Sneha Kinetic Power Projects Private Limited

(CIN: U40109DL2000PTC231172), GSTIN: 11AAFCS1221B1ZD

Site Address: Dikchu H.E.P, Dikchu Bazar, East Sikkim - 737107

**Greenk** 

Ref: SKPPPL/MOEF&CC/HO/2019-20/02

Date: 16 /01/2020

To The Joint Director (S). Ministry of Environment, Forests and Climate Change, North Eastern Regional Office, Law-U-sib, Lumbatngen, Near MTC Workshop, Shillong, Meghalaya – 793 021



Submission of Half yearly compliance report on environmental stipulations - as per MOEF Environmental clearance of Dikchu HEP (96MW) in Sikkim - by M/s. SKPPPL - reg.

Ref:

- 1. Environmental clearance obtained from MOEF&CC vide letter no: J-12011/91/2007-IA.I dated 01-04-2008.
- 2. Amendment in Environmental Clearance from MOEF&CC vide letter no: J-12011/91/2007- IA.I dated 05-03-2018.

Dear Sir

With reference to above, our project is in operational stage after being successfully commissioned. We are hereby submitting our Half yearly compliance and status report (along with required annexures) for the period ending upto December 2019.

Thanking you

Yours faithfully

For M/s. Sneha Kinetic Power Projects Private Limited Sneha Kinetic Power Prefects Ltd

Authorized signator

Enclosed

: as above

Copy to

: Ministry of Environment, Forest & Climate Change (MoEF&CC), New Delhi.

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Administrative Office: Plot No. 1366, Road no.45, Jubilee Hills, Hyderabad 500033, Telangana. Ph: +91(40)4030 1000, Fax: +91(40) 40301102 Registered Office: Greenko House, No.23, Green Avenue Road, Vasant Kunj, New Delhi-110070

# Six Monthly Compliance & Status Report (April 2019 to December 2019) of Environmental Clearance for Dikchu Hydro Electric Project (96 MW), Sikkim



by

M/s Sneha Kinetic Power Projects Private Limited

# **Brief details of Project**

1.	Name of the project	Dikchu Hydro Electric Project (96 MW)					
2.	Type of Project	River Valley Project (run off river scheme)					
3.	Clearance Letter(s) OM No. & Date						
	a) Environment Clearance	Obtained vide  i. Ref no: J12011/91/2007-IA. I dated  1st April 2008  ii. Amended EC obtained vide ref no:  J-12011/91/2007-IA-I dated 5th Ma  2018					
	b) Forest Clearance (Stage-II from Govt. of Sikkim)	Obtained vide  i. Ref no:1110/FCA/FEWMD/515 dated 9 <sup>th</sup> February 2010  ii. After Addition/Adjustment, the revi- forest land diversion of about 9.53 have obtained vide ref. 1110/FCA/FEWMD/1662 dated 26 <sup>th</sup> March 2013					
4.	Location details						
	<ul> <li>a) District</li> <li>b) State</li> <li>c) Dam site</li> <li>i. Latitude</li> <li>ii. Longitude</li> <li>d) Powerhouse</li> <li>i. Latitude</li> <li>ii. Longitude</li> </ul>	East & North District Sikkim 27°24′ 00″ N 88°35′20″ E 27°24'14.32" N 88° 31'37.83"E					
5.	Contact details of Concerned officials at  a) Site office	Mr. M.P. Joshi Dikchu, Lower Rakdong East-District, Sikkim-737107 Ph no: +919083675999					
	b) Corporate/Head office	Mr. Prasada Raju J.V.S.D #1071, Road no.44, Jubilee hills, Hyderabad-500033 Ph no. 04040301100					
6.	Status of construction						

Compliance & Status report for the period ending December 2019
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S.no:	Conditions	Status				
1	Additional conditions specified during Amenda					
i.	The muck generation quantity is beyond the EC quantity. Further, consolidated and compaction of dumps have not been done. The debris is sliding through the slopes to River. Retaining wall is not capable to control the muck from erosion. No reclamation at any site has been done so far.	No additional muck other than shown in the calculations was generated at site however it was observed that somehow swell factor was not added for calculation of muck to be dumped, calculations were corrected by adding that and accordingly the details were supplied.  For the required 3lakh cum of muck to be dumped, muck area of about 4lakh cum capacity is available. In addition to this, all modern techniques of reclamation in consultation with forest officials are being implemented. The details of the same are given in Muck restoration plan enclosed as Annexure I				
ii.	The dumping sites need to be completely reclaimed to avoid soil and sediment run off from dumps. A reclamation plan with time bound implementation schedule may be submitted to regional office. The project must allocate sufficient fund for reclamation of Six Dumping sites.	In addition to details above, during EC amendment, the Muck management plan allocated fund has been increased to Rs.257.77lakhs from earlier approved Rs.76.03lakhs. The present status of works being carried out are enclosed as Annexure II				
iii.	The report on raising Afforestation in 15.6 Ha with details of site, species planted and survival status etc. is yet to be submitted by project to regional office.	For Green Belt Development around project area, we have been regularly carrying out plantation and participating in the Green Mission programmes, like World Environment Day, 10 Minutes to Earth etc. These have been regularly updated in our compliance reports. Photographs of the such recent event is attached herewith as Annexure III.				
iv.	No work with respect to in-situ/ex-situ conservation of orchids and rehabilitation of the species along the road from Rangpo to Ranipool has yet been implemented.	We are presently in receipt of requisitions from locals GPU's such as Ramthang, Rakdong etc., (copies enclosed) to divert the said funds for developmental works of their GPU's instead of the proposed Orchid conservation works (enclosed as Annexure IV). We are in consultation with local forest officials and said GPU's for identification of these works in the vicinity of project area.				
V.	The project has not complied with the condition to implement fisheries management Plan for project. During meeting of Multidisciplinary Committee, State Fisheries Department official informed that the work can be done by them.	A total amount of Rs. 55.75 Lakhs in EMP has been deposited. The receipt of the same is enclosed as Annexure V.				
vi.	Regular monitoring of ambient air and ground level concentrations of SO2, NO2 and PM25 & PM10 should be carried out in the impact zone and records maintained and periodically reports submitted to the regional office. These data should also be put on the website of the company.	On regular basis, all the required monitoring is being done at our site. Senior officials and Scientists of Sikkim State Pollution Control Board have visited our project site on 29 <sup>th</sup> September 2019. The photograph of the same is enclosed as Annexure VI.				

