



Environmental Monitoring Report

Project Number: 41627-043
May 2018

Period: January 2017 – March 2017

IND: MFF - Himachal Pradesh Clean Energy Development Investment Program - Tranche 3

Submitted by

Himachal Pradesh Power Corporation Limited, Shimla

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Asian Development Bank



***SAINJ
HYDRO ELECTRIC PROJECT
(100 MW)***

Environmental Monitoring Report
(First Quarter (Q1) Report 2017)

List of abbreviations and colloquial terms used

ADB	Asian Development Bank
AY	Academic Year
Bigha	Unit for measuring land (One Bigha = about 800 sq mtr)
Biswa	Unit for measuring land (One Biswa = about 40 sq mtr)
CA	Compensatory Afforestation
CAMPA	Compensatory Afforestation Management and Planning Agency
CAT	Catchment Area Treatment
CBO	Community Based Organization
CES	Chief Environment Specialist
CMO	Chief Medical Officer
CSR	Corporate Social Responsibility
DC	Deputy Commissioner
DFO	Divisional Forest Officer
DGM	Deputy General Manager
distt.	District
DPR	Detailed Project Report
EIA	Environment Impact Assessment
EMP	Environment Management Plan
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
MoEF	Ministry of Environment & Forests
MW	Megawatt
NPV	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
Parivar	Family
PAZ	Project Affected Zone
PCC	Project Construction Circle
PHC	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
Sq kms	Square Kilometer
Sq Mtr	Square Meter
ST	Scheduled Tribe

INDEX

S.N.	CONTENT	PAGE
	Name of Project & Other Details	1-5
1	Status of Implementation of Environment Management Plan	6-21
2	Annexures	
	EMR-I	18
	EMR-II	19

SAINJ (100MW) HYDRO-ELECTRIC PROJECT
ENVIRONMENT SAFEGUARDING AND MANAGEMENT REPORT

The Sainj (100 MW) Hydro-Electric Project is being funded by the Asian Development Bank, which is covered under HPCEDIP Tranche-3.

I	Name of Project	Sainj Hydro Electric Project (100 MW)
II	Name of Monitoring/Reporting Agency and address	Internal Monitoring report of HPPCL, General Manager, Sainj Hydroelectric Project, HPPCL, Sarabai (Bhuntar), Distt. Kullu (H.P)-175125
III	Monitoring Period (season/month)	Jan to March, 2017
IV	Report No.	HPPCL-ESMU-Sainj-Env.Comp.Rprt-2017/1
V	Report for the period	01.01.17 to 31.03.17
VI	Date of reporting	18.09.2017.

1. Status of Implementation of Environment Management Plan

The abstract of various provisions in the approved EMP of Sainj HEP along with their implementation status is tabulated below.

S N	Component of EMP	Institutional responsibility	Status up to date 31.03.2017	Activities done / developments during reporting period (1 Jan. to 31 March, 2017)	Remarks
1.	Compensatory Afforestation and Biodiversity Conservation Plan				
	<ul style="list-style-type: none"> Afforestation of 96.00 ha 	Forest Department, Director GHNP	For Compensatory Afforestation (CA) over 96 ha land i.e. twice the area of forestland diverted (47.993 ha) in lieu of diversion of forestland for the Project, Rs 92.50 lacs have been deposited during Sept., 2009 with Himachal Pradesh Forest Department.	No funds have been diverted against compensatory afforestation so far.	Additional principal Chief conservator of Forest (CAT Plan) has been requested by Chief Environment Specialist vide his office letter no. HPPCL/ESMU-1/Sainj HEP/2015-530-32 dated 28.05.2015 to release the funds on account of compensatory afforestation to DFO Great Himalyan National Park Shamshi but no funds have been diverted against CA so far.
	<ul style="list-style-type: none"> In situ relocation of <i>Betula alnoides</i> 	State Forest Department/ HPPCL	The matter has been taken up with Forest Department.	-	Principal Chief Conservator of Forest (Wild Life HP) has been requested by Chief Environment Specialist vide his office letter no. HPPCL/ESMU-2/Sainj HEP/2014-

S N	Component of EMP	Institutional responsibility	Status up to date 31.03.2017	Activities done / developments during reporting period (1 Jan. to 31 March, 2017)	Remarks
					533-35 dated 20.08.2015 for in Situ conversation measures of the Betula alnoids of EMP of Sainj HEP which is still awaited.
	<ul style="list-style-type: none"> Ex situ conservation measures (seed collection in vitro seed germination and nursery establishment, including setting up of lab. and offices etc and 5 year maintenance) 		The matter has been taken up with G.B. Pant Institute of Himalayan Environment & Development, Kullu.	A comprehensive proposal was received from G.B. Pant Institute of Himalayan Environment and Deployment, Mohal for Ex-situ conversation measures and the work agreement for the ex-situ conversation measures has been signed with the institute and the work is in progress.	Study for Ex-situ conversation measures is in progress.
	<ul style="list-style-type: none"> Conservation of fauna: restrictions on noise levels during March-June and Oct-Dec shall be followed and this information should be included in tender documents for contractors. 	HPPCL/ Contractor	The machinery being used for the project work is fully modified. Regular checks are being made to limit their noise level as per the permissible limits notified by the manufacturer.	-	
	<ul style="list-style-type: none"> Conservation of fauna: labourers should be made aware of 	HPPCL/ Contractor	Labours has been made aware of conservation during the celebration of Environment Day, World Water Day etc. Notice board has been placed near labour camp. Three Nos. of check post has been maintained near the project site and fifteen Nos. of Home Guards	-	

S N	Component of EMP	Institutional responsibility	Status up to date 31.03.2017	Activities done / developments during reporting period (1 Jan. to 31 March, 2017)	Remarks
	conservation, notice boards near labour camps, no firearms allowed in the Sainj valley, strict restrictions on laborers to ensure no they do not harvest any products from the forests		has been deployed in these check posts. The main duty of these home guards is to check all illegal activities in the GHNP area.		
	<ul style="list-style-type: none"> Fuel for laborers should be provided from plantations or provision should be made for free kerosene/LPG 	HPPCL/ Contractors	Fuel arrangement (LPG) is being made by the contractor for its labour and staff free of cost.	Construction work is completed so no free fuel is provided in this reporting period.	-
	<ul style="list-style-type: none"> Creation and funding of a Sainj Valley Conservation Cell; which will monitor and enforce regulatory provisions to protect the existing biodiversity 	Forest Department, Director GHNP	Four No. computers and one no. Vehicle has already provided to Forest Department under this plan. Fifteen No. Home guard has been deployed in Great Himalayan National Park at the project cost during Oct, 2012 to ensure regulatory provisions to protect the existing biodiversity.	During reporting period Rs 292,950/-has been paid on account of salary of home guards.	
	<ul style="list-style-type: none"> Environmental Awareness for Conservation – development of educational 	Support to existing state government agencies	Provided financial support to :- <ul style="list-style-type: none"> Greenson, A social, Environment Tourism & Development Concern organization, Manali during a workshop on Environment protection, H.P.Forest Deptt for publication of a Wildlife 		

