
Panchayat	Lower most tier (at cluster of village level) of governance in India
Panchayat	Family
PAZ	Project Affected Zone Project Construction Circle
PCC	Project Construction Circle Public Information Office
PIO	Public Information Office

List of abbreviations and colloquial terms used

РНС	Primary Health Centre		
R&R	Resettlement and Rehabilitation		
RoR	Run-of-the-River		
Rs.	Indian Rupees/INR		
SC	Scheduled Caste		
SDM	Sub Divisional Magistrate		
SE	Superintending Engineer		
SPCB	State Pollution Control Board		
Sqkms	Square Kilometer		
SqMtr	Square Meter		
ST	Scheduled Tribe		
XEN	Executive Engineer		

Note:- Issues already settled have been shown underlined and retained in the report for the reference of reader. Also the points on which there has not been any status change have been shown as underlined.

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А	. <u>Environment Safeguards implementation reports</u> (111MW) for the period w.e.f. 01-04-2017 to	
S. No.	Environment Safeguards Conditions	Action Taken/Reply
1.	Component wise Construction Status of the project and Commissioning Schedule.	Attached as annexure-1 (a, b &c).
2.	Physical and financial progress of CAT Works during the reporting period.	Till Now a sum of 6.62 Crore has been deposited with the forest department. Balance funds shall be deposited as and when demanded by forest department. As per information supplied by DFO
		plantation of 42932 no trees have been shown covering the area of 39.03 ha under CAT plan works. Upto date financial progress is Rs. 4,23,58,886/- only.
		The Physical/Financial progress for the quarter ending June'17 & Sept'17 has been received showing financial progress of Rs.0.00 Lacs & Rs2.70 Lacs respectively (Attached as Annexure-2).
3.	Physical and financial progress on implementation of resettlement and rehabilitation Measures.	Attached as annexure-3.
4.	Upto date information on the project in 13 point data sheet (A copy may be downloaded from the website <u>http://nrodmoef.gov.in</u>).	Attached as annexure-4.
5.	Latest monitoring reports in respect of ambient air quality, noise level, ground water quality, biological/ chemical oxygen demand (BOD/COD) and coliform count of surface water, etc., carried out by HPSPCB.	Attached as annexure-5.
б.	Comprehensive physical and financial progress about disbursement of medical facilities to the workers.	Package wise detail of physical and financial progress about disbursement of medical facilities to the workers is attached as annexure-6 .
		Pharmacist with medical aid has been deployed in labour camps by HPPCL and the contracting agencies for regular check-up of the workmen as well as project staff. First aid kits are also provided at all the work sites. Ambulances have been provided at

		every work site for emergency evacuation of the workers, if any. Local Govt. Health centre has been strengthened to provide medical facility to project construction workers. The doctors and local representatives suggested that the laboratory shall be opened at the Primary Health Centre (PHC) at Sawra. These equipments were procured from PMFMC account amounting to Rs.3.0 lacs during the previous reporting period. The procurement of these lab equipments has been done and put to use for general public at primary health centre Sawra.
7.	Upto date detail about the quantum of crate work/ wire crate works/ breast wall etc. at different dumping sites.	In total 1025.50 running meters of retaining walls have been constructed (4927 Cubic meter) to prevent landslides till date (i.e. 30-09-2017). This is a continuous process and wherever need is felt retaining structures are erected to keep the slopes stable. During this reporting period 26 running meters retaining walls has been provided at additional adit road.
8.	Information on the dumping sites which have been fully utilized and now stopped for further dumping. In such cases the rehabilitation work should be completed and the sites should be returned to the Forest Department. Action taken so far in this regard may be intimated.	The excavated muck from excavations is being dumped in designated dumping sites duly compacted and protected by providing stone wire crate walls/retaining walls to prevent its slippage into natural drainage system. Muck has been allowed to be lifted for utilization by other Govt./ Non- Government agencies and there are chances that in near future whole of the muck would get recycled and sites restored to their original shape.
9.	Upto date figures for allocation of funds for different Environment Management Plan along with utilization of funds.	Upto date expenditure detail has been attached as annexure-7 .
10.	Upto date physical and financial progress on afforestation including location area covered by plantation and number of plants planted till date.	Compensatory afforestation over an area of (108.00 + 1.3884+ 0.6944) i.e. 110.08 ha. Compensatory afforestation over 108.0 Ha. area of land was done till year 2007-08. Additional area of 2.088 ha was brought under CA during this quarter ending 31-03- 2014. Till date utilization of Rs.22,46,400/- has been shown by HP forest department. Upto date Rs. 72.87 lacs have been deposited with HP forest department on this account.
11.	Physical and financial progress on fisheries development.	1 st instalment of Rs. 31.0 lacs have been released to HP fisheries Department for providing alternate water supply to

		Dhamwari Trout Farm. Rs. 7.344 Lacs has been utilized upto the year 2009-10 as per the utilization certificate given by Fishery Department. As per the information provided by the department the funds are further allocated to other agency for executing the work. Progress is awaited. As and when more funds would be demanded by Fishery Department, same would be provided.
12.	The information on number of labours engaged by different contractors, quantity of free fuel supplied and expenditure incurred in the following Performa for the period w.e.f. 01-04-2017 to 30-09-2017.	The information is annexed as annexure-8 .
13.	The information on number of labourers medically got checked by different contractors, expenditure incurred on medicines and other medical facilities in the following Performa for the period w.e.f. 01-04-2017 to 30-09-2017.	The information is annexed as annexure-6 .
14.	Detail of social welfare measures and other schemes being run for the locals and project affected people.	The information is annexed as annexure-3 .
15.	Newspaper cutting of the advertisement about environment clearance given in the newspapers.	Insertion in the Newspapers was made as desired. (Annexure-9)
16.	Measures being taken to release at least 15% of water downstream during lean season period.	The discharge shall be monitored/ maintained during the operation phase of the project. The provision of fish ladder has been included in the design of the diversion barrage structures. In addition, an environment flow pipe of dia 600 mm has also been embedded in the structure. Discharge shall be regulated as per norms during operation phase.

B. Environment clearance

Environmental Clearance for Sawra-Kuddu (111 MW) HEP was accorded vide Additional Director GoIMoEF letter No. J-12011/13/2006-IA.I dated 17th May, 2007 (**Annexure 10**).

Compliance status	of conditions	of Environmen	t Clearance is	given in f	he following.
Compliance status	of conditions	of Environmen	Clearance is	given m t	ne tonowing

S.	Stipulations C								liance Status		5.	
<u>No</u>	Part A-S	Speci	fic Co	nditio	ns							
i)		1				-						
	Treatment Measure	Y-I	Y-II	Y-III	Y-IV	Y-V	Total	demanded by forest department.				
	(i) Biologi	col Tr	eatment						physical/financial			-
	Social	60	60	60	60	60 Ha	300		ng June'17 & Sep			
	forestry Fuel	Ha 91	Ha 91	Ha 91	Ha 91	91 Ha	Ha 455	shov	ving financial progr	ess of Rs.	.0.00	& Rs2.70
	wood and fodder grass	На	Ha	Ha	Ha	<i>91</i> 11a	Ha		respectively. Upto 4,23,58,886/- only.	date finan	icial p	progress is
	NTFP	50	50	50	50	50 Ha	250		•			
	Nursery	Ha 2	Ha 	Ha 	Ha		Ha 2	The	summarized detail of	of the phy	sical /	financial
	Devlopem ent	No.					No.		ress from the above D, is as below:-	e progress	rece	ived from
	Pasture Developm	60 Ha	60 Ha	60 Ha	60 Ha	60 Ha	300 Ha			Phy.		Fin.
	ent (ii)Engine	ering '	Freatme	nt				Sr.	Component	Progress during	Uints	Progress
	Wire crates	40	40	40	40	40	200	No.		reporting Qtr.	ts	(Rs.)
	Vegetative Spurs	80	80	80	80	80	400	Ma	intenance of afforestati	1.2		
	Contour	20	20	20	20	20 Ha	100	1	3 rd year maint. of	5	1	9500
	Trenching Bench	На 25	Ha 25	Ha 25	Ha 25	25 Ha	Ha 125	1	afforestation	5	ha	8500
	Terracing	Ha	Ha 100	Ha 100	Ha 10	100	Ha	2	4 th year maint. of	25	ha	42500
	Catch water	100 На	Ha	Ha	0	Ha	500 На		afforestation	25	na	42300
	drains R-wall & Check	97 Ha	97 Ha	97 Ha	Ha 97 Ha	97 Ha	485 Ha	3	5 th year maint. of afforestation	8	ha	13600
	dams							4	4 th year maint. of Timber plantation	80	ha	136000
								5	5 th year maint. of	41	На	69700
									Timber plantation			
									al expenditure during t orting period upto 30.0		2,70,	,300/-
ii)	The lan	nd h	olding	of	proje	ct affe	ected	753	No Main MPAF have	been identi	fied.	
	persons v											
	submitte								er the standard R&R			
	family w		-						of less than 5 bigha	-		
	70% of the total land holding is identified, such family /person shall be treated as fully						less. 31 nos. of p					
		~ 1					•		ition had submitted the ied from the revenue			
	affected person for compensation package applicable in such cases will be undertaken by PVPCL (now HPPCL).						irsed to persons for					
							rtisements were issue					
						letter	s written to local par	nchayats to	intim	ate people		
									ding the policy provi			
									of 45.23 lacs to 1			
								relea	sed so far. Some ne	ew applica	tions	nave been

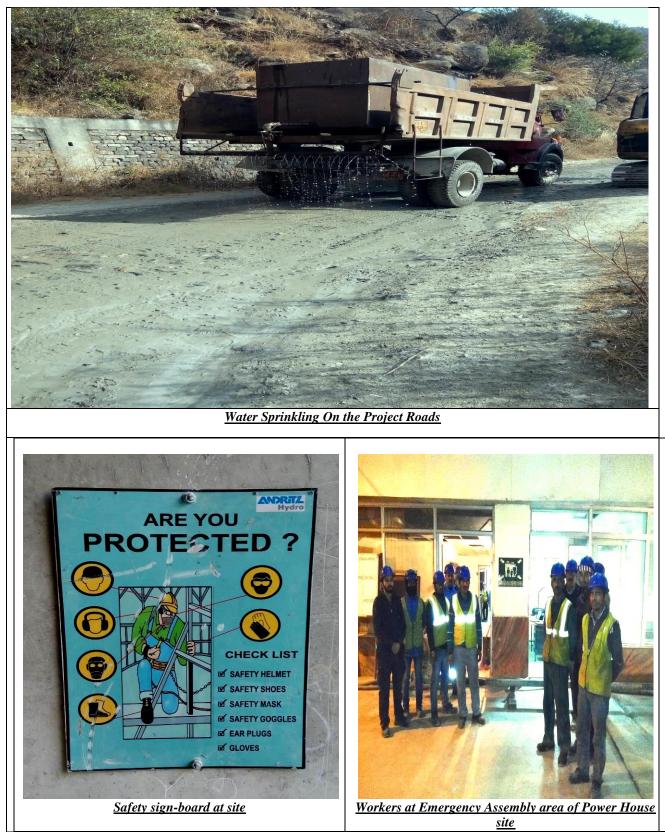
		received which are being processed for verification from revenue department.
iii)	A Monitoring Committee for RR should be constituted which must include representative of project affected person from SC/ST category and a women beneficiary	R&R Plan has been finalised. In the present setup the committee administering the LADF is authorized by GoHP to monitor the progress. It is also competent to look into grievance of the PAFs.
iv)	The Commitment made during the public hearing should be fulfilled	Being fulfilled. Status given separately in this report under the title 'fulfilment of commitments of public hearing' under this Report.
V)	The Biodiversity conservation and management plan as proposed in the EMP shall be followed in Toto.	Mentioned in Environment Clearance but not proposed in EMP. Description of study of flora and fauna is available in EMP. There is no significant wildlife in the area. For aquatic fauna provision of fish ladder has been made in the Barrage. As per policy of the State Govt. 15% discharge of lean season will be ensured in the river at any given time. Since majority of structures are underground hence flora is not getting affected. Hence Biodiversity Plan is not prepared. In any case inspection for poaching of wildlife species is being carried out.
vi)	All the equipments which are likely to generate high noise levels are to be fully mollified (Noise reduction measures).	Being implemented by ensuring proper maintenance of machinery/by creating barriers/enclosures around the stationary machinery/equipment. All moving machineries and equipment are provided with silencers to avoid high noise levels. DG sets with noise suppressing jacketing installed. Timing of crushing plants curtailed as per the requests of local inhabitants.
	Figure 2 and	essing jacketing & installed in Sheds
vii)	muck should be carried out in the muck dump sites and the dump sites should be above high flood level.	The Muck Management Plan as part of the EMP is being implemented and all the muck sites are more than 6 m high above the HFL. The dumped muck is being levelled &compacted simultaneously engineering structures provided for retaining the same. Once the construction activities are completed, the muck dumping areas will be treated with plantation.