S.no:	Conditions	Status
vii.	The amenities and facilities provide to workers are grossly inadequate, improvement is needed to modernize the kitchen, eating place, drinking water and adopt better kitchen waste management both at Powerhouse and Dam sites.	The required facilities and amenities upgraded are enclosed in photographs as Annexure VII.
II	PART-A Specific conditions	
i.	Catchment Area Treatment Plan has been proposed and should be completed in 4 years	The entire CAT plan amount of Rs.780.92 Lakhs is already deposited to State forest department. Compliance report for the same from State Forest department is awaited.
ii.	The land holding of project affected persons whose land is being acquired has to be submitted to this Ministry. During the construction of the project, 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. NPRR - 2007 as well as Sikkim R & R package would be followed for R & R of project affected persons	Not Applicable
iii.	A Monitoring committee for R&R should be constituted which must include representatives of project affected persons from SC/ ST category and a women beneficiary	Not Applicable
iv.	The commitment made during the public hearing should be fulfilled	Complied. In addition to the commitments made during the Public Hearing, we have taken up many local works as given in Annexure-VIII.
V.	All the equipment which are likely to generate high noise levels are to be fully taken care (noise reduction measures) to meet the ambient noise control standards	All necessary provisions are made to meet ambient noise control standards as applicable.
Vi.	The proposed plan for 3.6 lakh cu.m of muck disposal i.e about 1.1 lakh cu.m is proposed to be reutilised during construction and the remaining 2.5 lakh cumecs of muck to be disposed of at 6 designated areas in North and East Sikkim districts Consolidation and compilation of the muck should be above high flood level	Same as I (i) & I (ii)
vii.	The fishery management plan as proposed in the letter dated 11-02-2008 should be implemented in totality. Creating hatcheries, establishment of fish farms and reservoir fishery has been proposed for conservation and fisheries development and suitable sites for establishment of hatcheries should be identified in consultation with the State	Same as I (v)

S.no:	Conditions	Status
	Fisheries Department. The total budget of Rs. 55.75 lakhs for fishery development and conservation should not be diverted for any other purpose.	
viii.	The proposed afforestation programme in double of degrade forest area of 15.6ha (10ha in north & 5.6 in East districts) using native plant species are identified for this afforestation programme should be strictly implemented. Necessary forest clearance under Forest (conservation) Act, 1980 should be obtained in this regard.	For afforestation of said 15.6ha, the amount of Rs.33.31lakhs is already submitted. In addition to this during the adjustment of diversion of required forest land an additional amount of Rs. 13.39lakhs is also submitted to State forest department. Compliance report for the same from State Forest department is awaited. Further to above, regular afforestation works are carried out at project site. The photographs of such recent event are enclosed as Annexure III.
ix.	The proposed green belt within the 39.1ha of the project area along the network of approach roads, residential areas, office complex, dam site, around the periphery of the reservoir should be strictly adhered and also proposed in - situ/ex - situ conservation of Orchids and take up rehabilitation of these species along the road from Rangpo to Ranipool which are ideal places for rehabilitation should be strictly implemented.	Same as I (iii) & I (iv)
Х.	During lean season 4.92cumecs of water flow is available in the river. A minimum of 1cum of the water shall be released during the lean season for maintaining the aquatic life in the river	Noted and being Compiled.
III	Part - B: General conditions	
i.	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.	Noted, Project is in operation stage, LPG is being provided/used at Kitchen.
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.	Noted, Project is in Operation stage, Local medical dispensary unit is set up. Ambulance is readily available at project site for any emergencies not only for the employees but also open to the local public.
iii.	All the labourers to be engaged for construction works should also be thoroughly examined by health personnel and adequately treated before issuing them work permit.	Project is in Operation stage; only maintenance activities and infra activities are in progress. All the labourers are thoroughly examined before hiring them for various activities during operation stage. In addition to this, Medical camps are being conducted regularly. Photographs of recently conducted medical eye camp on 15 <sup>th</sup> Dec-19 with free Cataract operation is enclosed as Annexure -IX.
iv.	Restoration of construction area including dumping area with levelling, filling up of burrow pits, landscaping etc. area should	Same as I (i) & I (ii)

S.no:	Conditions	Status
	be properly treated with suitable	
	plantation.	
V.	Financial provision shall be made in the	Same as I (i) & I (ii)
٧.	total budget for safeguard measures.	Junic as r (i) & r (ii)
vi.	A multidisciplinary committee in consultation with the Ministry should be constituted with Ecologists, Environmental Scientists, Conservationists and experienced administrators etc., to oversee the effective implementation of suggested safeguard measures.	The Multidisciplinary committee for our project is already formed and all the required steps are being carried out as per their guidance.
vii.	Six monthly monitoring reports should be submitted to the Ministry and its regional Office, Shillong for review.	Six monthly reports are being submitted regularly.
4.	Officials from Regional Office MoEF, Shillong 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.	Noted & Complied
5.	The responsibility of implementation of environmental safeguards rests fully with Sneha Kinetic Power Projects Limited & Government of Sikkim	Yes, being ensured of various safety measures implemented at project site.
6.	The total amount of Rs. 2346.88 lakhs kept in the budgetary provisions in the letter dated 11.02.2008 for implementation of environmental management plan should be strictly adhered and not to be diverted for any purpose.	After the receipt of Amendment in Environmental Clearance on 5/3/2018; revised amount of Rs.3595 lakhs are allocated as budgetary provisions for our project's Environmental Management Plan and is being implemented.
7.	In case of change in the scope of the project, project would require a fresh appraisal.	Amendment in EC has already been obtained from MOEF&CC vide no: J-12011/91/2007-IA-I dated 5 <sup>th</sup> March 2018
8.	The ministry reserves 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	Noted
9.	This clearance letter is valid for a period of 10 years from the date of issue of this letter of commencement of construction	Noted, Project is in operation stage.  Declaration of COD was done for  i. Unit 1 on 12 <sup>th</sup> April 2017

S.no:	Conditions	Status
	work	ii. Unit 2 on 28 <sup>th</sup> May 2017
10.	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	Noted and Complied.
11.	State Pollution Control Board/Committee should display a copy of the clearance letter at the Regional office, District Industries Centre and Collector's office/ tehsildhar's office for 30 days	Noted and Complied.
12.	The project proponent should advertise within 7 days at least in 2 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	The advertisement regarding the issue of environmental clearance for project was published in newspapers as per details below.  1. Samay Dainik dated 09/04/2008  2. Sikkim Express dated 10/04/2008  3. Sikkim Herald dated 15/04/2008
13.	Any appeal against this environmental clearance shall lie with the National Appellate Authority, if preferred within a period of 30 days as prescribed under Section 11 of the National Environment Appellate Act, 1997	Noted.