S N	Component of EMP	Institutional responsibility	Status up to date 31.03.2017	Activities done / developments during reporting period (1 Jan. to 31 March, 2017)	Remarks
	awareness packages, workshops. The project authorities will bring out a monthly publication in local language with progress and future programme.		souvenir.		
	<ul style="list-style-type: none"> • Anti-poaching measures: one check post to be constructed near the intake and one near the powerhouse site. Each check post shall have 3 guards and adequate communication equipment. 		Three no. of check posts are being maintained to regulate movement of forest produce as suggested by Forest Deptt. 15 No. home guard has been deployed at Ropa Complex, Barishisharan and Bah Complex during Oct, 2012 in Great Himalayan National Park at the project cost . Bed & Beddings and kitchen utensils have been provided for the home guards. An amount of Rs. 48, 07,000/- has been deposited with DFO, Shamshi for maintenance of labour shed, construction of kitchen, toilet bath and water supply fitting etc. during August, 2012 for the execution of check posts. Emergency light, High Beam torches, Search light has been provided to the forest department for the working of check posts.		
2	Catchment Area Treatment Plan				
	<ul style="list-style-type: none"> • Biological measures: <ul style="list-style-type: none"> ○ 101 ha afforestation ○ 195ha gap plantation ○ 150 ha pasture development 	Forest Department	The funds in phased manner (in five years) are being released to HP Forest Deptt. (CAMPA account) for implementing CAT Plan. The total provision allocated for CAT Plan is Rs 111.54 million. Annexure is attached as Following payment has been done in favour of		

S N	Component of EMP	Institutional responsibility	Status up to date 31.03.2017				Activities done / developments during reporting period (1 Jan. to 31 March, 2017)	Remarks
	<ul style="list-style-type: none"> ○ 40 ha fuel wood plantation ○ 40 ha fodder plantation ○ 90 ha social forestry ○ 5 new nurseries <ul style="list-style-type: none"> • Engineering measures: <ul style="list-style-type: none"> ○ 401ha contour bunding ○ 105 Rmt stepped drain ○ 15 check dams • Wildlife improvement and development: <ul style="list-style-type: none"> ○ Survey of flora & fauna in catchment ○ Incentives to local communities for fire prevention ○ Incentives to local communities for wildlife protection ○ Incentives to local communities to regulate local and migratory grazers ○ Habitat improvement in 	<p style="text-align: center;">GHNP will prepare detailed action plan</p>	Forest Deptt:-				No utilization certificate is submitted in this reporting period	
S . N .	Amount Deposited (in Rs.)	Date	Remarks					
1	5,20,75,000/-	3/04/2010	Rs. 185.14 lakh for 0 year and Rs. 335.61 lakh for 1 st year.					
2	2,75,86,000/-	30/03/2012	2 nd year implementation of CAT Plan.					
3	2,42,98,000/-	29/03/2013	3 rd year implementation of CAT Plan.					
4	2,37,14,050/-	26.11.2015	4 th year implementation of CAT Plan.					

S N	Component of EMP	Institutional responsibility	Status up to date 31.03.2017	Activities done / developments during reporting period (1 Jan. to 31 March, 2017)	Remarks
	Sainj WLS ○ Wildlife census ○ Capacity building of staff and community ○ Support for communication ○ Nursery establishment and maintenance ○ Soil & moisture conservation ○ Monitoring, evaluation and impact assessment study ○ Support for vermin-compost development ○ Support for intro of LPG for poor household ○ Socio-economic survey ○ Ex-situ support for Himalayan Thar breeding/conservation of GHNP	Forest Department			
	<ul style="list-style-type: none"> Joint Forest Management Process, training and awareness 	Forest Department			

S N	Component of EMP	Institutional responsibility	Status up to date 31.03.2017	Activities done / developments during reporting period (1 Jan. to 31 March, 2017)	Remarks
	<ul style="list-style-type: none"> Silt observatory 	Forest Department			
	<ul style="list-style-type: none"> Promotion of eco-tourism, payment for environmental services, monitoring 				
3	Fisheries Management Plan				
	<ul style="list-style-type: none"> Provision of fish ladder in the barrage 	HPPCL/ Contractor	Provision of fish ladder has been made in the barrage of Sainj HEP. Some biological data of fish of Sainj river required for fish ladder design, but the data was not available with the Fisheries Deptt. as intimated by Deputy Director of Fisheries, Patlikulah vide his office letter No. TFP-5-202-D-I-1989 dated 21/09/2012. Due to non availability of the biological data the design of fish ladder has been prepared as per IS Code 13877.	Fish ladder work in Barrage of SHEP is in progress.	
	<ul style="list-style-type: none"> Construction of additional rearing space for trout hatchlings at Hamini farm 	Fisheries Deptt.	Yet to be done	Work for construction of angling lake at Nagini is in progress.	
	<ul style="list-style-type: none"> Construction of angling lake at Nagini 	Fisheries Deptt.	First installment of Rs 5.0 million has been released to HP Fisheries Department during April, 2010 for the construction of angling lake at Nagini and the work is in progress.	.Construction of angling lake at Nagini is in progress.	Deputy director (Fisheries) has been requested to intimate current status of construction of angling lake.
4	Public Health Delivery System				
	<ul style="list-style-type: none"> Construction of one Dispensary, including staffing, hospital equipment 	HPPCL/ Contractor	Provision of Rs. 50 lacs has been kept for construction of Hospital at Sainj (Rs. 25 lakh under LADF & Rs. 25 lakh under R&R Plan) Scheme submitted to GoHP by Health Department, outcome awaited. Payment		

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	and supplies		will be released after approval by Govt. of Himachal Pradesh. HPPCL is maintaining a dispensary. One No. Doctor and one No. Pharmacists are posted in the dispensary. Health checkups are carried out by the Doctor posted in the dispensary during various camps organized in the project area.	-	
	• A first-aid post at each of the major construction sites (two in total), including staffing, equipment and supplies	Contractor	Two no. First aid posts have been constructed by the contractor near Barrage and Power House sites.	-	
	• Two ambulances	Contractor	Two numbers of full Equipped Ambulances provided at Project Site used for betterment of Workmen and Local Villagers.	-	
5	Environmental Management in Labor Camps	Contractor	The labour camp has been constructed at Jangla near Adit - II by the contractor.	-	
	• Provision of heating (chapter does not have clear measures; please describe what source of heating is used)	Contractor	The contractor has provided heating arrangements to the labourers. Heaters and coal was provided for the heating during the winter.	-	
	• Provision of water supply	Contractor	The contractor has provided water purifiers in all messes.		