2 i)	Part-B- General Condition Adequate free fuel arrangement should be made for the Labour force engaged in the construction work at project cost so that	Muck is also being utilized by other Government/Non-Government agencies and there are chances that in near future whole of the muck would get re-cycled and sites restored to their original shape.
	indiscriminate felling of trees is prevented.	Wood is not being used as fuel for cooking food. Community/common kitchens are being run by contractors where food is cooked for staff and workers. So far, (up-to30-09-2017) 151667Kgs. of LPG, 140109 liters of diesel has been provided to community kitchen / mess at all locations by the contractor. No incident of tree felling for the purpose of fuel wood has been observed.
ii)	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 labourers.	As stated above LPG is being provided in labour camps by the contractors. Pharmacist with medical aids has been put in place in labour camps by all four contracting agencies; First aid kits are provided at all the work sites. • During this reporting period 153 Nos. of workers have been checked and medicines have been disbursed by the contracting agencies to the workers. Two Nos. of ambulances have also been deployed at site. Total expenditure on this account during this reporting period comes out to be Rs.7,26,530/- only. • HPPCL dispensary at Power house site has been made functional and a pharmacist deployed to check labourer and local public.
		 HPPCL Dispensary at Power House site, Snail Ambulances have been provided at every work site for emergency evacuation of workers if any. Local government health centre has been

		<text><text></text></text>
		Ambulance and dispensary Facilities at work site
iii)	All the labourers to be engaged for the construction works should be thoroughly examined by Health personnel and adequately treated before issuing them work permit.	All the Main contractors are directed to follow up instructions regarding Health personnel and adequately treated before issuing them work permit. Periodic medical checks are being done. No occupational diseases have been noticed. The workers working at crushers and batching plants (who are more exposed to dust and cement) are being observed periodically for any occupational diseases. During this reporting period 153 Nos. of workers have been checked and medicines have been disbursed by the contracting agencies to the workers. Two Nos. of ambulances have also been deployed at site. Total expenditure on this account during this reporting period comes out to be Rs.7,26,530/- only.
iv)	Restoration of construction area including dumping site of excavated materials should be ensured by levelling, filling up of burrow pits, landscaping etc. The area should be properly treated with suitable plantation.	Muck in the dumping sites is being levelled & compacted simultaneously with its disposal. Afforestation over the dump sites would be done once the muck dumping is completed. Muck has been allowed to be lifted for utilization by other Government/Non-Government agencies and there are chances that in near future whole of the muck

		would get re-cycled and sites restored to their original shape.
		The muck statement is being submitted to HP pollution control Board regularly.
v)	Financial provision should be made in the total budget of the project for implementation of above suggested safeguard measures.	A provision of Rs 19.36 Crore has been kept for implementation of the EMP which includes the cost of implementation of these safeguards. The costs are in-built and additional costs are being taken in the revised cost estimate of the DPR. However, it is assured by the management that adequate funds for implementation of EMP shall be made available.
		So far (30-09-2017), Rs. 208.9 million have been spent against Rs. 193.583 million i.e. the total cost of implementation of EMP.
vi)	A multidisciplinary committee should be constituted in consultation with the Ministry with ecologists, environmental scientists, Conservationists and experienced administrators etc. to oversee the effective implementation of the suggested safeguard measures.	The committee has already been constituted to oversee the effective implementation of suggested safeguards measures. However, in addition to this the Project Implementation Committee constituted at project level is also looking after the various Environmental aspects.
vii)	Six monthly monitoring reports should be submitted to the Ministry and its Regional Office Dehradun for review.	Report is being submitted on regular basis.
3	Official from Regional office MOEF Chandigarh who would be monitoring the implementation of environmental safeguards should be given full co- operation, facilities and documents/data by the project proponents during their inspection.	HPPCL commits to provide full cooperation and data supply, as and when demanded. Officials of state pollution control board pay regular visits to the project and their suggestions/directions are complied with. All the information sought by regional office is being provided in time bound manner.
4	The responsibility of implementation of environment safeguards rests fully with the PVPCL & Govt. HP.	Agreed and being complied with.
5	In case of change in the scope of the project, project would require a fresh appraisal.	There is no change in scope as per the EIA notification'2006 vide clause 7(ii) as there is no change in project parameters. This situation is also cleared by the MoEFCC vide there affidavit in National Green Tribunal dated 28 th October, 2015.
6	The Ministry reserves the right to add additional safeguard measures subsequently, if found necessary and to take action including revoking of the clearance under the provision of the Environment (protection) Act, 1986 to ensure affective implementation of the suggested safeguard measures in a time bound and satisfactory manner.	Safeguard measures as suggested are being implemented & additional safeguards measures if any suggested subsequently will also be implemented.

7	This clearance letter is valid for a period of five years from the date of issue of this letter for commencement of construction work.	In terms of date, the letter is valid up to for 16.05.2012 for commencement of works. Construction work has already begun with in stipulated date and the MoEF has been intimated in this regard.
8	A Copy of the clearance letter will be marked concerned Panchayat/local NGO's, if any, from who any suggestion/representation has been received while processing the proposal.	Copy of the clearance letter has been sent to concern Panchayats vide letter No. PVPCL/SE/SKCC-DB-SK C.A.T/2007-1301-13 dated 20-07-2007.
9	State Pollution Control Board/ Committee should display a copy of the clearance letter at the Regional Office, District Industry centre and Collectors office/Tehsildar's office for thirty days.	The clearance letter was displayed as stated in this condition.
10	The project proponent should advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned informing that the project has been accorded Environmental Clearance and copies of the clearance letters are available with the state Pollution Control Board/ Committee and may also be seen at the Web site of the Ministry of Environment and Forest at http://www.envfor.nic.in	Insertion in the Newspapers was made as desired.



Some photographic record of Environment Measures.

S. No.	Issues raised	Commitment at the time of consultation/hearing	0
A A	First public hearing	at Hatkoti on dated 15.06.2	2006
1	Water sources in the project area should be inventoried by the project authorities in consultation with the IPH and concerned Gram Panchayats.		Inventory of water sources and house structures along with photographs in the presence of representatives of IPH Department, concerned Pardhan and Project proponent has been completed. In total there are 30 no. of water sources. Periodic monitoring of water resources being carried out in consultation with local representatives. No instance of drying up of any source received/noticed so far.
2	Provision of beautification of Hatkoti temple should be made:	This work can be covered under the LADA funds earmarked by the project proponent.	 The work of Development/ Maintenance work at Hatkoti Mandir has been awarded amounting to Rs. 16.53 lacs on dated 05-03-2010. Additional funds were allocated and work has been completed at the cost of Rs 28.91 lacs. Rs 10.00 lac deposited with HPPWD Jubbal for widening, metalling and tarring of link road to Hateshwari Temple from Sawra—Rohru road during March, 2009. The utilization certificate amounting to Rs 5.00 lac out of Rs 10.00 lacs received from Executive Engineer Jubbal. Work has been completed. Total Rs. 24 lacs have been released for construction of water storage tank on hill for regulating the water supply to temple Complex and for surrounding area. Work has been
3	LADA should comprise local people and nomination of local people should not be on	There is a Provision for nomination of local people in The LADA Committee headed by the Deputy Commissioner.	completed. The body has been nominated by DC Shimla in which local representative are included. Works recommended by Gram Sabha are only covered under LADF.
	political consideration.		
4	Provision should be kept for construction of crematoria.	A provision of Rs. 20 lakh have been kept in CAT Plan and also this aspect can be covered under LADA funds.	Funds have been allocated. Work of construction of crematoria at the bank of Bhishkalti Khad Near HPPCL Colony is completed as intimated by the DFO, Rohru.
5	Employment should be provided to the local people.	Since, Pabbar Valley Power Corporation is a subsidiary of HPSEB, employment by it for the project shall be largely from	Of the total people employed during the reporting period about 64% Himachalis have been deployed.