## **Annexure I - Muck Restoration plan**

#### **RESTORATION & LANDSCAPING OF MUCK DISPOSAL YARDS**

The excavation works are completed and there is no scope of any further generation of muck from any project components, hence, it is postulated that, restoration and landscaping of the dumping yards are to be taken up by adopting bio-engineering measures considering project components in the mountainous terrain.

#### 1.1 METHODOLOGY

The methodologies to be adopted for restoration and landscaping are by engineering & biological treatment.

## A. Engineering measures:

- a. **Terracing / bench development / slope maintenance**: The first step of the plan is to develop proper benches and terraces by engaging excavator machines so that proper slope of yards may be maintained.
- b. **Crate walls**: Wherever retaining structures are required, the crate walls have been proposed to provide so that, toe portions may be made intact. The crate / gabion wall is suggested as it has good properties of underground water percolation and earth pressure withstand due to unorganized loads.
- c. **Grid beams (RRM / Gabion ):** As the slopes with various undulations are developed, grid beams preferably RRM of standard size of 450 mm x 600 mm having internal grid size of 3 m x 3 m and 3 m x 6 m have been proposed so that, surface erosions are completely avoided.
- d. **Jute matting & GI mess laying:** Once the grid beams are ready, the area will be treated by laying jute mat and further, GI mess will be provided over it (wherever required) with proper anchorage. The jute mat will completely avoid surface erosion and further, it will help in regeneration of vegetation over it.
- e. **Catch water drains**: The periphery and within the dumping yards, proper catch water drains have to be provided wherever required, as it leads to creation gullies and damage the treated areas, if not proposed.









(Pictorial plan of the walls, grid beams, jute matting & GI mess laying)

# **B. Biological measures:**

- a. Laying of organic matters & manure: Once the engineering measures gets completed, organic matters like excavated soil & forest decayed material may be spread by mixing with manure.
- b. **Plantation with suitable plant species and soil binding species:** Techniques like block plantation, pasture development & soil and moisture conservation (SMC) may be adopted.
- c. **Seed dribbling and seed spreading technique**: Seeds of plants like walnut, avocado, kainzal, etc. may be dribbed within the treated area and also seeds of plants like alnus & broom grass may be collected and spread over the treated area, so that natural regeneration can be enhanced.











(Pictorial plan of biological measures)

# 1.2 DETAILED RESTORATION PLAN

Dumping yard and site wise schematic plans have been prepared by conducting inspection of each location. As per the requirement and site condition, bioengineering measures have been adopted as per the details mentioned below:

	DETAILED COST OF THE BIOENGINEERING MEASURES									
CI	Cost details (in INR)									
SI. No.	Location	Crate wall	Levelling & Tracing	RRM Grid	Jute Matting	Plantation	Total			
1	Dumping No. 1	0	578480	1620000	157000	54635	2410115			
2	Dumping No. 2	401850	289240	180000	136000	44035	1051125			
3	Dumping No. 3	790305	289240	525000	192500	192500 44035				
4	Dumping No. 5 736725 385653 660000 165800 0						1948178			
5 Dumping No. 6 602775 192827 450000 111500 0 <b>1</b>										
Total 2531655 1735440 3435000 762800 142705										
	Grand Total									

#### 1. Dumping yard no. 1:

The schematic plan for restoration of the dumping yard is prepared as **PLAN-1**.

The dumping yard no. 1 is proposed to be restored and landscaped by measures like construction of RR Grid to arrest and minimize the surface erosion along with providing surface jute matting & plantation over it. Also, the benches being developed will be treated by biological measures especially by means of block plantation.

The detailed estimation is mentioned below:

#### a. RRM Grid construction:

## ESTIMATION FOR THE CONSTRUCTION OF RRM GRID AT DUMPING YARD NO.1

RRM G	RRM GRID CONSTRUCTION ALONG NALA SECTION / DUMPING YARD								
SI. No.	SSR. No.	Particulars	Unit	L	В	Qty.	Rate	Amount	
1	AR	RRM Grid of size 3m x 6 m with 0.60 Height & 0.45 width of RRM column & beam	sqm	180	36	6480	Rs.250 / sqm	1620000.00	
							Total	1620000.00	

#### **RATE ANALYSIS: -**

Total area in sqm = 6 x 12 = 72 sqm

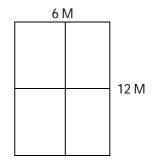
Horizontal beam = 3 x 3 = 9 m

Vertical beam =  $3 \times 6 = 18 \text{ m}$ 

Total length = 27 m

Width of the beam = 0.45 m

Height of the beam - 0.60 m



Total Qty in 72 sqm area =  $27 \times 0.45 \times 0.60 = 7.29 \text{ cum } \times \text{Rs. } 2467 /- = \text{Rs. } 17,984.43 /- \text{SAY} = \text{Rs. } 17,985/-$ Hence, per sqm = 17985 / 72 = Rs. 249.79 /- SAY Rs. 250/- per sqm.