S N	Component of EMP	Institutional responsibility	Status up to date 31.03.2017	Activities done / developments during reporting period (1 Jan. to 31 March, 2017)	Remarks
	<ul style="list-style-type: none"> • Sanitation and sewage facilities: please describe current status per camp, and the periodic monitoring results of the quality of effluent from the oxidation ditches, to ensure that the sewage from the labor camps does not pollute the river water (measure pH, BOD, COD, TSS and TDS as per EMP chapter 14). 	Contractor	Community toilets have been provided and in the labor camp and septic tank has been provided for the sewage from the toilets. Waste Water, Drinking Water, Ambient Air Quality, Noise Levels were being monitored periodically at the Project Site by the External party and records being maintained.	All the parameters were monitored which is under control and the reports are being maintained. An expenditure of Rs 3, 29,267 /- has been done by the contractor for the construction of septic tank maintenance of septic tank in the labour camps.	
	<ul style="list-style-type: none"> • Solid waste management: <ul style="list-style-type: none"> ○ Report progress on the location, construction and use of the designated landfill site according to international good practice. ○ Report progress on the disposal of biodegradable waste: preferably through the use of 	Contractors/ HPPCL	Wastage has been carried out by contractor own vehicle. The process of Composting has been established by the contractor. The bio- degradable waste from labour camp has been disposed off in four composting pits and later it is being used as Fertilizers to plants.	-	

S N	Component of EMP	Institutional responsibility	Status up to date 31.03.2017	Activities done / developments during reporting period (1 Jan. to 31 March, 2017)	Remarks
	composting pits. Disposal of biodegradable waste at the muck disposal sites, as mentioned in the EMP, should be discouraged). o Commissioning and use of a waste collection truck				
6	Muck Management Plan	Contractor/ HPPCL	The Muck dumping sites are being prepared/constructed as per norms of H.P. State Pollution Control Board for dumping. Presently muck is being dumped in five dumping sites only and protection works has been provided at these dumping sites.	Excavation work is completed..	
	D1: max. quantity to be dumped = 116864 cum		76.24 % dumped to date; Retaining wall has been provided to the dumping site all along the river.	D1: No muck dumped this period	
	D2: max. quantity to be dumped = 113226 cum		43.72% dumped to date; Retaining wall has been provided to the dumping site all along the Kartaul Nallah. A stone crusher has been set up at this site.	D2: No muck dumped this period	
	D3: max. quantity to be dumped = 41439 cum		This site is not being used so far.	-	
	D4: max. quantity to be dumped = 231306 cum		39.95% muck dumped so far. A stone crusher (20TPH) has been set up at this site and crushing of muck from site no. 7 is being carried out.	D4: No muck dumped this period.	
	D5: max. quantity		17.62% muck dumped so far; proper protection is	D5: No muck is dumped in this	

S N	Component of EMP	Institutional responsibility	Status up to date 31.03.2017	Activities done / developments during reporting period (1 Jan. to 31 March, 2017)	Remarks
	to be dumped = 507035 cum		being provided to this dumping site.	reporting period.	
	D6: max. quantity to be dumped = 42323 cum		This site is not being used so far.	-	
	D7: max. quantity to be dumped = 42323 cum		100% muck dumped Proper protection has already provided to this dumping site.	-	
7.	Restoration and Landscaping of Construction Sites				
	• Use & restoration of quarry sites	HPPCL/ Contractor	Quarry site is not being used so far.	-	
	• Beautification of the barrage site, power house complex and the colony area	HPPCL	Beautification of the barrage site, power house complex and the colony area will be done after construction works.	-	
8.	Environmental Management in Road Construction.				
	• 4 km: 5/7 m wide road from Neuli to Barrage		Cutting road from Neuli to Barrage has been completed. Breast wall and retaining walls has been provided wherever required. Drainage system has been provided to the entire road length.	Maintenance of road is being carried out by HCC Ltd.	
	• 0.5 km: 5/7 m wide road to Desanding basin and intake		-		
	• 2 km: 5/7 m wide road from Sambha to deflushing tunnel & HRT adit-I at		Cutting of road from Sambha to Adit-I has been completed.	Maintenance of road is being carried out by HCC Ltd.	

S N	Component of EMP	Institutional responsibility	Status up to date 31.03.2017	Activities done / developments during reporting period (1 Jan. to 31 March, 2017)	Remarks
	Kartaul nallah				
	<ul style="list-style-type: none"> • 7 km: 5/7 m wide road from Suind to bottom of surge shaft 		Cutting of 4.15 km road from MAT to junction, 0.86 km from junction to Adit-II and 0.67 km from junction to common Adit to top & bottom of surge shaft has been completed. Common adit will be used for construction of surge shaft so the road length is reduced. Breast wall and retaining walls has been provided wherever required.	-----do-----	
	<ul style="list-style-type: none"> • 2.5 km: 5/7 m wide road from bottom of the surge shaft to top of surge shaft 				
	<ul style="list-style-type: none"> • 1.5 km: 7/10 m wide road from Suind to MAT and tail race 		Cutting of 0.400 km road from Suind to MAT and tail race has been completed. Breast wall and retaining walls has been provided wherever required	-----do-----	
	<ul style="list-style-type: none"> • 2 km: 5/7 m wide road from quarry sites, dumping areas & colony etc. 		Quarry site is not being used so far no road construction for quarry sites had been carried out.	-----do-----	
	<ul style="list-style-type: none"> • 8 km: Widening of existing road from Suind to Neuli (from 2.75/5m to 5/7m) 	HPPWD/HPPCL	Rs. 1 Crore as advance was released to HPPWD on 08.04.2009 & Utilization Certificate amounting to Rs. 92.84 lacs up to Dec., 11 received from HPPWD. Due to local agitation a meeting with HPPWD held on 28.02.2012 and it was agreed that balance work from Suind to Neuli shall be done by HPPCL after taking over site from HPPWD. Revised utilization certificate amounting to Rs. 81.82 lacs up to May, 2012 has been received from HPPWD. Secretary, PWD has accorded his consent for handing over of road from Suind to Neuli road to HPPCL. The balance work of improvement of road has been taken up by HPPCL work is in progress.	The work is in progress.	