C. Fulfilment of commitments made in Public Hearing – I & II

		the HPSEB. However, the major private contractors shall be	Month	Himachali	Non- Himachali
		bound by the provisions of	April-17	365	210
		minimum 70% employment as prescribed by the State	May-17	364	213
		prescribed by the State Government.	June-17	363	196
			July-17	363	196
			August-17	103	83
			Sept17	200	90
			Total	1758	988
			have beer PAF&PAA 894.64 Lacs • 41 Nos. P PAA have	n awarded so far amo Persons from	MPAF/PAF/ ployment on
6	Copies of EIA should also be provided to the local Panchayats in project area.	It was appraised that the copies of these documents would remain in the office of SDM, Rohru for public perusal even after the Public hearing.	The same have been distributed in all t affected Panchayats.		
7	Plantation along the roads should be done.	Plantation along the project roads will be provided by the Project proponent. As far as the other roads are concerned, this may be considered under LADA funds.	Of the total road length of 11.50 km plantation along 6.25 km has been carried out So far.		
8	The construction debris and muck produced should be properly managed in the designated dumping sites.	The EIA/EMP has been prepared and total generation of the debris has been duly estimated including the quantities to be reused for construction purpose. The debris shall be properly checked by constructing adequate retaining structures ensuring that the water quality/flow or land is not affected due to disposal of debris.	is being dur dumping site providing wi structures. For dumping sites the muck is b besides at Saw Muck has bee utilization by Government chances that in	mped in the es, well ire crates the purpose have been eing dumped ra College gr en allowed to other Go agencies an n near future get re-cycl	he designated protected by & retaining e five numbers identified and l at these sites ound. b be lifted for vernment/Non- nd there are e whole of the led and sites
9	Social intrusion is apprehended due to migratory labour.	Provision of separate labour camps would be provided during construction phase.	migratory labo	hear the wo	have been ork sites for im distance of from nearest

10	Migratory labour should be provided proper health and educational facilities	Local infrastructure in terms of health & education may be used and provision of its	• PHC Sawra strengthened with the installation of X-Ray Machine purchased by CMO, Shimla for the
	for their children;	strengthening shall be made through LADA funds.	amounting Rs 5.00 lac released by HPPCL.
			• The meeting of PMFMC was held on 04-06-2014. The doctors and local representatives suggested that the
			laboratory shall be opened at the Primary Health Centre (PHC) at Sawra. The procurement and installation of
			these equipments involves 3.0 lacs from PMFMC account. The committee
			approved the demand and procurement of equipments has been done and put to use for general public at primary health centre Sawra.
			• Medical camps are also being organized in the area with the R&R training-cum-awareness camps.
			• Infrastructure of CBSE affiliated School (DAV school) at Sawra
			strengthened by giving one-time financial assistance of Rs 10.00 lac to facilitate assured admission and
			concessional education to ward of Project affected families, PAA & HPPCL staff.
			• 5 rooms have also been provided in HPPCL colony at Chauri (Snail) to run the Primary section of CBSE pattern (branch of DAV Public School). 2200
			Sqm Land has been identified for school Building at Snail.
11	Resettlement&Rehabilitation Plan is notindicated in the report.	No family is getting displaced. However, people affected to some extent shall be	Standard R&R plan has been prepared on dated 19th January'2009 and being implemented.
		compensated as may be determined by the competent	Project specific Resettlement Plan (RP) has already been finalized and the
		authority.	payment of due diligence is under process.
12	Noise pollution from project activities should be controlled.	done during the construction & operation phase of project. More over most operation would	Being implemented by ensuring proper maintenance of machinery/by creating barriers/enclosures around the stationary machinery/equipment. All moving
		underground hence noise at ground level would be minimum.	machineries and equipment are provided with silencers to avoid high noise levels. DG sets with noise suppressing jacketing installed. Timing of crushing plants outsiled as par the requests of local
			curtailed as per the requests of local inhabitants. Two crushers and one batching plant have
			been dismantled due to which the noise as well as air pollution got reduced. The remaining crushers are far away from the populated area.

13	Project activities shall not hamper the smooth flow of traffic on the existing roads;	Major components of the project would on the left bank of river Pabbar where traffic flow is much less than that on the right bank. However, traffic due to Project shall be regulated such that it does not cause public inconvenience.	No such inconvenience noticed, so far. However, if it takes place, regulations of project vehicles and traffic shall be done.
14	Suggestionsfromotherdepartmentsofgovernmentshouldalsobe taken.	-	Report sent to other departments, no comments received till date.
15	Proponent should organize visit of the people from the project areas to another project which has been operational for some time.	Proponent readily agreed to the suggestion.	The project authorities organized visit of local people to Sanjay Jal Vidyut Pariyojana (Sanjay HEP) and Nathpa- Jhakri HPS to have interactions with local people of those affected Projects.
16	Construction circle should be immediately shifted to Hatkoti.	This would be done whenever infrastructure developed/available.	One construction circle has been shifted during April'2009 to Hatkoti & other to Snail (Power House Complex) during May'2009. Now all the offices of project are at Hatkoti and Snail.
17	Natural calamity and land subsidence may occur due to tunnelling;	Project proponent clarified that most work would be underground and hence there would be minimum disturbance at surface. It was apprised that the underground tunnel cavity in fact would attenuate the lateral as well as vertical operations the vent of earth quads thus reducing the damages to the buildings due to the Project would be compensated by the Project proponent. Baseline inventories of houses/other buildings would be prepared to determine the potential damages. In addition, the existing areas prone to land subsidence would need to be strengthened/protected for the safety of project components.	Some complaints have been received from local residents regarding development of cracks in their houses. Committee appointed for assessing the damages by Deputy Commissioner has submitted the report to Sub-Divisional Magistrate, Rohru. Compensation as intimated by administration shall be paid.
18	Horticulture may be affected due to project.	There is no established evidence that project would affect the horticultural produce except for those areas which are acquired for the project for which compensation as determined by the competent authority would be provided.	Complaints of reduction in horticulture production have been received. Requests have been sent to horticulture and agriculture department for formation of committee to look into complaints. D.C. Shimla has been requested to constitute a committee to determine the loss of production of loss of horticulture and

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			agriculture. The issue was discussed in the meeting with DC, where it was found that in the last 3 years, production of apple in the area has increased and any such adverse effect seems not to have occurred. Hence matter was decided to be disposed/ closed.
19	Barrage proposed for the project should also envisage bridge on its top at least for small vehicles.	This is not envisaged in the project design in view of the consideration related to the Project security;	No commitment made; hence, fulfilment not required.
Firs	st public hearing at Si	nail on dated 15.06.2006;	
ISS	UES RAISED AT KU	UDDU NEAR SNAIL VILI	LAGE:
1	Compensation to the project affected people should be adequate & Prompt besides alternative occupation for the land losers.	affected people shall be determined by the competent authority and project proponent is committed to release it	Compensation as decided by the competent authorities being disbursed. As per compensation paid so far, following rates have been applied: -
	the fand losers.	promptly to the Affected people.	S.No.Class of landRate (Rs/bigha)1Agriculture6,17,392.00(Irrigated)22Agriculture3Barren1,21,072.00
			Rs 4578.34 Lacs for the land of 44-87-07
2	Project road should be extended to the Chauri village.	This could be covered under the LADA funds as per priorities to be fixed by the committee to be constituted.	ha paid (up to 30-09-2017). Road shall be extended to Chauri Village.
	SECOND PUBLIC CO	DNSULTATION held on 12.03.200	8 at Hatkoti, Distt. Shimla (H.P)
1	Progress of LADC (Local Area Development Committee)	All the Pradhans of project affected Panchayats have been nominated as member of LADC as per the demand of Panchayat Pardhan in the first meeting. First instalment of Rs. 1.92 Crore has been deposited with chairman. LADC Shimla. Further distribution of this amount to the project affected Panchayats will be done by DC Shimla-cum- Chairman LADC. Project will request the DC Shimla to hold the	 released against total contribution 8,37,79,500/- on account of LADF. Utilization certificate of LADF have been sought from D.C. Shimla which is still awaited. Distribution of fund for development of Panchayats under LADF made by DC Shimla (Rs. 254.12 lacs) including second instalment is as under :-

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		meeting at the earliest. Explanatory Note (added in the proceeding): LADC fund is raised as per HP Hydro Power Project 2006, from the HPPs @ 1.5% of the project cost which is placed at the disposal of the Local Area Development Committee (LADC) headed by the Deputy Commissioner of the district (Administrator of the District) having representatives (Panchayat Pradhan Head of the local unit of	S. No. 1 2 3 4 5 6 7 8	Name of Panchayat Sari Saraswatinagar Mandal Ranvi Kuddu Thana Jhalta Seema Total	Distribution of funds (lac) 42.49 35.05 34.97 37.90 20.77 41.16 41.28 0.50 254.12
		governance) of the Project Affected Panchayats).	still av		
2	Rehabilitation of affected people and RR Plan	R & R (Rehabilitation & Resettlement) Plan was prepared as per the policy of government in force at the time and provisions as per guidelines of the ADB are incorporated, which will be re- submitted to the State Government for approval at the earliest.	of benu 1) Gu a) gi an ref. b) 19 ma c) wa sp Ti 31 ac 2) Er a) c) d) 3) Au Ref ba 4) Ref sa	onsored in differen ll date an Ar ,07,640/- has be count of fees and s nployment given s MPAF, PAF&PA Bonafide H.P:- 70 Outsourced (MPA mount release s.7,90,000/- to 9 N sed organizations.	s under. yment has been / PAF and an Lacs has been ount. unting to Rs to the wards of udents from the IPAF/PAF/PAA nt I.T.I,s of H.P. nount of Rs. en released on scholarships. 50 far:- A:-267No. 55 No. AF): - 41No. d so far Vos. Community mployment &
3	Downstream flow of water from barrage should be 15% where as it has been mentioned as 10% in EIA/EMP report. Why?	The claim was refuted as false and misleading as the downstream discharge from the barrage to be maintained by the project is 15% as per HP Hydro Power Policy and also finds mention in the EIA EMP (paragraph 4.2.1.A and Table-4.2) document.	where is to b installe The pr include barrage be mo operati arrange	he structure has re- arrangement for re- e installed and th ed. rovision of fish l ed in the design of e structures. The onitored/ maintain ion phase of t ement for pase um discharge ha	eleasing the flow e same is being adder has been of the diversion discharge shall ned during the the project & sing of such

			Fish pass has been constructed. In addition to this an environment flow pipe of dia. 600 has also been embedded in the structure. Discharge shall be regulated as per norms during operation stage.
4	Downstream fisherman from Hatkoti to Snail, only one license fisherman has been mentioned in EIA report. Whereas, as per his knowledge there are more 50 fisherman license holder exists in the affected area. Why?	License holder Fisherman prior to notification under Section IV of Land Acquisition Act, will be allowed fishing in the submergence area. Strengthening of the hatchery at Dhamwari (up stream of this project) is already provided for in the EIA EMP document. Deputy Commissioner Shimla has been requested to hold inquiry regarding the alleged licenses issued after the EIA EMP was prepared or after the section 4 notification. Explanatory Note (added in the proceeding): The section 4 of Land Acquisition Act pertains to the notice of intent of the government to acquire land and this presents the notice of project construction.	As Explained and Matter being monitored regularly. Fishing rights shall be transferred in the impoundment to be created due to the project. The inquiry is in progress. As soon as, any progress is noticed, the same will be incorporated in the next safeguards report due. First instalment of Rs. 3.10 million has been released to HP Fisheries Department vide Sub-Divisional officer (C), Rohru letter No. RHU/RDR/2009- 1835 dated 03-09-2009 for development of fisheries. The funds have been allocated to the execution agency by the Director-cum- Warden of Fisheries. The physical and financial progress is awaited.
5	No blasting in the middle of night.	It is assured that blast will not be taken in the midnight particularly after 22:00 hours and before 06:00 hours at least till an appropriate depth is achieved where the impact on the surface is negligible.	As explained the compliance being done. Blasting is being done in delayed & staggered manner. The delay detonator divides total charge to be fired in a round into a number of segmental charges. Very safe and effective blast pattern has been designed which will take care of blasting related problems.
6	Gram Panchayat Mandal, Ranwi, Thana are most effect Panchayats there are slide prone area as per HP Geological report. Why this fact has not been mentioned in the EIA report. What effective measures are being taken to tide over this situation?	Since the project activity is to remain confined to underground and the blasting done with delayed and staggered method, it is not likely to initiate a surface landslide. Moreover, all the necessary safety measures will be taken during the construction of the project, keeping in view geology of area.	As explained all necessary safety measures are being followed as per the requirement & geological condition. Retaining structures have been constructed at vulnerable points such as road cut surfaces and so far till now no instance of land slide has occurred.
7	Dumping should be done in waste land not in irrigated land, why it is so.	Dumping sites for the excavated muck has already been identified, which largely is located on barren land but smaller land holdings situate in between or adjacent to muck dumping sites have been included for safety. Some agricultural patches were	Dumping of muck is being done in the already identified and approved sites.