# b. Leveling and Terracing:

# **ESTIMATION FOR THE LEVELING & TERRACING AT DUMPING YARD NO.1**

LEVELI	LEVELING AND TERRACING FOR BENCH DEVELOPMENT AT DUMPING -1						
SI. Particulars Unit Rate of Diesel No of days An Excavator Consumption /day engaged							
1	Excavator (PC 200)	1	350000	7616	30	578480	
					Total	578480	

# c. Laying of Jute Mat & Plantation:

# ESTIMATION FOR THE PROCUREMENT OF JUTE MAT, LAYING OF JUTE MAT & PLANTATION OVER JUTE MAT AT DUMPING -1

SI.	Particulars Particulars	Unit	L	В	Qty.	Rate	Amount
No.							
1	Jute Mate (20-25 mm grid)						
	Above bench formation & within grids	Sqm	180	50	9000	5.00	45000.00
2	Providing & supplying of surface organics / top soils & manures	Truck			8	6500.00	52000.00
3	Labour supply (For laying jute mat)	Nos.			150	400.00	60000.00
4	Labour supply (For plantation works)	Nos.			100	400.00	40000.00
						Total	157000.00

# d. Biological / Plantation work:

#### ESTIMATION FOR CARRYING OUT BIOLOGICAL RESTORATION WORKS AT DUMPING-1 BENCHES

BLOC	OCK PLANTATION WORK (2.4 Ha + 2.5 Ha = 4.9 Ha, Say = 5 Ha)						
SI.	Particulars Particulars	Work /	Total	Rate /	Amount		
No.		manday	manday	manday			
1	Collection of stack of size 60-75 cm long and 2.5 cm diameter (200 stacks x 5 Ha = 1000 stacks)	200 stacks	5	160.69	803.45		
2	Laying out of plantation pits (1000 nos.)	200 pits	5	160.69	803.45		
3	Digging and refilling of plantation pits (1000 nos) of size 30 cm x 30 cm x 45 cm	40 pits	25	160.69	4017.25		
4	Collection and carriage of polybag seedlings from nursery to plantation site (1000 nos)	80 nos.	12.5	160.69	2008.63		
5	Cost of rhizomes of broom grass and other site specific grasses (2500 nos. x 5 Ha - 12500 nos)			1.5	18750		
6	Collection and carriage of site specific grass to plantation sites by head loads (2500 nos. x 5 Ha - 12500 nos)	250 rhizomes	50	160.69	8034.5		
7	Cost of seedlings 1000 nos. @ Rs. 4.15 per seedling			4.15	4150		
8	laying out and planting of grass rhizomes in crobar holes at 2m x 2m spacing and ramming (2500 nos. x 5 Ha - 12500 nos)	150 rhizomes	83.33	160.69	13390.3		
9	Planting of tree seedlings and fixing of sticks ( 200 nos x 5 ha - 1000 nos)	100 nos.	10	160.69	1606.9		
				Total	53564.5		
10	Contingencies for sign board & implements				1071.29		
	NOTE AS DED FOREST COR		Grand	Total	54635.8		

NOTE: AS PER FOREST SSR 2008.

# 2. Dumping yard no. 2:

The schematic plan for restoration of the dumping yard is prepared as PLAN-2.

The dumping yard no. 2 is proposed to be restored and landscaped by measures like construction of Crate walls, RRM Grid to arrest and minimize the surface erosion along with providing surface jute matting & plantation over it. Also the benches being developed will be treated by biological measures especially by means of block plantation.

The detailed estimation is mentioned below:

#### a. Crate wall construction:

# ESTIMATION FOR THE CONSTRUCTION OF CRATE WALLS AT DUMPING YARD -2

S. No.	SSR. No.	Particulars	Unit	L	В	Н	Qty.	Rate	Amount
1	AR	Crate wall							
		1st Layer	Cum	60	2.50	1	150	1786.00	267900.00
		2nd Layer	Cum	60	1.25	1	75	1786.00	133950.00
			Total				225		401850.00

# b. Leveling and Terracing:

#### **ESTIMATION FOR THE LEVELING & TERRACING AT DUMPING YARD NO.2**

LEVELIN	LEVELING AND TERRACING FOR BENCH DEVELOPMENT AT DUMPING -2											
SI. No.	Particulars	Unit	Rate of Excavator	Diesel Consumption /day	No of days engaged	Amount						
1	Excavator (PC 200)	1	350000	7616	15	289240						
					Total	289240						

#### c. RRM Grid construction:

RRM G	RRM GRID CONSTRUCTION ALONG NALA SECTION / DUMPING YARD										
SI. No.	SSR. No.	Particulars	Unit	L	В	Qty.	Rate	Amount			
1	AR	RRM Grid of size 3m x 6 m with 0.60 Height & 0.45 width of RRM column & beam	sqm	60	12	720	Rs.250 / sqm	180000.00			
							Total	180000.00			

# d. Laying of Jute Mat & Plantation:

# ESTIMATION FOR THE PROCUREMENT OF JUTE MAT, LAYING OF JUTE MAT & PLANTATION OVER JUTE MAT AT DUMPING -2

S. No.	Particulars	Unit	L	В	Qty.	Rate	Amount
1	Jute Mate (20-25 mm grid)						
	Above bench formation & within grids		120	40	4800	5.00	24000.00
2	Providing & supplying of surface organics / top soils & manures	Truck			8	6500.00	52000.00
3	Labour supply (For laying jute mat)	Nos.			150	400.00	60000.00
4	Labour supply (For plantation works)	Nos.			100	400.00	40000.00
						Total	136000.00

# e. Biological / Plantation work:

#### ESTIMATION FOR CARRYING OUT BIOLOGICAL RESTORATION WORKS AT DUMPING-2

SI. No.	Particulars	Work / manday	Total manday	Rate / manday	Amount
1	collection of stack of size 60-75 cm lng and 2.5 cm diameter (200 stacks x 4 Ha = 800 stacks)	200 stacks	4	160.69	642.76
2	laying out of plantation pits (800 nos.)	200 pits	4	160.69	642.76
3	Digging and refilling of plantation pits (800 nos) of size 30 cm x 30 cm x 45 cm	40 pits	20	160.69	3213.8
4	Collection and carriage of polybag seedlings from nursery to plantation site (800 nos)	80 nos.	12	160.69	1928.28
5	Cost of rhizomes of broom grass and other site specific grasses (2500 nos. x 4 Ha - 10000 nos)			1.5	15000
6	Collection and carriage of site specific grass to plantation sites by head loads (2500 nos. x 4 Ha = 10000 nos)	250 rhizomes	40	160.69	6427.6
7	Cost of seedlings 800 nos. @ Rs. 4.15 per seedling			4.15	3320
8	laying out and planting of grass rhizomes in crobar holes at 2m x 2m spacing and ramming (2500 nos. x 4 Ha = 10000 nos)	150 rhizomes	66.66	160.69	10711.6
	Planting of tree seedlings and fixing of sticks (200 nos x 4 ha - 800 nos)	100 nos.	8	160.69	1285.52
				Total	43172.3
9	Contingencies for sign board & implements				863.446
			Gran	nd Total	44035.8

**NOTE: AS PER FOREST SSR 2008.** 

# 3. Dumping yard no. 3:

The schematic plan for restoration of the dumping yard is prepared as **PLAN-3**.