S N	Component of EMP	Institutional responsibility	Status up to date 31.03.2017	Activities done / developments during reporting period (1 Jan. to 31 March, 2017)	Remarks
9	Greenbelt Development Plan: 40 ha. Around reservoir area. This includes nursery creation, advance works, plantation and maintenance	Forest Deptt. /HPPCL	The project contractor has implanted 1000 plants on both banks of the Sainj River.	Green Belt will be developed in reservoir area after the completion of project.	
1 0	Control of Air Pollution (for monitoring requirements see chapter 14 of EMP: once every season at major construction sites, SPM, RPM, SO2 and NOx):	Contractors, /HPPCL	Ambient air sampling is being carried out by Environment Engineer, H.P. State Pollution Control Board, Kullu once in every three months at the major construction sites and analysis report is being submitted.	Monitoring for the 1st quarter of 2016-17 has been carried out by H.P. State Pollution Control Board Kullu. Reports are attached as (Annexure- EMR-I)	
	Control of emissions of equipment, vehicles and generators;		Every vehicle is being checked for pollution under control certificate regularly.		
	Dust control: sprinkling, covering stockpile, effective traffic management		<ul style="list-style-type: none"> ➤ Sprinkling of water is being done regularly along the PWD roads ➤ Effective traffic management is being maintained at site. ➤ Truck hauling soil, sand & other loose material is being maintained at least two feet of freeboard. 		
1 1	Measures for Noise Control: see chapter 11. Monitoring as per EMP chapter	Contractors / HPPCL	<ul style="list-style-type: none"> ➤ Maintenance of construction equipment is being carried out regularly. ➤ Provision of ear plug /ear muff has been made to the labourers. 		

S N	Component of EMP	Institutional responsibility	Status up to date 31.03.2017	Activities done / developments during reporting period (1 Jan. to 31 March, 2017)	Remarks
	14: once every three months, at the major construction sites.			-	
1 2	Water Pollution Control	Contractors/ HPPCL	The sedimentation/ settling tanks have been provided for the batching plant near Power House, Adit -1 and Adit-3, in all the tunnels and also for vehicle washing ramps.	During the reporting period regular cleaning and maintenance of these settling tanks has been carried out.	
1 3	Environmental Monitoring Programme: • Water quality • Air quality and meteorology • Noise	H.P. Pollution Control Board	<ul style="list-style-type: none"> ➤ An amount of Rs. 3.05 lacs, 5 lacs and 5.24 lacs was released in the year 2010-11, 2011-12 and 2012-13 respectively to HP State Pollution Control Board under Environmental Monitoring Plan. ➤ An amount of Rs. 15 lacs have been deposited with Environment Department, GoHP for EMP monitoring during March, 2012. 	Quarterly monitoring of air and water quality level is being carried out by H.P. State Pollution Control Board, Kullu. Monitoring for the 1st quarter 2016-17 has been carried out in the month of March 2017 and the report is attached as EMR-II	
	• Soil erosion and siltation		Yet to be done	-	No monitoring programme is suggested for project construction stage. Monitoring of Soil erosion and siltation will be carried out during operation phase.
	• Ecology		Yet to be done	-	Monitoring of restoration of muck disposal area will be carried out after completion of excavation work.

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	<ul style="list-style-type: none"> • Incidence of water-related diseases 		Yet to be done	-	
	<ul style="list-style-type: none"> • Land use pattern 		Yet to be done	-	<p>No monitoring programme is suggested for project construction stage Monitoring of land use pattern will be carried out during operation phase.</p>



H.P. STATE POLLUTION CONTROL BOARD

Regional Office: HIMUDA, Shopping Complex Hall No-5, Beasa More- Kullu
Distt-Kullu, Pin-175101 (Phone: 01902-223149)
Website: <http://hpscpcb.nic.in> e-mail: pcbrcokullu@gmail.com

No. PCB/RO Kullu/M/s Sainj HEP/EIA/2015- 438

Dated: 02.06.2017

To

✓ **The General Manager,**

M/s Sainj Hydro Electric Project,

HPPCL, Sarabai (Bhunter),

Distt. Kullu-175125 (H.P.)

Sub: - Analysis Report and bill for the analysis of Ambient Air Samples of EMP 4th Qtr.- 2016-17.

Sir,

Please find enclosed herewith the analysis Report No. **A-1 to A-12 dated 17.05.2017** of the sample (s) of Ambient Air of your project site Sainj HEP (100MW) collected on **20.03.2017 to 24.03.2017**. The comparative statement showing Parameters with results are also enclosed.

Bill (s) No. K187.05.2017 dated 26.05.2017, amounting to Rs. 21, 600/- on account of sample testing charges of the above mentioned sample (s) is/are also enclosed herewith. **You are requested to arrange the payment against the above referred bill online within one month and submit the HIM XGN generated payment receipt to this office for office record please.**

Encl: - A/A

Yours faithfully,



Handwritten signature and initials: Sainj HEP, CH/CT, and a symbol resembling a dollar sign.

pl. process
Chandn/30 (env)

(Er. Chandan Kumar Singh)
Assistant Environmental Engineer
Regional Office, Kullu

Handwritten initials: KB

(21)

Comparative Statement of Ambient Air Samples

Sampling Point	Report No.	Parameters	Prescribed Limit (24 Hrs. ug/m ³)	Result (24 Hrs. ug/m ³)	Remarks
1 Km U/s of Project Site	A-1	RSPM	100.0	87.00	Within Limit
	A-2	SO ₂	80.0	BDL	Within Limit
	A-3	NO _x	80.0	11.84	Within Limit
2 Dam Site Near Adit-III	A-4	RSPM	100.0	33.66	Within Limit
	A-5	SO ₂	80.0	BDL	Within Limit
	A-6	NO _x	80.0	13.02	Within Limit
Power House Site, Sainj	A-7	RSPM	100.0	44.33	Within Limit
	A-8	SO ₂	80.0	BDL	Within Limit
	A-9	NO _x	80.0	11.64	Within Limit
4 D/s MAT from Project Site	A-10	RSPM	100.0	161.33	Above limit
	A-11	SO ₂	80.0	BDL	Within Limit
	A-12	NO ₂	80.0	16.97	Within Limit

(Er. Chandan Kumar Singh)
Assistant Environmental Engineer,
Regional Office, Kullu

22



H.P.STATE POLLUTION CONTROL BOARD

REG. LAB. B.B.M.B. COLONY SUNDER NAGAR DISTT. MANDI (H.P.)