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		inevitable.				
8	Irrigation of left out land in Bharot Chak, Management should reply whether the irrigation is provided to left out land what is alternative.	Damaged kuhl (irrigation channel) has been restored by the Project. In future also irrigation facilities to the remaining land shall be made available, if damaged due to project construction.	HPPCL will commitment i Since last rest has been notic	t has given i oration no fu	n this regard.	
9	According to policy of Govt. of HP 70% employment should be given to local people.	Of the total period	od about 649 loyed.	% Himachalis		
	Give detail how much people employed from	being executed required skilled workers which are not available	Month	Himachali	Non- Himachali	
	7 No. Panchayat of	locally. Besides, local people do	April-17	365	210	
	trans Pabbar area.	not want to work on underground components for various reasons	May-17	364	213	
		including risk to life. A list of	June-17	363	196	
		local people employed in project would be made available at the	July-17	363	196	
		project office and also to the SDM	Aug17	103	83	
		Rohru.	Sept17	200	90	
			Total	1758	988	
			numbers of petty contracts ha awarded to PAA/PAZ/PAFs with contract value of Rs 894.64 Lacs In the project 09 No. of vehicl been hired by HPPCL from loca and additionally 37 No. of vehicl been hired by contracting firm local people.			
10	Since start of this project. How many times the grievances of Public have been listened.	There was public hearing on dated 15.06.2006. The R & R plan office has been opened to hear the problem of public and to bridge the gap between Public and Project Management. The name, contact details etc. are being notified by the Project Management.	The R&R offi Hatkoti to be the PAF/ PAA grievances by HPPCL.	etter commu A public and	nication with redressed of	
11	Under LADC Sawra Kuddu Panchayat is being offered Rs. 40 lacs on which ground, where tunnel is passing only Rs. 8-9 lacs are being offered to those Panchayats?	All the Panchayat Pradhans have been nominated as Member of LADC and funds are and will be allocated by the LADC in consultation with the nominated member of Project Affected Panchayats.	A distribution by the HPPCI disputes. Rece distribution m and PAZ and various works & Power No. 05-10-2011. T dispute in futu	to address t ntly the GoH ethod with r within PAA vide Depart MPP-F(10)-2 hus, there sha	hese kinds of P notified the atio for PAA A as also for ment of MPP 24/2011 dated	

12	The fund issued against CAT plan is being spent in Rohru area.	First instalment of Rs. 50.00 lac of CAT (Catchment Area Treatment) Plan deposited by HPPCL is with Compensatory Afforestation Management and Planning Authority (CAMPA) of Govt. of India. The requirement of the fund has been sent by the Forest Department to release the payment for implementation of CAT Plan. The CAT plan as the name implies is meant for the catchment and not only the project affected area. Normally the area draining is taken for treatment under CAT Plan. However, in this case, the same has been extended down to TRT (Tail Race Tunnel) outlet to	In view of explanation given in the hearing (at the time of second consultation) no further action on this issue is required.
13	The X-Ray machine should be given to PHC. Sawra Kuddu instead of construction of Ghat. The Mobile Health Van hired by HPPCL should be kept at the disposal of doctor of PHC (Primary Health Center).	give benefit to the project affected areas as well. Matter will be reviewed, before initiating any action in consultation with project affected Panchayats.	A sum of Rs 5.00 lac deposited with CMO Shimla for purchase & installation of X-ray plant in PHC Sawra and X-ray plant has been installed at PHC Sawra. The meeting of PMFMC was held on 04-06-2014. The doctors and locals representatives suggested that the laboratory shall be opened at the Primary Health Center (PHC) at Sawra. The procurement and installation of these equipments involves 3.0 lacs from PMFMC account. The committee approved the demand and procurement of equipments has been done and put to use for general public at primary health centre Sawra.
14	When the R & R plan will be started and house should be prepared for houseless families.	R & R Plan was prepared as per the policy of the government and has now been revised to align with the guidelines of the ADB, which will be re-submitted to the state government for approval.	The R & R plan prepared and approved by State Govt. vide letter No. Rev (PC) A (10)-7/2008 dated Shimla-2, the 19 th January, 2009 and the same is being implemented. Project specific Resettlement Plan (RP) has already been finalized and the payment of due diligence is under process. In all, only one (01) person became houseless. Full & final compensation of Rs. 22,62,460/- against the land and structure has already been paid. Houseless grant amounting to Rs. 6,68,750/- Lacs has been released on dated 03-08-2015.

15	Height of barrages has been shown as 9.20 meters instead of 13.50 meters as shown in the web site. Why so contradiction?	The height of barrage has been reduced to minimize submergence (including private cultivated land) and it is now 9.2 meters above riverbed level with a total height of about 13 meters	The height of Barrage varies at different sections depending upon the river bed profile, however FRL remains unchanged.		
16	The total Panchayat in EIA and EMP report are 12, why it is now 8 Panchayat.	Change in the scope of the project reduced the number of affected Panchayats as reflected in the EIA EMP.	These are as per actual.		
17	No land looser is in the LADC committee	Constitution of LADC is as per the HP Hydro Power Policy 2006 and it is constituted by the Deputy Commissioner concerned. In this exercise the Project Proponent has no say. However, all Panchayat Pradhans of project affected Panchayats are the member of LADC in case of Sawra Kuddu HEP.	The committee for LADC Constituted by DC Shimla and due representation has been given to Pardhans of affected Panchayats. However, there is no provision to give representation to each land loser in the LADC.		
18	What is the policy for land looser who has left only 2.5 Bigha and what programme for them, the land should be given in addition to compensation, so that horticulture can be boosted.	It is partly addressed at 8 (iv) above and people left with less than 5 Bighas of land would be declared landless provision for which is covered under R&R plan	As per R & R plan, the losers of land are being given Rs. 75,000/- to 2,50,000/- as resettlement grant in addition to land compensation depending upon the quantum of land left after acquisition of land. As per the standard R&R policy people with left out land of less than 5 bigha (0.38 Hec.) are treated as land less. 31 nos. of people coming under this definition had submitted the affidavits which were got verified from the revenue department and grants disbursed to persons found eligible. Subsequently advertisements were issued in newspapers and also letters written to local panchayats to intimate people regarding the policy provisions. The payments to the tune of 45.23 lacs to 189 Nos. MPAF has been released so far. Some new applications have been received which are being processed for verification from revenue department.		

COMPONENT WISE CONSTRUCTION STATUS OF THE PROJECT

Name of component :-

Head Race Tunnel

S. No.	Name of sub	Total	Executed	Status of sub	Remarks
	component	Length	Length	component on %age	
	•	(m)	(m)	basis up to 30-09-2017.	
1	Face-0	173.95			Completion schedule- Dec'2018
	Excavation		173.95	100%	
	Overt Lining		144.4	83%	
	Invert Lining		142	82%	
2	Face-1	2191.789			
	Excavation		2191.789	100%	
	Overt Lining		0	0%	
	Invert Lining		0	0%	
3	face-2	2191.789			
	Excavation		2191.789	100%	
	Overt Lining		0	0%	
	Invert Lining		0	0%]
4	Face-3	905.62]
	Excavation		905.62	100%]
	Overt Lining		870.223	96%	
	Invert Lining		869.623	96%	
5	Face-4	905.62			
	Excavation		905.62	100%	
	Overt Lining		900.677	99%	
	Invert Lining		884	98%	
6	Face-5	2182			
	Excavation		2182	100%	
	Overt Lining		2177	100%	
	Invert Lining		1703	78%	
7	Face-6	1936.178			
	Excavation		1936.178	100%	
	Overt Lining		1934	100%	
	Invert Lining		1921.18	99%	
8	Face-7	877.79			
	Excavation		877.79		
	Overt Lining		872.8		
	Invert Lining		860.8	98%	
Α	Total Length	11365			
	Excavation		11364.74	100.00%	
	Overt Lining		6899.1	60.71%	
	Invert Lining		6380.603	56%	
В	Balance Length				
	Excavation		0	0.00%	
	Overt Lining		4466		
	Invert Lining		4984	43.86%	

Annexure-1(b)

COMPONENT WISE CONSTRUCTION STATUS OF THE PROJECT

Name of component :-

Diversion Barrage, Intake & Desanding chamber(DBID)

S. No.	Name of sub component	Estimated (Cu	-	Executed Quar 30-09-20 (Cum	017	Balance ((Cu	-	%age ex	cecuted	Completion Schedule
		Excavation	Concrete	Excavation	Concrete	Excavation	Concrete	Excavation	Concrete	
1	Barrage	196236	123447	196236	123146	0	301	100	99.76	
2	Power Intake	19452	16348	19452					103.71	
3	Desanding Arragement	329887	74325	329887		ded due to ac 0			99.51	Likely date of <u>completion is June-</u> 2018, except some
4	Misc. Works	0	8000	0	6270.67	0	1729.33	-	78.38	balance misc.
	Total	545575	222120	545575	220329.7	0	1790.33	100.00	99.19	
5	HM Works	100)%	92%		89	6	92	.%	

Annexure-1(C)

COMPONENT WISE CONSTRUCTION STATUS OF THE PROJECT

Name of component :-

Power House complex

S. No.	Name of sub component	Status of sub component on %age basis up to 30-09-2017	Remarks
1	Surge Shaft		Only minor fininshing works of
	Excavation	100%	power house are balance.
	Lining	100%	
2	Pressure Shaft		
	Excavation	100%	
	Backfill	100%	
3	Power House Cavern		
a)	Control Block-1 & service bays		
	Excavation	100%	
	Concrete	100%	
b)	Unit bays & Control block-II		
	Excavation	100%	
	Concrete	100%	
4	Transformer Hall i/c Bus Ducts		
	Excavation	100%	
	Concrete	100%	
5	TRT		
	Excavation	100%	
	Lining	100%	
6	САТ		
	Excavation	100%	
	Concrete	100%	
7	Pot Head Yard		
	Excavation	100%	
	Concrete	100%	

Annexure-2 No. CAT & CA/2016-17 8688. H P Forest Department. From: Chief Conservator of Forests, Shimla Forest Circle, Shimla. To: Chief Environment Specialist, HP Power Corporation Ltd. Himfed Building, BCS, New Shimla-9. 30/10/2172 Dated: Shimla-2, the Subject: Quarterly Progress report of CAT Plans for the quarter ending 30.06.2017- regarding. Memo: Kindly refer to your office memo. No. HPPCL/ESMU-2/Sawra Kuddu HEP/ Vol-III/201719254-57 dated 23.10.2017 on the subject cited above. DGM-A The quarterly progress report of Sawra Kuddu, HEP CAT Plan for the E. A. Inter ending 30.06.2017 for the year 2017-18 under CAMPA funds may be treated as nil. The progress D.B. report for the quarter ending 30.09.2017 in respect of Shimla Forest Circle is enclosed for favour of R.R information please. Encl: As above. Chief Conservator of Forests, Day (b. 633 Shimla Forest Circle, Shimla. 311117 to study theorem, Envir /2012-18-4311 re'a/wite enclosers is forwarded to De Ren Hother for information of Sr. Mars paction please. Sr. Mars O/o Genera

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	3	Fodder Plantation
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Chief Conservation Forests, Correst Circle, Shimla

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Physical & Financial Progress of Resettlement and Rehabilitation measures

1 <u>LADF:-</u>

In LADF, the total contribution amounting to Rs. 8,37,79,500/- has already been released for the construction Phase.