The dumping yard no. 3 is proposed to be restored and landscaped by measures like construction of Crate walls, RRM Grid to arrest and minimize the surface erosion along with providing surface jute matting & plantation over it. Also the benches being developed will be treated by biological measures especially by means of block plantation.

The detailed estimation is mentioned below:

#### a. Crate wall construction:

# ESTIMATION FOR THE CONSTRUCTION OF CRATE WALLS AT DUMPING YARD -3

S. No.	SSR. No.	Particulars	Unit	L	В	Н	Qty.	Rate	Amount
1	AR	Crate wall							
		1st Layer	Cum	70	2.75	1	192.5	1786.00	343805.00
		2nd Layer	Cum	70	2.50	1	175	1786.00	312550.00
		3RD Layer	Cum	60	1.25	1	75	1786.00	133950.00
				Tot	al		442.5		790305.00

# b. Leveling and Terracing:

#### ESTIMATION FOR THE LEVELING & TERRACING AT DUMPING YARD NO.3

LEVELIN	LEVELING AND TERRACING FOR BENCH DEVELOPMENT AT DUMPING -3											
SI. No.	Particulars	Unit	Rate of Excavator	Diesel Consumption /day	No of days engaged	Amount						
1	Excavator (PC 200)	1	350000	7616	15	289240						
					Total	289240						

# c. RRM Grid construction:

#### ESTIMATION FOR THE CONSTRUCTION OF RRM GRID AT DUMPING YARD NO. 3

SI. No.	SSR. No.	Particulars	Unit	L	В	Qty.	Rate	Amount
1	AR	RRM Grid of size 3m x 6 m with 0.60 Height & 0.45 width of RRM column & beam	sqm	60	35	2100	Rs.250 / sqm	525000.00
							Total	525000.00

# d. Jute Mat Laying & Plantation:

# ESTIMATION FOR THE PROCUREMENT OF JUTE MAT, LAYING OF JUTE MAT & PLANTATION OVER JUTE MAT AT DUMPING -3

S. No.	Particulars		L	В	Qty.	Rate	Amount
1	Jute Mate (20-25 mm grid)						
	Above bench formation & within grids		170	90	15300	5.00	76500.00
2	Providing & supplying of surface				8	6500.00	52000.00
	organics / top soils & manures						
3	Labour supply (For laying jute mat)	Nos.			160	400.00	64000.00
4	Labour supply (For plantation works)	Nos.			130	400.00	52000.00
						Total	192500.00

# e. Biological / Plantation works:

#### ESTIMATION FOR CARRYING OUT BIOLOGICAL RESTORATION WORKS AT DUMPING-3

BLOC	K DEVELOPMENT WORK (2.4 Ha + 0.6 Ha + 0.9 Ha = 3	3.9 Ha, Say =	4 Ha)		
SI. No.	Particulars Particulars	Work / manday	Total manday	Rate / manday	Amount
1	collection of stack of size 60-75 cm lng and 2.5 cm diameter (200 stacks x 4 Ha = 800 stacks)	200 stacks	4	160.69	642.76
2	laying out of plantation pits (800 nos.)	200 pits	4	160.69	642.76
3	Digging and refilling of planation pits (800 nos) of size 30 cm x 30 cm x 45 cm	40 pits	20	160.69	3213.8
4	Collection and carriage of polybag seedlings from nursery to plantation site (800 nos)	80 nos.	12	160.69	1928.28
5	Cost of rhizomes of broom grass and other site specific grasses (2500 nos. x 4 Ha - 10000 nos)			1.5	15000
6	Collection and carriage of site specific grass to plantation sites by head loads (2500 nos. x 4 Ha = 10000 nos)	250 rhizomes	40	160.69	6427.6
7	Cost of seedlings 800 nos. @ Rs. 4.15 per seedling			4.15	3320
8	laying out and planting of grass rhizomes in crobar holes at 2m x 2m spacing and ramming (2500 nos. x 4 Ha = 10000 nos)	150 rhizomes	66.66	160.69	10711.6
	Planting of tree seedlings and fixing of sticks (200 nos x 4 ha - 800 nos)	100 nos.	8	160.69	1285.52
				Total	43172.3
9	Contingencies for sign board & implements				863.446
			Grand	44035.8	

# 4. Dumping yard no. 4:

The schematic plan for restoration of the dumping yard is prepared as PLAN-4.

The dumping yard no. 4 at Lower Tanek village has been properly restored as on date and no further any restoration plan is required. The base of the dumping yard has been provided with proper retaining structure and about 95 % area has been covered with vegetation now.

# 5. **Dumping yard no. 5:**

The schematic plan for restoration of the dumping yard is prepared as **PLAN-5**.

The dumping yard no. 5 is proposed to be restored and landscaped by measures like construction of Crate walls, RRM Grid to arrest and minimize the surface erosion along with providing surface jute matting & plantation over it. Also the benches being developed will be treated by biological measures especially by means of block plantation.