PHONE NO. - 01907-263940

AMBIENT AIR MONITORING REPORT

Report No.:-	A-1 to A-12						
Dated:-	17.05.2017						
1. Issued to:-	M/s HPPCL, Sainj						
2. Collected By:-	JEE(K)						
3. Date of Receipt:-	12.04.2017						
4. Sample Detail:-	EMP, 4 th Quarter, 2016-17 HPPCL Sainj						
Sr. No	Sampling Point	Date of Collection	Sampling Time	Report No.	Results (ug/M ³)		
					RSPM	SO ₂	NO _x
1.	1 Km U/S of Project Site	20.03.2017	10 AM to 6 PM	A-1	107.00	BDL,BDL	9.00, 9.95
2.	1 Km U/S of Project Site	20.03.2017	6 PM to 2 AM	A-2	133.00	BDL,BDL	11.37, 14.68
3.	1 Km U/S of Project Site	21.03.2017	2 AM to 10 AM	A-3	51.00	BDL,BDL	14.22, 11.84
4.	Dam Site Near Adit-III	21.03.2017	11 AM to 7 PM	A-4	54.00	BDL,BDL	12.79, 10.89
5.	Dam Site Near Adit-III	21.03.2017	7 PM to 3 AM	A-5	33.00	BDL,BDL	11.84, 12.32
6.	Dam Site Near Adit-III	22.03.2017	3 AM to 11AM	A-6	34.00	BDL,BDL	11.84, 18.47
7.	Power House Site, Sainj	22.03.2017	12 N to 8 PM	A-7	35.00	BDL,BDL	9.47, 9.95
8.	Power House Site, Sainj	22.03.2017	8 PM to 4 AM	A-8	18.00	BDL,BDL	14.68, 13.74
9.	Power House Site, Sainj	23.03.2017	4 AM to 12N	A-9	80.00	BDL,BDL	BDL, 17.53
10.	D/S MAT from project Site	23.03.2017	1 PM to 9PM	A-10	69.00	BDL,BDL	15.16, 17.53
11.	D/S MAT from project Site	23.03.2017	9 PM to 5 AM	A-11	87.00	BDL,BDL	13.74, 11.84
12.	D/S MAT from project Site	24.03.2017	5 AM to 1 PM	A-12	328.00	BDL,BDL	12.79, 30.79

STATE BOARD ANALYST

General Manager
(896)
4/s Sainj Hydro Electric Project,
HPPCL, Sarabai (Bhunter),
Distt. Kullu 175125 (H.P.)



PCB, Kullu
Distt. Kullu (H.P.)
Pin-175101
Tel:- 01902223149

Lab Samples Bill

Bill No. **K 187.05.2017**
Bill Date:- **26-May-2017**
Insp Id
Insp. Type **H.O. Direction**
Insp Dt **20-March-2017 to**
24-March-2017
Lab Id **A-1 to A-12**

Type	Samples/Parameters	Amount
Air	12/ 36	21600
Water	0/0	-
Haz.	0/0	-
Collection/ Transportation Charges	-	-
Total Amount :		21600

- a. For future correspondence/ enquiry, always refer to Bill No.
b. Arrange the payment against the above referred bill online within one month and submit the HIM XGN generated payment receipt to this office for office record please.
c. Pls. clear all your Pending Bills within 30 days.

Samples Detail

Sample ID	Act	Para.	Bill	Amount	Type	Sampling Dt.	Sampling Point
A-1	A	3	Yes	1800	AIR	20.03.17	M/s HPPCL Sainj HEP Near 1 km U/s of project site
A-2	A	3	Yes	1800	AIR	20.03.17	M/s HPPCL Sainj HEP Near 1 km U/s of project site
A-3	A	3	Yes	1800	AIR	21.03.17	M/s HPPCL Sainj HEP Near 1 km U/s of project site
A-4	A	3	Yes	1800	AIR	21.03.17	M/s HPPCL Sainj Dam site Near Adit-III
A-5	A	3	Yes	1800	AIR	21.03.17	M/s HPPCL Sainj Dam site Near Adit-III
A-6	A	3	Yes	1800	AIR	22.03.17	M/s HPPCL Sainj Power House
A-7	A	3	Yes	1800	AIR	22.03.17	M/s HPPCL Sainj Power House
A-8	A	3	Yes	1800	AIR	22.03.17	M/s HPPCL Sainj Power House
A-9	A	3	Yes	1800	AIR	23.03.17	M/s HPPCL Sainj D/s MAT From Project site 1 KM
A-10	A	3	Yes	1800	AIR	23.03.17	M/s HPPCL Sainj D/s MAT From Project site 1 KM
A-11	A	3	Yes	1800	AIR	23.03.17	M/s HPPCL Sainj D/s MAT From Project site 1 KM
A-12	A	3	Yes	1800	AIR	24.03.17	M/s HPPCL Sainj D/s MAT From Project site 1 KM

Signature of R.O. Head

HL

(24)



H.P. STATE POLLUTION CONTROL BOARD

Regional Office: HIMUDA, Shopping Complex Hall No-5, Beasa More-
Kullu Distt-Kullu, Pin-175101 (Phone: 01902-223149)

Website: <http://hppcb.nic.in> e-mail: pcbokullu@gmail.com

No. PCB/RO Kullu/PHEP-II&III/EMP/2015 258

Dated: 20.05.2017

To

✓ The General Manager,
M/s Sainj Hydro Electric Project,
HPPCL, Sarabal (Bhunter),
Distt. - Kullu-175125 (H.P.)