- 2 <u>ITI Training:-</u> Total 88 students have been sponsored till date (out of which 5 dropped) and Rs. 31,07,640/- released on account of fee & scholarship to ITI students upto 30-09-2017
- 3 Training & Awareness camps:
 - i) School competition:- Total 19 Nos. School Competitions were organized and expense of Rs.1,86,997/- incurred upto 30-09-2017.
 - ii) Awareness camps:- Total 28 Nos. of awareness camps were organized upto30-09-2017 and expense of Rs. 10,66,508/-only.
 - iii) CBO Camps: 47 Nos. of Camps were organized upto the end of reporting period with expenditure of Rs. 7,90,000/- only.

4 Other benefits of the R&R schemes:-

- i) **Scholarship:-** First installment of the session 2016-2017 was released in Dec.,2016. Till 30.09.2017 scholarship to 220 Nos. students has been released amounting to Rs. 19,96,800/-only. During this reporting period no scholership has been released.
- ii) **Sports tournament:-** 11 Nos Sports tournaments organized up to 30-09-2017, the expenditure incurred Rs.3,12,605/-.
- iii) CBO Scheme:- 7,40,000/- released to selected 9 No. of CBOs upto 30-09-2017.
- iv) R&R Grant:- Total Rs.2,50,81,77/- R&R Grant was given to MPAF's.
- v) Medical Fund Scheme:- upto the end of this reporting period Rs. 19,93,544/- was released on account of disbursement of medicine, purchase of medical equipments and reimbursement of medical bills (Medical Assistance) to MPAF under this scheme.

Annexure-4

Ministry of Environment, Forest and Climate Change North Central Regional Office Dehradun DATA SHEET

		ATA SHEET
1.	Project Type:	Hydro Electric Project
2.	Name of the Project:	Sawra Kuddu Hydro Electric Project(111 MW) V.P.O. Hatkoti, Tehsil Jubbal, Distt. Shimla(HP)-171206.
3.	Clearance letter (s)/ O.M No.& dates:	Forest Clearance 1. F.No.8-42/2005/2005-FC dated 02-06-2006. 2. F.No.8-42/2005/2005-FC dated 20-01-2010. 3. F.No.8-42/2005/2005-FC dated 10-01-2013. Environment Clearance 1. 1. J-2011/13/2006-IA.I Dated 17-05-2007.
4.	Location: a) District (s) b) State (s) c) Latitudes/longitudes	Shimla Himachal Pradesh Longitude 77.45.00 to 77.49.00 East Latitude 31.07.54 to 31.03.30 North
5.	Address for correspondence: a) Address of Concerned Project Chief Engineer (with Pin Code/ Tel No./Telex/FaxNo./ E.Mail address)	General Manager, Sawra Kuddu Hydro Electric Project(111 MW) V.P.O. Hatkoti, Tehsil Jubbal, Distt. Shimla(HP)-171206. Phone No. 01781-239205. Fax No. 01781-239208. Email ID- progress.skhep@gmail.com
6.	Salient features: a) of the project	As Per <u>Annexure-5(A)</u> Attached.
	b) of the environmental management plans	 Construction of Sewage Treatment Plant Solid Waste collection and disposal system Sewage Disposal for labour Camp Cost of substitution of fuel wood for work force Muck Management and Rehabilitation of Disposal Sites Mining Area Rehabilitation including maintenance for 7 years Compensatory afforestation including maintenance for 7 years Health Delivery System Control of Air Pollution Environmental Measures in Project's transport line Noise Control Measures Sustenance and Development of Fisheries including O&M Greenbelt Development Management of dust from transport activities Road side Plantation Cost of implementing CAT plan i/e maintenance for 7 years. NPV paid to ameliorate environment Impact mitigation on cultural sites Cost of Environment Monitoring Programme

7.	Breakup of the project area	Fores	st Land	54.1425 Ha	
		Pvt.]	Land	Aggri. Land- 29.2073 Ha Pasture & Other-15.3969 Ha Bani Land-0.2056 Ha Total- 44.8098 Ha	
		Total	l	98.9523 Ha	
8.	Breakup of project affected population		Project affected affected fami	d families-753 Nos. lies - 58 Nos.	
9.	Financial details: a) Project cost as originally planned and subsequent revised estimates and the year of price reference.	Revise		48.00Crore.(2003 Price Level) 65.10 Crore(2013 Price Level) EMP ·-	
	b) Allocations made for environmental management plans	S. No.		Item	Cost (Million)
	with item wise and year wise break	1	Construction	of Sewage Treatment Plant	2.4
	up.	2	Solid Waste System	collection and disposal	2.34
		3		oosal for labour Camp	1.5
		4	Cost of subst	titution of fuel wood for work	1.58
		5	Muck Manag Disposal Site	gement and Rehabilitation of es	33.74
		6	Mining Area maintenance	Rehabilitation including for 7 years	4.03
		7	Compensator maintenance	ry afforestation including for 7 years	4.265
		8	Health Deliv		1.2
		9	Control of A		1.5
		10	transport line		1
		11	Noise Contro		0.2
		12	including O&		13
		13	Greenbelt De	- -	1.3
		14	activities	t of dust from transport	2
		15	Road side Pl		2 73.108
		16	maintenance	ementing CAT plan i/e for 7 years	
		17		ameliorate environment	36.715
		18 19		ation on cultural sites ronment Monitoring	0.3 7.182
		19	Programme	ronnent Monitoring	1.162
		20	O&M cost		4.223
			Total		193.583
	c) Benefit cost ratio/Internal Rate of Return and the year of assessment.	As Per	r annexure-5	5(B) Attached.	

	d) Whether (c) includes the cost of	Yes
	environmental management as	
	shown in b) above.	
	e) Actual expenditure incurred on the	Rs.115919.03Lacs.
	project so far.	
	f) Actual expenditure incurred on the	Rs. 1999.53 Lacs.
	environmental management plans so	
	far :	
10.	Forest land requirement :	54.2514 hectare
11.	The status of clear felling in non-	Not applicable
	forest areas	
12.	Status of construction :	
	a) Date of commencement	10-10-2007(Actual)
	(actual and/or planned)	
	b) Date of completion (actual and/or	October-2017 (Planned)
	planned)	
13.	Reasons for the delay if the project is	Not applicable, project has already been commenced.
	yet to start:	
14.	Dates of site visits	
	a. Date of previous site visit:	Yet not Visited.
	b. Date of present site visit:	Yet not Visited.

SALIENT FEATURES

LOCATION:

State	:		Himachal Pradesh
District		:	Shimla
River		:	Pabbar
Dam site		:	Hatkoti Village
Power house site		:	Snail Village

PK Weir

RESERVOIR:

Maximum reservoir level (MRL)	:	1422.80m
Fullreservoir level (FRL)	:	1417.95m
Minimum draw down Level (MDD)	:	1413 .70m
Gross Storage		113Ham
Live storage	:	53Ha-m
Dead storage	:	60Ha –m

Diversion Barrage

Туре	:	Barrage
Max. Height	:	19.50 m
Top Elevation	:	1424.00m

SPILLWAY

Туре	:	Gated &PK Weir
Design Flood :6880cumecs		
Crest Elevation	:	1404.50m
Energy Dissipater Gate	:	Stilling Basin +stepped spillway
		5Nos (8.20mx6.30m each)

PK weir	:	110.40m	
Water Way Width	:	162.9m(52.50m under sluices+110.4m)	
		PK weir.	

POWER INTAKE STRUCTURE

Design Discharge:	:	66.87 Cumecs
Туре	:	Side intake
Crest Elevation	:	1410.70 m
Over all crest length	:	46.90m
Gate sill level	:	1406.50m

DESANDING ARRANGEMENT

DESAN				
i)	Feeder system	:		Three (Box Type) feede conduits 3x3m each .
(I)	Main Chambers:-			
Туре			:	Modified hopper
Nos			:	Three
Size o	of each chamber		:	94X17.60) x11.60 (depth above hopper Level)
Limiti	ing Particle Size		:	0.25 mm
(iii) Flush	ing System		:	Three 1.30 dia .each flushing pipes laid in reverse slope
HRT				
Length		:		11365 m
Size		:		Dia.5m,D-Shaped
SURGE	SAFT			
Dia.(Finis	shed)	:		14.00m
Depth -		:		76.640m
Orifice D	ia-	:		2.10m
POWE	R HOUSE			
Installed		•		111 MW
	& number	:		37 MW, 3 units
Type of N		:		Francis (Vertical Axis)
Gross He		:		205.36m
Net Hea	d	:		184.50m
Main Acc	ess Tunnel	:		Dia-7.50m,D-Shaped, 239.00m Long
Machine	Hall	:		58m x 14m x 39.20m
Erection/	transport Bay	:		18m x 14m x 20.00m, Underground
Control E	Bay	:		14m x 14m x 20m, Underground
Pot Head	l Yard	:		45m x 25m
Cable Tu	nnel	:		Dia. 5.50m, D-Shaped, 277m Long
Pressure	shaft	:		Main Dia. 4.00m, 304.732m Long
				Branch dia. 3.00m, 16.025m Long

Tail Race Tunnel

Transformer hall caver

73m x 14m x 22.5m

Branch Dia. 2.30m, 93.238m long

Dia. 5.00m, D-Shaped, 384m Long

TAIL RACE SURGE TANK

Dia.	:	7m
Туре	:	Restricted Orifice Type
Dia. of Orifice	:	2.70m

:

:

Annexure-4 (B)

Benefit analysis (to be enclosed)

The extendation of the economic analysis are based on net present value (NPV). The principal is to consider that the value of money charge with time due to the interest rate. This means, instance at 10% interest with 100 INR today as the same value as 110 INR. When using instance and expenditure during a certain period are re-calculated to discounted to a certain income and expenditure during are added up and the balance become the NPV. The state considered profitable if the NPV is positive at the given interest rate.

4

Internal rate of nation (IRR) is the interest rate that gives a NPV equal to zero. Benefit/cost (RC) is defined as NPV of total income divided with NPV of total costs.

Cost of energy is defined as the required average price per Kwh. Where the net present value endances the net present value of income at a given discount rate (BR).

The following criteria have been used in the economic calculation

A wall discount rate of 9% is excluded.

i) A price level of December, 1995 and no extra cost for interest for interest during

Ho cost value of the plant or major equipment has been considered in the calculation.

Calculation of basis condition :-

The cost of energy used are for base power summer and winter 1.25 INR/Kwh and for proceeder summer and winter 2.58 INR/Kwh. The total project cost are calculated 557.19 (mrss (excluding Transmission cost) in the price level of December, 1995. A total capacity of 1965, W will require capital investment of Rs.0.39 lacs/Kw. The annual cost of operation to be internance are calculated to be Ra.557 lacs

		DISCOUN	<u>rs</u>
	7%	9%	11%
PNVminimum total cost -	t 290.64	+120.67	21.86
NPV Cost of energy INR/Kuth	0.96	1.20	1.47

The internal rate of return is calculated to 12.2% and the benefit /cost rate to be 1.37.