The detailed estimation is mentioned below:

#### a. Crate wall construction:

#### ESTIMATION FOR THE CONSTRUCTION OF CRATE WALLS AT DUMPING YARD -5

S. No.	SSR. No.	Particulars	Unit	L	В	Н	Qty.	Rate	Amount
1	AR	Crate wall							
		1st Layer	Cum	110	2.50	1	275	1786.00	491150.00
		2nd Layer	Cum	110	1.25	1	137.5	1786.00	245575.00
				Tot	al		412.5		736725.00

# b. Leveling and Terracing:

#### **ESTIMATION FOR THE LEVELING & TERRACING AT DUMPING YARD NO.5**

LEVEL	LEVELING AND TERRACING FOR BENCH DEVELOPMENT AT DUMPING -5											
S.	S. Particulars Unit Rate of Diesel Consumption No of days Amount											
No.	o. Excavator /day engaged											
1	Excavator (PC 200)	1	350000	7616	20	385653						
					Total	385653						

# c. RRM Grid construction:

# ESTIMATION FOR THE CONSTRUCTION OF RRM GRID AT DUMPING YARD NO. 5

SI. No.	SSR. No.	Particulars	Unit	L	В	Qty.	Rate	Amount
1	AR	RRM Grid of size 3m x 6 m with 0.60 Height & 0.45 width of RRM column & beam	sqm	110	24	2640	Rs.250 / sqm	660000.00
							Total	660000.00

# d. Jute Mat Laying & Plantation:

# ESTIMATION FOR THE PROCUREMENT OF JUTE MAT, LAYING OF JUTE MAT & PLANTATION OVER JUTE MAT AT DUMPING -5

SI. No.	Particulars	Unit	L	В	Qty.	Rate	Amount
1	Jute Mate (20-25 mm grid)						
	Above bench formation & within Grid	Sqm	110	36	3960	5.00	19800.00
2	Providing & supplying of surface organics	Truck			12	6500.00	78000.00
	/ top soils & manures						
3	Labour supply (For laying jute mat)	Nos.			170	400.00	68000.00
4	Labour supply (For plantation works)	Nos.			135	400.00	54000.00
						Total	165800.00

# 6. Dumping yard no. 6:

The schematic plan for restoration of the dumping yard is prepared as **PLAN-6**.

The dumping yard no. 6 is proposed to be restored and landscaped by measures like construction of Crate walls, RRM Grid to arrest and minimize the surface erosion along with providing surface jute matting & plantation over it. Also, the benches being developed will be treated by biological measures especially by means of block plantation.

The detailed estimation is mentioned below:

#### a. Crate wall construction:

#### ESTIMATION FOR THE CONSTRUCTION OF CRATE WALLS AT DUMPING YARD -6

SI. No.	SSR. No.	Particulars	Unit	L	В	Н	Qty.	Rate	Amount
1	AR	Crate wall							
		1st Layer	Cum	90	2.50	1	225	1786.00	401850.00
		2nd Layer	Cum	90	1.25	1	112.5	1786.00	200925.00
				To	tal		337.5		602775.00

# b. Levelling and Terracing:

#### ESTIMATION FOR THE LEVELING & TERRACING AT DUMPING YARD NO.6

LEVELING	LEVELING AND TERRACING FOR BENCH DEVELOPMENT AT DUMPING -6									
SI. No.	Particulars	Unit	Rate of Excavator	Diesel Consumption /day	No of days engaged	Amount				
1	Excavator (PC 200)	1	350000	7616	10	192827				
					Total	192827				

#### c. RRM Grid construction:

#### ESTIMATION FOR THE CONSTRUCTION OF RRM GRID AT DUMPING YARD NO. 6

SI. No.	SSR. No.	Particulars Particulars	Unit	L	В	Qty.	Rate	Amount
1	AR	RRM Grid of size 3m x 6 m with 0.60 Height & 0.45 width of RRM column & beam	sqm	90	20	1800	Rs.250 / sqm	450000.00
							Total	450000.00

#### d. Jute Mat Laying & Plantation works:

# ESTIMATION FOR THE PROCUREMENT OF JUTE MAT, LAYING OF JUTE MAT & PLANTATION OVER JUTE MAT AT DUMPING -6

SI. No.	Particulars	Unit	L	В	Qty.	Rate	Amount
1	Jute Mate (20-25 mm grid)						
	Above bench formation & within grids	Sqm	90	40	3600	5.00	18000.00
2	Providing & supplying of surface organics /	Truck			7	6500.00	45500.00
	top soils & manures						
3	Labour supply (For laying jute mat)	Nos.			120	400.00	48000.00
4	Labour supply (For plantation works)	Nos.			100	400.00	40000.00
						Total	111500.00

# **Annexure II – Present status of Reclamation Works**





Present muck dumping area at Surge Shaft Area



Reclamation work of muck dumping area at Powerhouse Area





Present muck dumping area at Dam site Area

# **Annexure III - Afforestation programmes**

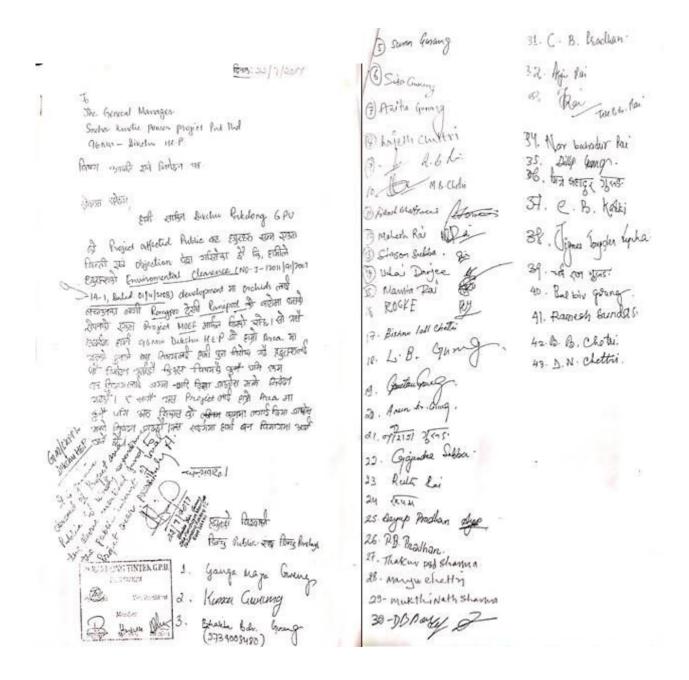


Plantation at Dikchu Powerhouse on 5<sup>th</sup> June – World Environment Day.



Plantation at Dam Site on 6<sup>th</sup> June 2019.

# Annexure IV - Requisition letters from various GPU's



To,

The General Manager, M/s. Sneha Kinetic Power Project Pvt. Ltd. 96 MW Dikchu H.E.P.