D

**Sub: - Analysis Report and bill for the analysis of Water Samples of EMP 4th Qtr. -
2016-17.**

Sir,

Please find enclosed herewith the sample analysis Report No. **7781 to 7786** dated **05.05.2017** of the sample (s) of river water of your project site Sainj HEP (100MW) collected on 28.03.2017. The comparative statement showing Parameters with results are also enclosed.

Bill (s) No. 10930 dated 30.03.2017, amounting to Rs. 3020/- (Three thousand and twenty only) on account of sample testing charges of the above mentioned sample (s) is/are also enclosed herewith. **You are requested to arrange the payment against the above referred bill online within one month and submit the HIM XGN generated payment receipt to this office for office record please.**

Encl: - A/A

Yours faithfully,

SM
DHEP -
OR
AS
(AECG)


(Er. Chandan Kumar Singh) 19/05/17
Assistant Environmental Engineer
Regional Office, Kullu

KR

(25)

COMPARITIVE STATEMENT OF WATER SAMPLES

Sr. No.	Sampling Point	Report No.	Parameters						Remarks
			TSS (mg/l)	Cond. (us/cm)	DO (mg/l)	O&G (mg/l)	pH	BOD (mg/l)	
1	River Sainj 1 Km of TRT outlet	7781	2.0	109.5	8.8	Nil	8.45	----	As per water quality criteria; this confirms class A. It is suitable for drinking without conventional treatment but after disinfection.
2	River Sainj at diversion Structure Site	7782	3.0	95.9	9.1	Nil	7.90	----	As per water quality criteria; this confirms class A. It is suitable for drinking without conventional treatment but after disinfection.
3	River Sainj 500m U/s of Barrage Site	7783	4.0	119.9	9.1	Nil	8.22	----	As per water quality criteria; this confirms class A. It is suitable for drinking without conventional treatment but after disinfection.
4	U/s Labour colony, Adit-1 (Katrol Nallah)	7784	5.0	125.4	8.9	Nil	8.65	----	As per water quality criteria; this confirms class A. It is suitable for drinking without conventional treatment but after disinfection.
5	D/s Labour colony, Adit-1 (Katrol Nallah)	7785	2.0	96.8	8.9	Nil	8.11	----	As per water quality criteria; this confirms class A. It is suitable for drinking without conventional treatment but after disinfection.
6	Water Source at Ropa	7786	2.0	179.4	----	Nil	7.98	----	As per water quality criteria; this confirms class A. It is suitable for drinking without conventional treatment but after disinfection.


 (Er. Chandan Kumar Singh)
 Assistant Environmental Engineer,
 Regional Office, Kullu

24

ANALYSIS REPORT FOR
WATER - WASTE WATER SAMPLE

Himachal State Pollution Control Board, Sunder Nagar
1-AM
Bhabh Colony
Sunder Nagar, Dist. Mandi (H.P.)
Sunder Nagar-174402

Sample ID: 46153 - Analysis Completion: 05/05/2017

- Power generation plant [except Wind and Solar
renewable power plants of all capacities and Mini Hydel
power plant of capacity <25MW] / LAB Inward : 7781

TEST REPORT

Test Report No. : 7781

Date: 05/05/2017

1. Name of the Customer : Sainj Hydro Electric Project (Hppcl) - 10896
2. Address : ~General Manager, Sainj Hydro Electric Project ,HPPCL,Sarabai,Dy. General Manager
Works),Sainj Project Const. Circle, HPPCL,Sarabai
3. Nature of Sample : WAT-Water Act(Legal), (Insp Type : HOR-H.O.Reference)
4. Sample Collected By : Sh. Rajiv Sharma, JEE
5. Quantity of Sample Received :
6. Code No. of the Sample : 46153
7. Date & Time of Collection & Inwarding : 28/03/2017 , (0900 to 0900) & 29/03/2017
8. Date of Start & Completion of Analysis : 30/03/2017 & 05/05/2017
9. Sampling Point : River Sainj 1 Km of TRT outlet ~
10. Flow Details (Remarks) :
11. Mode of Disposal : river
12. Ultimate Receiving Body : 0
13. Temperature on Collection : & pH Range on pH Strip :
14. Carboys Nos for : --- & Color & Appearance : Clear
15. Water Consumption & W.W.G (KLPD) : Ind :2,000 , Dom :22,000 & Ind :1,000 , Dom :18,000

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	Suspended Solids	-	-	-	2.0 mg/l
2	Conductivity	-	-	-	109.5 uS
3	Dissolved Oxygen	-	-	-	8.2 mg/l
4	Oil and Grease	-	-	-	Nil
5	pH	-	-	-	8.45

Laboratory Remarks : EMP project sample. By:23-lab_23 Dt: 05/05/2017

Anup Vaidya,SSO

Field Observation :

Note :

- * - These parameters are covered under the scope of NABL.
- The results refer only to the tested samples and applicable parameters. Enforce ment of products is neither inferred nor implied.
- Samples will be destroyed after 10 days from the date of issue of test report unless otherwise specified.
- 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.
- The Board is not responsible for the authenticity for the samples not collected by the Board's officials.
- 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.
- Permissible Limits: as per Schedule VI of EPA Rules, 1986 as amended by Second and Third amendment 1993 for Effluents



15/05/2017

ANALYSIS REPORT FOR
WATER - WASTE WATER SAMPLE

Himachal State Pollution Control Board, Sunder Nagar
LAB
BMD Colony
Sunder Nagar, Distt. Mandi (H.P.)
Sunder Nagar-174402

Sample ID: 46154 - Analysis Completion: 05/05/2017

Power generation plant [except Wind and Solar
renewable power plants of all capacities and Mini Hydel
power plant of capacity <25MW] / LAB Inward : 7782

TEST REPORT

Test Report No. : 7782

Date: 05/05/2017

1. Name of the Customer : Sainj Hydro Electric Project (Hppcl) - 10896
2. Address : -,General Manager, Sainj Hydro Electric Project ,HPPCL,Sarabai,Dy. General Manag
Works),Sainj Project Const. Circle, HPPCL,Sarabai
3. Nature of Sample : WAT-Water Act(Legal), (Insp Type : HOR-H.O.Reference)
4. Sample Collected By : Sh. Rajiv Sharma, JEE
5. Quantity of Sample Received :
6. Code No. of the Sample : 46154
7. Date & Time of Collection & Inwarding : 28/03/2017 , (0900 to 0900) & 29/03/2017
8. Date of Start & Completion of Analysis : 30/03/2017 & 05/05/2017
9. Sampling Point : River Sainj at diversion structure site. -
10. Flow Details (Remarks) :
11. Mode of Disposal : river
12. Ultimate Receiving Body : 0
13. Temperature on Collection : & pH Range on pH Strip :
14. Carboys Nos for : --- & Color & Appearance : Clear
15. Water Consumption & W.W.G (KLPD) : Ind :2,000 , Dom :22,000 & Ind :1,000 , Dom :18,000