Role of energy for base power is 1.25 and for peak power 2.5 INR/Kwh. yields a positive NPV are on discount rate up to 12.2 % equal to the internal rate of return - The calculation so the cost for energy to be 1.20 INR/Kwh and benefit (cost rate of 1.37 at 9% discount rates.

The cost of energy in this case means that using an average rate of energy of 1.20 INK/Kwh balances the total cost during the operating life of the project using a discount rate

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Supphil



Sample ID:47601 - Analysis Completion:03/11/2017

Power generation plant [except Wind and Solar renewable power plants of all capacities and Mini Hydel power plant of capacity <25MW] / LAB Inward : 13205 **TEST REPORT**

Test Report No. : 13205	Date: 03/11/2017
1. Name of the Customer	: Sawra Kuddu H.E.P. (111 Mw) - 11241
2. Address	: -,H.P.Power Corporation Ltd.,Sawra kuddu Const. Circle
	Hatkoti-171206, Taluka : Rohru, District : Shimla, GIDC : Not in any SIDC
3. Nature of Sample	: PRJ-Project, (Insp Type : PAR-Party Sample)
4. Sample Collected By	: Abhay Gupta,JEE
5. Quantity of Sample Received	:
6. Code No. of the Sample	: 47601
7. Date & Time of Collection & Inwarding	: 16/09/2017 , (1440 to 1445) & 19/09/2017
8. Date of Start & Completion of Analysis	: 19/09/2017 & 03/11/2017
9. Sampling Point	: GROUND WATER SOURCE AT COLONY HATKOTI ~`
10. Flow Details (Remarks)	:
11. Mode of Disposal	:
12. Ultimate Receiving Body	: river
13. Temperature on Collection	: & pH Range on pH Strip :
14. Carboys Nos for	: M1 & Color & Appearance :
15. Water Consumption & W.W.G (KLPD)	: Ind :0.000 , Dom :9.000 & Ind :0.000 , Dom :7.200

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	Suspended Solids	-	-	-	3.0 mg/l
2	Chloride	-	-	-	16.49 mg/l
3	COD	-	-	-	28.0 mg/l
4	Iron	-	-	-	0.10 mg/l
5	pН	-	-	-	7.38

Laboratory Remarks : Study Sample By:94-pcb_94 Dt.: 03/11/2017

Sanjeev Sharma, SSO

emp monitoring Field Observation :

- 1. * These parameters are covered under the scope of NABL.
- 2. The results refer only to the tested samples and applicable parameters. Endorsement of products is neither inferred nor implied.
- 3. Samples will be destroyed after 10 days from the date of issue of test report unless otherwise specified.
- 4. This report is not to be reproduced wholly or in part or used in any advertising media without the permission of the Board in writing.
- 5. The Board is not responsible for the authenticity for the samples not collected by the Board's officials.
- 6. Total liability of our laboratory is limited to the invoiced amount. Any dispute arising out of this report is subject to Himachal Pradesh Jurisdiction only.
- 7. Permissible Limits: as per Schedule VI of EPA Rules, 1986 as ammended by Second and Third ammendment 1993 for Effluents



14. Carboys Nos for

5 pH

Sample ID:47602 - Analysis Completion:03/11/2017

Power generation plant [except Wind and Solar renewable power plants of all capacities and Mini Hydel power plant of capacity <25MW] / LAB Inward : 13206 TEST REPORT

Test Report No. : 13206	Date: 03/11/2017
1. Name of the Customer	: Sawra Kuddu H.E.P. (111 Mw) - 11241
2. Address	: -,H.P.Power Corporation Ltd.,Sawra kuddu Const. Circle
	Hatkoti-171206, Taluka : Rohru, District : Shimla, GIDC : Not in any SIDC
3. Nature of Sample	: WAT-Water Act(Legal), (Insp Type : PAR-Party Sample)
4. Sample Collected By	: Abhay Gupta,JEE
5. Quantity of Sample Received	:
6. Code No. of the Sample	: 47602
7. Date & Time of Collection & Inwarding	: 16/09/2017, (1430 to 1435) & 19/09/2017
8. Date of Start & Completion of Analysis	: 19/09/2017 & 03/11/2017
9. Sampling Point	: FINAL OUTLET OF STP ~`
10. Flow Details (Remarks)	:
11. Mode of Disposal	:
12. Ultimate Receiving Body	: river
13. Temperature on Collection	: & pH Range on pH Strip :

15.	Water Consumption & W.W.G (KLPD)	: Ind :0.	000, Dom :9.000 & Ind :0.000	Dom :7.200	
Sr	Parameter	Unit	Test Method	Range of Testing	
1	Suspended Solids	-	-	-	1
2	Biochemical Oxygen Demand (BOD)	-		-	
3	COD	-	-	-	6
4	Oil and Grease	-	-	-	(

: M2 & Color & Appearance :

Laboratory Remarks : Study Sample By:94-pcb_94 Dt.: 03/11/2017

Sanjeev Sharma, SSO

Result 10.0 mg/l 12.0 mg/l 68.0 mg/l 0.64 mg/l

7.16

Field Observation : stp was in operation

- 1. $^{\star}\,$ These parameters are covered under the scope of NABL.
- 2. The results refer only to the tested samples and applicable parameters. Endorsement of products is neither inferred nor implied.
- 3. Samples will be destroyed after 10 days from the date of issue of test report unless otherwise specified.
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- 5. The Board is not responsible for the authenticity for the samples not collected by the Board's officials.
- 6. Total liability of our laboratory is limited to the invoiced amount. Any dispute arising out of this report is subject to Himachal Pradesh Jurisdiction only.
- 7. Permissible Limits: as per Schedule VI of EPA Rules, 1986 as ammended by Second and Third ammendment 1993 for Effluents



Sample ID:47598 - Analysis Completion:06/11/2017

Power generation plant [except Wind and Solar renewable power plants of all capacities and Mini Hydel power plant of capacity <25MW] / LAB Inward : 13207 **TEST REPORT**

Date: 06/11/2017

1. Name of the Customer: Sawra Kuddu H.E.P. (111 Mw) - 112412. Address: -,H.P.Power Corporation Ltd.,Sawra kuddu Const. Circle Hatkoti-171206, Taluka : Rohru, District : Shimla, GIDC : Not in any SIDC3. Nature of Sample: PRJ-Project, (Insp Type : PAR-Party Sample)
Hatkoti-171206, Taluka : Rohru, District : Shimla, GIDC : Not in any SIDC
3 Nature of Sample · PRI_Project (Insp. Type · PAR_Party Sample)
s. mature of sample . This is the second s
4. Sample Collected By : Abhay Gupta, JEE
5. Quantity of Sample Received :
6. Code No. of the Sample : 47598
7. Date & Time of Collection & Inwarding : 16/09/2017 , (1400 to 1402) & 19/09/2017
8. Date of Start & Completion of Analysis : 19/09/2017 & 06/11/2017
9. Sampling Point : 500 m U/s of barrage ~`
10. Flow Details (Remarks) :
11. Mode of Disposal :
12. Ultimate Receiving Body : river
13. Temperature on Collection: & pH Range on pH Strip :
14. Carboys Nos for : A1 & Color & Appearance :
15. Water Consumption & W.W.G (KLPD) : Ind :0.000 , Dom :9.000 & Ind :0.000 , Dom :7.200

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	Suspended Solids	-	-	-	10.0 mg/l
2	Conductivity	-	-	-	96.8 us
3	Turbidity	-	-	-	1 NTU
4	Alkalinity	-	-	-	82.0 mg/l
5	Biochemical Oxygen Demand (BOD)	-		-	0.8 mg/l
6	Boron	-	-	-	0.08 mg/l
7	Calcium	-	-	-	20.82 mg/l
8	Chloride	-	-	-	22.49 mg/l
9	COD	-	-	-	16.0 mg/l
10	Fluoride	-	-	-	0.16 mg/l
11	Hardness (Total)		-	-	66.0 mg/l
12	Iron	-	-	-	NR
13	Magnesium	-	-	-	3.40 mg/l
14	рН	-	-	-	7.51
15	Phosphate (Total)	-	-	-	0.16 mg/l
16	Sulphate	-	-	-	10.0 mg/l

Laboratory Remarks : study sample By:94-pcb_94 Dt.: 06/11/2017

Sanjeev Sharma, SSO

emp monitoring Field Observation :

- 1. * These parameters are covered under the scope of NABL.
- 2. The results refer only to the tested samples and applicable parameters. Endorsement of products is neither inferred nor implied.
- 3. Samples will be destroyed after 10 days from the date of issue of test report unless otherwise specified.
- 4. This report is not to be reproduced wholly or in part or used in any advertising media without the permission of the Board in writing.
- 5. The Board is not responsible for the authenticity for the samples not collected by the Board's officials.
- 6. Total liability of our laboratory is limited to the invoiced amount. Any dispute arising out of this report is subject to Himachal Pradesh Jurisdiction only.
- 7. Permissible Limits: as per Schedule VI of EPA Rules, 1986 as ammended by Second and Third ammendment 1993 for Effluents



Test Report No. : 13208

Sample ID:47599 - Analysis Completion:06/11/2017

Power generation plant [except Wind and Solar renewable power plants of all capacities and Mini Hydel power plant of capacity <25MW] / LAB Inward : 13208 TEST REPORT

Date: 06/11/2017

1. Name of the Customer	: Sawra Kuddu H.E.P. (111 Mw) - 11241
2. Address	: -,H.P.Power Corporation Ltd.,Sawra kuddu Const. Circle
	Hatkoti-171206, Taluka : Rohru, District : Shimla, GIDC : Not in any SIDC
3. Nature of Sample	: PRJ-Project, (Insp Type : PAR-Party Sample)
4. Sample Collected By	: Abhay Gupta,JEE
5. Quantity of Sample Received	:
6. Code No. of the Sample	: 47599
7. Date & Time of Collection & Inwarding	: 16/09/2017, (1410 to 1412) & 19/09/2017
8. Date of Start & Completion of Analysis	: 19/09/2017 & 06/11/2017
9. Sampling Point	: At diversion Stucture ~`
10. Flow Details (Remarks)	:
11. Mode of Disposal	:
12. Ultimate Receiving Body	: river
13. Temperature on Collection	: & pH Range on pH Strip :
14. Carboys Nos for	: A2 & Color & Appearance :
15. Water Consumption & W.W.G (KLPD)	: Ind :0.000 , Dom :9.000 & Ind :0.000 , Dom :7.200

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	Suspended Solids	-	-	-	54.0 mg/l
2	Conductivity	-	-	-	156.6 us
3	Turbidity	-	-	-	4 NTU
4	Alkalinity	-	-	-	160.0 mg/l
5	Biochemical Oxygen Demand (BOD)	-		-	0.6 mg/l
6	Boron	-	-	-	0.10 mg/l
7	Calcium	-	-	-	21.61 mg/l
8	Chloride	-	-	-	31.68 mg/l
9	COD	-	-	-	12.0 mg/l
10	Fluoride	-	-	-	0.172 mg/l
11	Hardness (Total)		-	-	70.0 mg/l
12	Iron	-	-	-	ND
13	Magnesium	-	-	-	3.88 mg/l
14	pH	-	-	-	7.62
15	Phosphate (Total)	-	-	-	0.103 mg/l
16	Sulphate	-	-	-	12.0 mg/l