Sub: Objection for the implementation of the Orchid Conservation under Environmental Clearance of

96 M.W. Dikchu H.E.P.

Sir,

With reference to the above subject, we the affected public of Ramthang Tanek G.P.U., North Sikkim would like to Submit our displeasure/disappointment with the Project as well as the Forest Department, Government of Sikkim that in the Environment Clearance of Sneha Kinetic Power Project Pvt. Ltd vide no: J-12011/91/2007-IAI, Dated: 01/04/2008, it has been mentioned that there is a rehabilitation scheme of Conservation of Orchid Species around the road from Rangpo to Ranipool, which otherwise was never discussed in Public hearing those days. The said location (Rangpo –Ranipool) does not even falls in Project affected area. So in this regard we have an Objection for the implementation of the said project which is very far away from the project affected areas. And further we being affected public request your goodself to kindly divert the scheme in our affected areas as any type of Development works please. In this regards we shall approach the concerned Officer of Forest Department, Government of Sikkim.

Public and Panchayats of Ramthang Tanek G.P.U

GYAN ZSNE JA LADOHA Plande achayat Rababar Milangrek G.F.U YoruNikkim

> Panchayat Zilla Membel Panchayat Zilla Membel Ramthang, Tanek G.P.U North Sikkim

> > Langhp Lepch3
> > Vice President
> > Ramthang-Tanyek GPU

Copy to: Member Secretary, State Pollution Control Board. FEWMD, Government of Sikkim

# Annexure V - Receipt for deposit of total Fisheries fund

Sneha Kinetic Power Project Pvt. Ltd. (CIN: U40109DL2000PTC231172), GSTIN: 11AAFCS1221B1ZD Site Address: Dikchu H.E.P. Dikchu Bazar, East Sikkim - 737107

Greenk<sup>®</sup>

Ref: SKPPPL/GTK/Fisheries/19-20/05-60 .

Date: 22/05/2019.

The Director,

Directorate of Fisheries Deptt. Government of Sikkim, Gangtok, East Sikkim

Sup: Development of Fisheries as provision under EMP of Dikchu HEP- Sub mission fresh Cheque of balance payment against total amount of Rs. 55.75 lakhs.

Ref: SKPPL/Fisheries/18-19/05/07, Dated: 10/05/2018, 277/Fish, Dated: 11/07/2018. SKPPPL/GTK/Fisheries/18-19/11- 44, Dated: 12/11/2018 951(b)/Fish, Dated: 29/01/2019.

Dear Sir,

With reference to above, we are hereby submitting a fresh cheque of Rs. 35, 75,000/- (Rupees Thirty Five lakhs Seventy five Thousand) only for the balance amount of Total Rs. 55.75 Lakhs for the development of Fisheries as per provision under EMP of Dikchu HEP vide Cheque no: 717746, dated: 07/05/2019 of State Bank of India- payable to Director of Fisheries Government of Sikkim. Please ensure the cheque is deposited on time to avoid and revalidation further as this is the third time we are doing so.

Kindly acknowledge the receipt of the same and provide us the utilization report accordingly in dva time please.

Thanking You

Yours sincerely

For. M/s. Sneha Kinetic Power Projects (P) Ltd.

Encl: as above.

(Authorized Signator

Direction of Fisheries

# Annexure VI – Monitoring report of 2018-19 by SPCB, Sikkim



Site Visit of Senior Scientists and officials of Sikkim State Pollution Control Board at Project on 29<sup>th</sup> September 2019.

# Annexure VII - Various amenities provided at our Site offices





**Plant Mess Dining Hall** 





Living Room of Employees.





Plant Guest House Kitchen and Dining Hall.





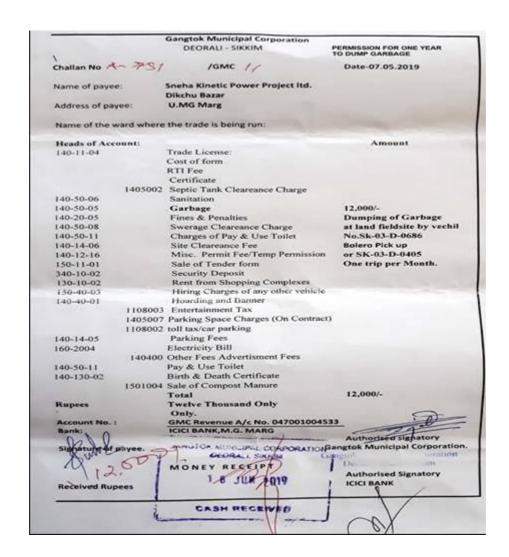


**Toilet facilities** 

# Waste Management- Disposal of Waste to the Government approved Dumping Yard.







For Kitchen Waste Management we have manage to send one vehicle of Kitchen Waste and other waste per month to Government authorized Land Fill.









**Drinking Water Facilities.** 









Conducting Plog Run (Cleanliness drive) on 2<sup>nd</sup> October 2019 at Dikchu Power House/Dam site and nearby village.