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	Suspended Solids	-	-	-	3.0 mg/l
2	Conductivity	-	-	-	95 µS
3	Dissolved Oxygen	-	-	-	9.1 mg/l
4	Oil and Grease	-	-	-	Nil
5	pH	-	-	-	7.90

Laboratory Remarks : EMP project sample. By 23-lab_23 Dt. : 05/05/2017

Anup Vaidya,SSO

Field Observation :

Note :

1. * - These parameters are covered under the scope of NABL.
2. The results refer only to the tested samples and applicable parameters. Enforcement 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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7. Permissible Limits: as per Schedule VI of EPA Rules, 1986 as amended by Second and Third amendment 1993 for Effluents



15/05/2017

ANALYSIS REPORT FOR
WATER - WASTE WATER SAMPLE

Himachal State Pollution Control Board, Sunder Nagar
LAB
BIMBI Colony
Sunder Nagar, Distt. Mandi (H.P.)
Sunder Nagar-174402

Sample ID: 46155 - Analysis Completion: 05/05/2017

Power generation plant [except Wind and Solar
renewable power plants of all capacities and Mini Hydel
power plant of capacity <25MW] / LAB Inward : 7783

TEST REPORT

Test Report No. : 7783

Date: 05/05/2017

1. Name of the Customer : Sainj Hydro Electric Project (Hppcl) - 10896
2. Address : -General Manager, Sainj Hydro Electric Project ,HPPCL Sarabai,Dy. General Manager (Works),Sainj Project Const. Circle, HPPCL,Sarabai
3. Nature of Sample : WAT-Water Act(Legal), (Insp Type : HOR-H.O.Reference)
4. Sample Collected By : Sh. Rajiv Sharma, JEE
5. Quantity of Sample Received :
6. Code No. of the Sample : 46155
7. Date & Time of Collection & Inwarding : 28/03/2017 , (0900 to 0900) & 29/03/2017
8. Date of Start & Completion of Analysis : 30/03/2017 & 05/05/2017
9. Sampling Point : River Sainj 500 m U/s of Barrage site. ~
10. Flow Details (Remarks) :
11. Mode of Disposal : river
12. Ultimate Receiving Body : 0
13. Temperature on Collection : & pH Range on pH Strip :
14. Carboys Nos for : --- & Color & Appearance : Clear
15. Water Consumption & W.W.G (KLPD) : Ind :2,000 , Dom :22,000 & Ind :1,000 , Dom :18,000

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	Suspended Solids	-	-	-	4.0 mg/l
2	Conductivity	-	-	-	119 duS
3	Dissolved Oxygen	-	-	-	9.1 mg/l
4	Oil and Grease	-	-	-	Nil
5	pH	-	-	-	8.22

Laboratory Remarks : EMP project sample. By:23-lab_23 Dt.: 05/05/2017

Anup Vaidya,SSO

Field Observation :

Note :

- * - These parameters are covered under the scope of NABL.
- The results refer only to the tested samples and applicable parameters. Endorsement of products is neither inferred nor implied.
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- 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.
- Permissible Limits: as per Schedule VI of EPA Rules, 1986 as amended by Second and Third amendment 1993 for Effluents

ANALYSIS REPORT FOR
WATER WASTE WATER SAMPLE

Himachal State Pollution Control Board, Sunder Nagar
I, A/D
BBVIB Colony
Sunder Nagar, Distt. Mandi (H.P.)
Sunder Nagar-174402

Sample ID: 46156 - Analysis Completion: 05/05/2017

Power generation plant [except Wind and Solar
renewable power plants of all capacities and Mini Hydel
power plant of capacity <25MW] / LAB Inward : 7784

TEST REPORT

Test Report No. : 7784

Date: 05/05/2017

1. Name of the Customer : Sainj Hydro Electric Project (Hppcl) - 10896
2. Address : -General Manager, Sainj Hydro Electric Project ,HPPCL, Sarabai, Dy. General Manag
Works),Sainj Project Const. Circle, HPPCL, Sarabai
3. Nature of Sample : WAT-Water Act(Legal), (Insp Type : HOR-H.O.Reference)
4. Sample Collected By : Sh. Rajiv Sharma, JEE
5. Quantity of Sample Received :
6. Code No. of the Sample : 46156
7. Date & Time of Collection & Inwarding : 28/03/2017 , (0900 to 0900) & 29/03/2017
8. Date of Start & Completion of Analysis : 30/03/2017 & 05/05/2017
9. Sampling Point : U/s Labour colony, Adit-1 (Katrol Nallah) -
10. Flow Details (Remarks) :
11. Mode of Disposal : river
12. Ultimate Receiving Body : 0
13. Temperature on Collection : & pH Range on pH Strip :
14. Carboys Nos for : --- & Color & Appearance : Clear
15. Water Consumption & W.W.G (KLPD) : Ind : 2,000 , Dom : 22,000 & Ind : 1,000 , Dom : 18,000

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	Suspended Solids	-	-	-	5.0 mg/l
2	Conductivity	-	-	-	125 μ S
3	Dissolved Oxygen	-	-	-	8.9 mg/l
4	Oil and Grease	-	-	-	Nil
5	pH	-	-	-	8.55

Laboratory Remarks : EMP project sample. By 23-lab_23 Dt: 05/05/2017

Anup Vaidya,SSO

Field Observation :

Note :

- * - These parameters are covered under the scope of NABL.
- The results refer only to the tested samples and applicable parameters. Endorsement of products is neither inferred nor implied.
- Samples will be destroyed after 10 days from the date of issue of test report unless otherwise specified.
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- 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.
- Permissible Limits: as per Schedule VI of EPA Rules, 1986 as amended by Second and Third amendment 1993 for Effluents