Laboratory Remarks : Read NR in place of ND in the result of Iron By:94-pcb_94 Dt.: 06/11/2017

Sanjeev Sharma, SSO

Field Observation : emp monitoring

- 1. $^{\star}\,$ These parameters are covered under the scope of NABL.
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- 5. The Board is not responsible for the authenticity for the samples not collected by the Board's officials.
- 6. Total liability of our laboratory is limited to the invoiced amount. Any dispute arising out of this report is subject to Himachal Pradesh Jurisdiction only.
- 7. Permissible Limits: as per Schedule VI of EPA Rules, 1986 as ammended by Second and Third ammendment 1993 for Effluents



Test Report No. : 13209

Sample ID:47600 - Analysis Completion:06/11/2017

Power generation plant [except Wind and Solar renewable power plants of all capacities and Mini Hydel power plant of capacity <25MW] / LAB Inward : 13209 TEST REPORT

Date: 06/11/2017

1. Name of the Customer	: Sawra Kuddu H.E.P. (111 Mw) - 11241
2. Address	: -,H.P.Power Corporation Ltd.,Sawra kuddu Const. Circle
	Hatkoti-171206, Taluka : Rohru, District : Shimla, GIDC : Not in any SIDC
3. Nature of Sample	: PRJ-Project, (Insp Type : PAR-Party Sample)
4. Sample Collected By	: Abhay Gupta,JEE
5. Quantity of Sample Received	:
6. Code No. of the Sample	: 47600
7. Date & Time of Collection & Inwarding	: 16/09/2017, (1415 to 1417) & 19/09/2017
8. Date of Start & Completion of Analysis	: 19/09/2017 & 06/11/2017
9. Sampling Point	: D/s Barrage ~`
10. Flow Details (Remarks)	:
11. Mode of Disposal	:
12. Ultimate Receiving Body	: river
13. Temperature on Collection	: & pH Range on pH Strip :
14. Carboys Nos for	: A3 & Color & Appearance :
15. Water Consumption & W.W.G (KLPD)	: Ind :0.000 , Dom :9.000 & Ind :0.000 , Dom :7.200

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	Suspended Solids	-	-	-	65.0 mg/l
2	Conductivity	-	-	-	100.1 us
3	Turbidity	-	-	-	14.0 mg/l
4	Alkalinity	-	-	-	120.0 mg/l
5	Biochemical Oxygen Demand (BOD)	-		-	2.4 mg/l
6	Boron	-	-	-	0.14 mg/l
7	Calcium	-	-	-	17.21 mg/l
8	Chloride	-	-	-	11.0 mg/l
9	COD	-	-	-	32.0 mg/l
10	Fluoride	-	-	-	0.155 mg/l
11	Hardness (Total)		-	-	52.0 mg/l
12	Iron	-	-	-	NR
13	Magnesium	-	-	-	2.19 mg/l
14	рН	-	-	-	7.57
15	Phosphate (Total)	-	-	-	0.52 mg/l
16	Sulphate	-	-	-	18.0 mg/l

Laboratory Remarks : study sample By:94-pcb_94 Dt.: 06/11/2017

Sanjeev Sharma, SSO

Field Observation : emp monitoring

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- 7. Permissible Limits: as per Schedule VI of EPA Rules, 1986 as ammended by Second and Third ammendment 1993 for Effluents

Detail of No. of Labourers medically checked up by different Contractors, expenditure incurred on medicines and other medical facilities provided during the reporting period.

S. No.	Year/ period	No. of Labourers medically checked up by M/s HCC Ltd. (Package-HRT)	Expenditure incurred on providing medicine (in Rs.)	No. of Labourers medically checked up by M/s Patel Engg. Ltd. (Package-DBID)	Expenditure incurred on providing medicine (in Rs.)	No. of Labourers medically checked up by M/s Patel Engg. Ltd. (Package-P/House)	Expenditure incurred on providing medicine (in Rs.)	Total No. of Workers Checked	Total Expenditure incurred on providing medicines (in Rs.)	Remarks
1	Apr-17	23	53,000.00	5	2,755.00	0	0	28	55,755.00	
2	May-17	24	56,000.00	5	2,755.00	0	0	29	58,755.00	
3	Jun-17		59,000.00	5	2,755.00		0	29	61,755.00	
4	Jul-17		36,923.00	5	2,755.00	0	0	21	39,678.00	
5	Aug-17		36,923.00	5	2,755.00	0	0	21	39,678.00	
6	Sep-17		46,154.00	5	2,755.00		0	25	48,909.00	
	Total	123	2,88,000.00	30	16,530.00	0	0	153	3,04,530.00	

Allocation of funds for different Environment Management Plan along with utilization of funds

S. No.	Description of Items	Allocation of funds (In Lacs)	Utilization of funds Upto Sept- 2017 (In lacs)	Remarks
1	Construction of Sewage Treatment Plant	24.00	58.60	
2	Solid Waste collection and disposal system	23.40	45.32	
3	Sewage Disposal for labour Camp	15.00	59.33	
4	Cost of substitution of fuel wood for work force	15.80	123.88	
5	Muck Management and Rehabilitation of Disposal Sites	337.40	344.91	
6	Mining Area Rehabilitation including maintenance for 7 years	40.30	0.00	
7	Compensatory afforestation including maintenance for 7 years	42.65	73.00	
8	Health Delivery System	12.00	65.45	
9	Control of Air Pollution	15.00	23.62	
10	Environmental Measures in Project's transport line	10.00	9.78	
11	Noise Control Measures	2.00	4.71	
12	Sustenance and Development of Fisheries including O&M	130.00	31.00	
13	Greenbelt Development	13.00	6.06	
14	Management of dust from transport activities	20.00	61.88	
15	Road side Plantation	20.00	12.56	
16	Cost of implementing CAT plan i/e maintenance for 7 years.	731.08	662.00	
17	NPV paid to ameliorate environment	367.15	374.42	
18	impact mitigation on cultural sites	3.00	28.91	
19	Cost of Environment Monitoring Programme	71.82	99.94	
20	O&M cost	42.23	4.23	
	Total	1935.83	2089.60	

Detail of No. of Labour engaged by the different Contractors, quantity of free fuel supplied and expenditure incurred during the reporting period

		No. of Labour engaged contract wise				Quantum o	ntum of fuel supplied or subsidy provided				Financial Expenditure incurred (in Rs.)				
S. No.	Year/ period	HRT	DBID	Power House	Diesel For	RT LPG (Cylinder)	DE Diesel For Burner (Ltrs.)	BID LPG (Cylinder)	Power Diesel For Burner (Ltrs.)	r House LPG (Cylinder)	HRT	DBID	Power House	Total	Remarks
1	Apr-17	350	25	0	1400	105	204	12	0	0	199038	28049	0	227087	
2	May-17	346	25	0	1300	103	204	12	0	0	273071	28049	0	301120	
3	Jun-17	342	20	0	1300	100	204	11	0	0	273071	26662	0	299733	
4	Jul-17	260	25	0	1239	99	215	10	0	0	202173	25163	0	227336	
5	Aug-17	259	20	0	1170	95	215	10	0	0	182878	25163	0	208041	
6	Sep-17	214	25	0	1110	91	215	10	0	0	184818	25164	0	209982	
									Grand Tota	1	1315049	158250	0	1473299	

Annexure-09

तार :

Telegram : PARYAVARAN, NEW DELHI

दरगाय : Telephone : & Fax 2436 2827 देलेग्स : Telex : W-68186 DOE IN FAX : 4360878

> भारत सरमार पर्यावरण एवं गण मंत्रालय GOVERNMENT OF INDIA MINISTRY OF ENVIRONMENT & PORESTS पर्यावरण भवग, ती. जी. जो. कॉल्पलेन्स म्वावरण भवग, ती. जी. जो. कॉल्पलेन्स FARYAVARAN BHAVAN, C.G.O. COMFLEX लोवी रोड, नई विल्ली-110003 LODHI ROAD, NEW DELHI-110003

> > Dated : 17th May, 2007

No. J-12011/13/2006-IA.I

Shri. A. K. Awasthi Managing Director, M/s Pabbaer Valley Power Corporation Ltd. Khalini Shimla – 171 002 Himachal Pradesh

Sub: Sawra-Kuddu Hydroelectric Power Project -111 MW (3 x 37 MW) in Himachal Pradesh – Environmental Clearance regarding.

Sir,

,)

This has reference to your letters No.PVPC-MD-SK-Environment/2006-1362 dated 5.10.2006 and 15.3.2007 on the above subject.

The above referred proposal was considered by the Expert Committee for River Valley & Hydroelectric projects at its meeting held on 21-22 February, 2007 and reconsidered on 21-22 March, 2007. the proposal envisages construction of a 9 m high diversion barrage from river bed level across river Pabbar for generating 111 MW hydropower. The power house will be underground. located in Rohru/Jubbal Tehsil of District Shimla of Himachal Pradesh. The project is located about 30 kms upstream of Hatkoti at Tehsil Jubbal of District Shimla to generate 111 MVV hydropower and is a run of the river project. The total land requirement for the project is about 97.62 ha out of which 53.21 ha is a forest land. A total of 24 families are likely to be affected. The height of the barrage is 9 mts which will submerge 50 ha. The total estimated cost is about Rs.648 Crores and the project is to be completed in 52 months.

2. The Ministry of Environment and Forests hereby accords environmental clearance as per the provisions of Environmental Impact Assessment Notification, 1994 & 2006 subject to strict compliance of the terms and conditions as follows:

Part A: Specific Conditions

i) Catchment Area Treatment Plan as has been proposed should be completed in three years. The plan is given below: Page 48 of 55

Treatment Measures	Year-I	Year-II	Year-III	Year-IV	Year-V	Total	
(I) Biological Treatment	1	· · · ·	1	1			
Social Forestry	60 ha	60 ha	60 ha	60 ha	60 ha	300 ha	
Fuel wood and fodder grass	91 ha	91 ha	91 ha	91 ha	91 ha	455 ha	
NTFP	50 ha	50 ha	50 ha	50 ha	50 ha	250 ha	
Nursery development	2 No.	-	-		gate	2 No	
Pasture Development	60 ha	60 ha	60 ha	60 ha	60 ha	300 ha	
(II) Engineering Treatm	ent		4	1			
Wire crates	40	40	40	40	40	200 No	
Vegetative spurs	80	80	80	80	80.	400 No	
Contour trenching	20 ha	20 ha	20 ha	20 ha	20 ha	.100 ha	
Bench terracing	25 ha	25 ha	25 ha	25 ha	25 ha	125 ha	
Catch-water drains	100 ha	100 ha	100 ha	100 ha	100 ha	500 ha	
R/W & Check dams	97 ha	97 ha	97 ha	97 ha	97 ha	485 ha	

ii) The land holding of project affected persons whose land is being acquired to be submitted to this Ministry. If any person/family whose acquired land is more than 70% of the total land holding is identified, such family/person shall be treated as fully affected person for compensation package applicable in such cases will be undertaken by PVPCL.