# Annexure VIII - Details of Local works carried out at project site

# Various Local welfare works carried out at out project site are as listed below

- 1. Computer centre with instructor was provided to Lingdok public. This was inaugurated by Hon'ble Minister Sh. T. T. Bhutia.
- 2. Fund of ₹10 Lacs was granted for construction of Water Supply line at Ramthang Village.
- 3. Construction of Temple at Tumin area, Dikchu was carried out for an amount of ₹.4.6 Lacs.
- 4. Fund of ₹ 10Lacs in 2 instalments i.e. as ₹.4 Lacs and ₹. 6 Lacs was contributed for construction of Gumpa at Tanek Village.
- 5. Renovation works were taken up at Chemistry Lab of Government Girls Senior Secondary School, Deorali, Gangtok costing to about ₹.3.5 Lacs.
- 6. Equipment's like Heater, Water Filter & Fire Extinguishers Cylinders etc., were supplied to Dikchu Primary Health Centre for an approximate cost of ₹ 20,000/-.
- 7. Cleanliness and sanitations works were carried out at various project locations under the scheme named "SWATCH BHARAT ABHIYAN-2014". This was actively participated both by Employees and Locals.
- 8. Repair works were taken up at various locally available government establish such as school, health centres/GPU. In addition to this, at government school we even carried out construction of washrooms.
- 9. Not only provided financial help during earthquake but also supplied many construction materials to locals such as cement, aggregate etc.
- 10. Renovation works were taken up at Panchayat Bhawan, Phodong, North Sikkim costing to about ₹1 Lac.
- 11. Construction of footpath from Adit-II LOWER Rongong, Phodong, North Sikkim was carried out for an amount of ₹ 4.35 Lacs.
- 12. Repair works were taken of at Foot Bridge at Lingdok over Dikchu River, costing to ₹.1.38 lacs.
- 13. Construction material such as cement/sand /aggregate and CGI Sheets etc. provided for Gumpa, Mandir/Church and Govt Schools, at Lingdok /Tanek/Dikchu/Phodong costing to about ₹ 30 lacs.
- 14. Equipment's like Heater, Water filter and blankets etc. were supplied to Phodong Primary Health Centre for an approximate cost of ₹ 10,000/-
- 15. Construction of RCC foot BRIDGE AT Tanek Village, North Sikkim was carried out for an amount of ₹ 4 lacs.
- 16. Construction of Drinking water pipeline connecting to Dikchu P.H.C, East Sikkim costing ₹ 1.5 lacs. (Dt-18/1/2016).
- 17. Construction of Crematorium shade at Lingdok, East Sikkim was carried out for an amount of ₹ 2 Lacs (Dt: 23/1/2016).
- 18. Construction of new PHSC (Dispensary) near 9<sup>th</sup> Mile at Lingdok, East Sikkim costing ₹. 9, 51,721/-(Dt: 23/01/2016).
- 19. One set Computer and Printer donated to Tanek Primary School, Government of Sikkim, North Sikkim costing to ₹ 30,000(Dt: 31/3/2016).
- 20. Construction material such as cement/Rods for repairing Rajeev Gandhi Sewa Kendra, under 46-Rakdong Tintek unit, Dikchu East Sikkim costing to about ₹.22,500/- (Dt: 20/5/2016).
- 21. Construction material such as cement /sand /aggregate for repairing Mid-day Meal Building of Lingdok, Govt Sr. Sec School, East Sikkim costing to about ₹ 51,000/- (Dt: 28/5/2016)
- 22. Financial support of ₹ 10,000/-given to S.H.G Members \of Lingdok /Namphong GPU for Organic Framing Training at Himachal Pradesh, (Dt: 06/6/2016)
- 23. Financial support of ₹ 20,000/- given to Lingdok Chanker Gumpa, East Sikkim for purchasing utensils and Furniture. (Dt: 10/6/2016).
- 24. Construction of C.C. Footpath at Lingdok Dam site towards Rongong Phodong village North Sikkim or ₹ 3, 90,154/-
- 25. Construction of protection works for landslide at Tumlong ,North Sikkim of ₹. 2, 46,606/-
- 26. Construction of Crematorium shed at Lower Rongong North Sikkim was carried out for an amount of ₹2 lacs.

- 27. Construction of portative works for development and extension of Crematorium centre at Ramthang of ₹13,83,914/-(Dt: 15/9/2016).
- 28. Construction of protective works of footpath and beatification of Ramthang View Point, North Sikkim of ₹7, 76,957/-(Dt: 15/9/2016)
- 29. Construction of protection work at Dikchu near powerhouse site, East Sikkim of ₹.4,04,586/-
- 30. Construction of I.C.D.S. for Dikchu village, East Sikkim of ₹.1,62,288/-
- 31. Construction of protection wall at Manilakhang, Mending, Installation of Street lights in
- 32. Rongong village and construction materials for construction of new Chorten at Rongong, worth ₹, 4, 50,230/-.
- 33. Materials supply for Road maintenance at Lingdok Namphong PWD Road worth ₹.4,27,000/-.
- 34. Protection works GURDUNG under Kabi North Sikkim worth ₹ 19,18,463/-
- 35. Provide 150 Nos. of plastic Chairs to Dikchu Govt. Sr. Sec. School East Sikkim worth ₹.44,885/-
- 36. Support for the construction of Basketball Court at EMRS School (Tribal School) at Swayem, North Sikkim worth ₹ 2,00,000/-.
- 37. Support for the construction of Sivik Samdrup Manilakhang Gumpa at Namphong, East Sikkim worth ₹ 2,00,000/-
- 38. Providing of a printer cum photocopy machine to Government Phodong Sen. Secondary School, North Sikkim worth ₹ 12,500/-
- 39. Construction of protection wall around playground of Namphong Jr. High School, East Sikkim worth ₹ 3,32,740/-
- 40. Construction of Toilet at Samdong Government High Secondary School, Dikchu East Sikkim worth ₹ 2,86,238/-
- 41. Construction of Crematorium Shed with foot path near LILO Tower at Tanek, North Sikkim ₹ 4, 93,829/-.
- 42. Financial support of Rs. 1 Lakh for the repairing of roof of Phodong Manilakhang Gumpa North Sikkim.
- 43. Construction of C.C. footpath from S.P.W.D Road to I.C.D.S. at Lingdok worth ₹ 1,17,825/-
- 44. Construction of Crematorium Shed with approach footpath at Pegya Busty worth ₹ 3, 14, 814/-
- 45. Construction of One Unit organic vegetable stall at Kabi, North Sikkim worth ₹ 3, 31, 170/-.
- 46. Installation of Street Lights at Rongong, North Sikkim worth ₹ 2,03,020/-.
- 47. Repairing of Phodong Manilakhang Gumpa Roof worth ₹ 1,00,000/-.

Photographs of some of them are as below

# 43. C.C. footpath from S.P.W.D Road to I.C.D.S. at Lingdok





44. Crematorium Shed with approach footpath at Pegya Busty, East Sikkim.





45. One Unit organic vegetable stall at Kabi, North Sikkim









47. Repairing of Phodong Manilakhang Gumpa Roof, Phodong, North Sikkim.



Sneha Kinetic Power Projects Private Limited

Six Monthly Report

# Annexure IX - Free Eye Camp on 15th December 2019, at Dikchu, East Sikkim