30

ANALYSIS REPORT FOR
WATER / WASTE WATER SAMPLE

Himachal State Pollution Control Board, Sunder Nagar
1, 3/B
BHSBH Colony
Sunder Nagar, Distt. Mandi (H.P.)
Sunder Nagar-174402

Sample ID: 46157 - Analysis Completion: 05/05/2017

Power generation plant [except Wind and Solar
renewable power plants of all capacities and Mini Hydel
power plant of capacity <25MW] / LAB Inward : 7785

TEST REPORT

Date: 05/05/2017

Test Report No. : 7785

1. Name of the Customer : Sainj Hydro Electric Project (Hppcl) - 10896
2. Address : -,General Manager, Sainj Hydro Electric Project (HPPCL, Sarabai,Dy. General Manag
Works),Sainj Project Const. Circle, HPPCL,Sarabai
3. Nature of Sample : WAT-Water Act(Legal), (Imp Type : HOR-H.O.Reference)
4. Sample Collected By : Sh. Rajiv Sharma, JEE.
5. Quantity of Sample Received : -
6. Code No. of the Sample : 46157
7. Date & Time of Collection & Inwarding : 28/03/2017 , (0900 to 0900) & 29/03/2017
8. Date of Start & Completion of Analysis : 30/03/2017 & 05/05/2017
9. Sampling Point : B's labour colony, Adit-1 (Katrol nallah) -
10. Flow Details (Remarks) : -
11. Mode of Disposal : river
12. Ultimate Receiving Body : 0
13. Temperature on Collection : & pH Range on pH Strip :
14. Carboys Nos for : --- & Color & Appearance :Clear
15. Water Consumption & W.W.G (KLPD) : Ind :2,000 , Dam :22,000 & Ind :1,000 , Dem :18,000

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	Suspended Solids	-	-	-	2.0 mg/l
2	Conductivity	-	-	-	96 µS
3	Dissolved Oxygen	-	-	-	8.0 mg/l
4	Oil and Grease	-	-	-	tr.
5	pH	-	-	-	8.7

Laboratory Remarks : EMP project sample. By:23-ab_23 Dt. 05/05/2017

Anup Vaidya_SSO

Field Observation :

Note :

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 intended 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 amended by Second and Third amendment 1993 for Effluents



15/05/2017



ANALYSIS REPORT FOR
WATER / WASTE WATER SAMPLE

Sample ID:46158 - Analysis Completion:05/05/2017

Power generation plant [except Wind and Solar
renewable power plants of all capacities and Mini Hydel
power plant of capacity <25MW] / LAB Inward : 7786

Himachal State Pollution Control Board, Sunder Nagar
LAB
BHSMB Colony
Sunder Nagar, Distt. Mandi (H.P.)
Sunder Nagar-174402

TEST REPORT

Test Report No. : 7786

Date: 05/05/2017

1. Name of the Customer : Sainj Hydro Electric Project (Hppcl) - 10896
2. Address : -,General Manager, Sainj Hydro Electric Project ,HPPCL,Sarabai,Dy. General Manag
Works,Sainj Project Const. Circle, HPPCL,Sarabai
3. Nature of Sample : REP-Representative, (Insp Type : HOR-ILO.Reference)
4. Sample Collected By : Sh. Rajiv Sharma, JEE
5. Quantity of Sample Received :
6. Code No. of the Sample : 46158
7. Date & Time of Collection & Inwarding : 28/03/2017 , (0900 to 0900) & 29/03/2017
8. Date of Start & Completion of Analysis : 30/03/2017 & 05/05/2017
9. Sampling Point : Water Source at Ropa -
10. Flow Details (Remarks) :
11. Mode of Disposal : river
12. Ultimate Receiving Body : 0
13. Temperature on Collection : & pH Range on pH Strip :
14. Carboys Nos for : --- & Color & Appearance :Clear
15. Water Consumption & W.W.G (KLPD) : Ind :2,000 , Dom :22,000 & Ind :1,000 , Dom :18,000

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	Suspended Solids	-	-	-	2.0 mg/l
2	Conductivity	-	-	-	179 μ S
3	Dissolved Oxygen	-	-	-	Not reported
4	Oil and Grease	-	-	-	Nil
5	pH	-	-	-	7.88

Laboratory Remarks : EMP project sample. By:23-lab_23 Dt.: 05/05/2017

Anup Vaidya,SSO

Field Observation :

Note :

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.
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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, 1985 as amended by Second and Third amendment 1993 for Effluents



15/05/2017



H.P. STATE POLLUTION CONTROL BOARD

Regional Office: HIMUDA, Shopping Complex Hall No-5, Beasa More- Kullu Distt-
Kullu, Pin-175101 (Phone: 01902-223149)

Website: <http://hspcb.nic.in> e-mail: pcbmkullu@gmail.com

The General Manager
(10896)
M/s Sainj Hydro Electric Project,
HPPCL, Sarabai (Bhunter),
Dsitt. Kullu 175125 (H.P.)

PCB Kullu R.O.
HIMUDA, Shopping Complex, Hall No.-5
Kullu-175101
Tel: 01902-223149

Lab Samples Bill

Bill No. : 10930
Bill D: 30.03.2017
Insp. Type: H.O. Direction
Report No. 7781-7786 Dated 05.05.2017
Insp. Dt.: 28.03.2017

Type	Parameters	Amount
Air	-/0	-
Water	6/29	-
Haz	0/0	-
Collection Charges	-	-
Total Amount :		3020.0

- For future correspondence/ enquiry, always refer to Bill No.
- Arrange the payment against the above referred bill online within one month and submit the HIM XGN generated payment receipt to this office for office record please.
- Pls. clear all your Pending Bills within 30 days.

Samples Detail

Report No.	Act	Para.	Bill	Amount	Type	Sampling Dt.	Sampling Point
7781	W	5	Yes	520	WAT	28.03.2017	River Sainj, 1 Km of TRT outlet
7782	W	5	Yes	520	WAT	28.03.2017	River Sainj at diversion Structure Site
7783	W	5	Yes	520	WAT	28.03.2017	River Sainj 500m U/s of Barrage Site
7784	W	5	Yes	520	WAT	28.03.2017	U/s Labour colony, Adit-1 (Katrol Nallah)
7785	W	5	Yes	520	WAT	28.03.2017	D/s Labour colony, Adit-1 (Katrol Nallah)
7786	W	4	Yes	420	WAT	28.03.2017	Water Source at Ropa

Signature of R.O. Head

23