- 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.
- iv) The commitment made during the public hearing should be fulfilled.

v) The Biodiversity Conservation & Management plan as proposed in the EMP shall be followed in toto.

vii) All the equipment which are likely to-generate high noise levels are to be fully mollified (noise reduction measures)

viii) 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

Part-B: General Conditions

- Adequate free fuel arrangement should be made for the labour force engaged in the construction work at project cost so that indiscriminate felling of trees is prevented.
- (ii) 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 labourers.
- (iii) All the labourers to be engaged for construction works should be thoroughly 11/13 examined by health personnel and adequately treated before issuing them work permit. Page 49 of 55

(iv) 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.

-3-

- (v) Financial provision should be made in the total budget of the project for implementation of the above suggested safeguard measures.
- (vi) A Multidisciplinary committee should be constituted in consultation with the Ministry, with ecologists, environmental scientists, conservationists and experienced administrators etc to oversee the effective implementation of the suggested safeguard measures.
- (vii) Six monthly monitoring reports should be submitted to the Ministry and its Regional Office, Chandigarh for review.

3. Officials from Regional Office MOEF, Chandigarh 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.

4. The responsibility of implementation of environmental safeguards rests fully with the PVVC, Ltd & Government of Himachal Pradesh.

5. In case of change in the scope of the project, project would require a fresh appraisal.

6. The Ministry reserves the right to add additional safeguard measures subsequently, if found necessary and to take action including revoking of the clearance under the provisions of the Environment (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time- bound and satisfactory manner.

7. This clearance letter is valid for a period of five years from the date of issue of this letter for commencement of construction work.

8 A copy of the clearance letter will be marked to concerned Panchayat / local NGO, if any, from whom any suggestion/ representation has been received while processing the proposal.

9 State Pollution Control Board / Committee should display a copy of the clearance letter at the Regional Office, District Industries Center and Collector's office/ Tehsildar's office for 30 days.

10. The project proponent should advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned informing that the project has been accorded environmental clearance and copies of clearance letters are available with the State Pollution Control Board / Committee and may also be seen at Website of the Ministry of Environment and Forests at http:// www.envfor.nic.in

(Dr. S. Bhowmik) Additional Director 12/13

Copy to:

- 1. The Secretary, Ministry of Power, Shram Shakti, Bhawan, Rafi Marg, New Delhi-
- 2. The Adviser (Power), Planning Commission, Yojna Bhawan, New Deihi 110001.
- 3. The Secretary, Department of Environment, Government of Himachal Pradesh
- 4. The Chief Engineer, Project Appraisal Directorate, Central Electricity Authority, Sewa Bhawan, R.K. Puram, New Delhi-110066.
- 5. The Regional Office, Ministry of Environment & Forests, Chandigarh
- 6. Member Secretary State Pollution Control Board , Government of Himachal Pradesh,
- 7. El- Division, Ministry of Environment & Forests, New Delhi-110003. 8. Guard file.

(Dr. S. Bhowmik) Additional Director

PABBAR VALLEY POWER CORPORATION LIMITED No PVPCL/SE/SKCC-DB-SK C.A.T./2007- 1661-62 Dated: 19-7-07 To

The Public Relation Officer, HPSEB, Shimla-4.

Subject:-

Publication of Advertisement.

Please find enclosed horewith the advertisement (Environment Clearance) to be published in the daily newspaper in English (The Tribune Chandigarh edition) & in Hindi (Amar Ujala Chandigarh edition) in one insertion in respect of Sawra-Kuddu HEP on or before 21-07-2007

The bill in duplicate for advertisement charges along with tear sheet of the said advertisement may be sent to this office for payment please.

Thanking You

Yours faithfully,

Superintending Engineer, Sawra-Kuddu Construction Circle, PVPCL Rohru 171207.

CC

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The Managing Director, PVPCL, Khalini- Shimla-2 for information please.

(Environment

SAWRA KUDDU HYDRO ELECTRIC PROJECT (3x37 MW) ENVIRONMENTALCLEARANCE

The Sawra Kuddu Hydro Electric Project (3x37MW) being executed by Pabbar Valley Power Corporation Limited (a company promoted by HPSEB) has been accorded Environmental clearance by the Ministry of Environment and Forest (GOI) as per the provisions of "Environmental Impact Assessment Notification", 1994 & 2006 on dated 17th May, 2007.

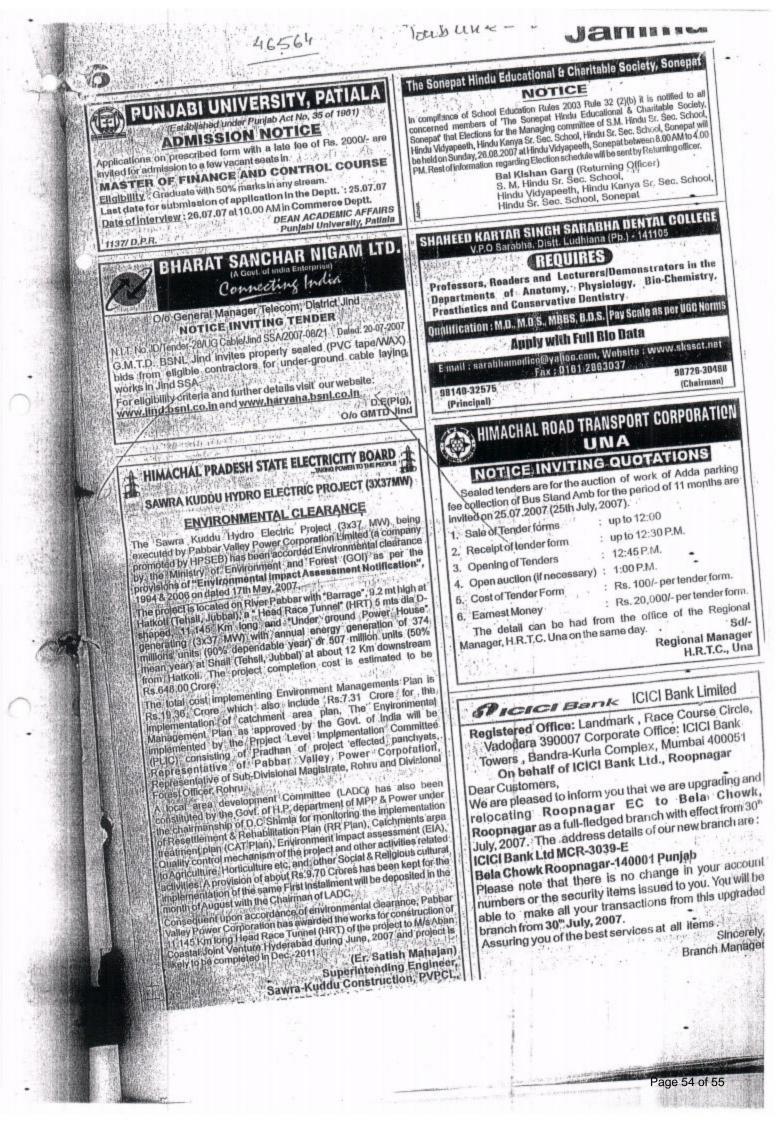
The project is located on River Pabbar with "Barrage", 9.2 mt high at Hatkoti (Tehsil, Jubbal), a "Head Race Tunnel" (HRT) 5mts dia D-shaped, 11.145 Km long and "Under ground Power House" generating (3x37 MW) with annual energy generation of 374 millions units (90% dependable year) or 507 million units (50% mean year) at Snail (Tehsil, Jubbal) at about 12Km, downstream from Hatkoti. The project completion cost is estimated to be Rs. 648.00 Crorp.

The total cost implementing Environment Managements Plan is Rs. 19.36 Crore which also include Rs. 7.31 Crore for the implementation of catchment area plan. The Environmental Management Plan as approved by the Govt. of India will be implemented by the Project level Implementation Committee (PLIC) consisting of Pradhan of project effected panchyats, Representative of Pabbar Valley Power Corporation, Representative of Sub-Divisional Magistrate, Rohru and Divisional Forest Officer, Rohrues A local area development Committee has also been constituted by the Govt of H.P

department of MPP & Power under-the chairmanship of D.C Shimla for monitoring the implementation of Resettlement & Rehabilitation Plan (RR plan), Catchments area treatment plan (CAT plan), Environment impact assessment (EIA), Quality control mechanism of the project and other activities related to Agriculture, Horticulture etc, and other Social & Religious cultural activities . A provision of about Rs 9.70 Crores has been kept for the implementation of the same First installment will be deposited in the month of August with the Chairman of LADC.

Consequent upon accordance of environmental clearance, Pabbar Valley Power Corporation has awarded the works for construction of 11.145km long Head Race Tunnel (HRT) of the project to M/s Aban Coastal Joint Venture Hyderabad during June ;2007and project is likely to be completed in Dec-2011 .

144 (Er. Satish .Mahajan) Superintending Engineer, Sawra-Kuddu Construction PVPCL Rohru.-171207 (Shimla) Tel; 01781240067



म वप प्रत	पत्र कार्यकारी आभियता, विद्युत मण्डल संख्या 2, पठा 2, पठा में मार्य के सम्मुख त्येक के भुगतान पर प्राप्त किया जा सकता है। नियिदा इस कार्यालय में कार्य के सम्मुख [णित विधि को अपराह 3.30 यजे तक प्राप्त को आएगी और उसी विधि को उन निवदादाताओं अयवा उनके अधिकृत प्रतिनिधियों को उपस्थिति में खोली आएगी, जो उस नुवदादाताओं अयवा उनके अधिकृत प्रतिनिधियों को उपस्थिति में खोली आएगी, जो उस नुवदादाताओं अयवा उनके अधिकृत प्रतिनिधियों को उपस्थिति में खोली आएगी, जो उस चुन			ताई तक नामाकन मरा जा सनगम सुट में शिर्मिल करने की गांकन पत्रों की जांच होगी और एक अगस्त नाम पसी की अंतिम तारीख होगी। 8 अगस्त शाम को ही बावी परिणाम आ जाएंगे। अमृतसर में 65, पटियाला वावी परिणाम आ जाएंगे। अमृतसर में 65, पटियाला रात्वार्य को स्वास्थ्य सरकार ने किस है। नाव-हीना है।
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	"जैसे हे जहां है के आधार पर" केडम बसों/वाहनों/मोटर पार्ट्स/टायर/ट्यूब्स/ बटरी, प्रयुक्त तेल, खाली डूम, एल्युमीनियम और आयरन स्क्रैप आदि तथा टाटा-			ि जन्म के संसंधित से संसंधित प्राय गासिताधुरा तथा अन्य सामाजम दून जनान
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	क्र सं.	डिपू का नाम	तिथि	- कार्यारशन न परियाजन का History Coastal Joint Venture Hyderabad को सौंपा है व जून, 2007 के दौरान M/S Aban Coastal Joint Venture Hyderabad को सौंपा है व परियोजना का कार्य दिसम्बर-2011 में पूरा होने की संभावना है।
	31.15	चेडीगद	31.07.2007 को प्रात: 11.00 सजे	(આખ, સલાશ નહાગ
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Page 55 of 55