MONITORING REPORT ON THE IMPLEMENTATION STATUS OF CONDITIONS OF ENVIRONMENTAL CLEARANCE

1. Project Type : River Valley

2. Name of the Project : Tashiding HEP (96 MW)


4. Location :
   a. District : West Sikkim
   b. State : Sikkim
   c. Latitude/Longitude
      Barrage site : 27°20'28"/88°13'59"
      Power House :

5. Address of correspondence :
   (a) Address of concerned project Head : Shri P. B. Praveen Kumar, Director,
                                             Shiga Energy Pvt. Ltd.,
                                             Rabdenling, Annex II,
                                             Adjoining Royal Plaza,
                                             Upper Shyari, Gangtok,
                                             East Sikkim-737101
                                             Telephone No. 03592–204709
                                             Fax No. 03592–201307

   (b) Address of Corporate Office : Shri T. Nagendra Rao,
                                      Shiga Energy Pvt. Ltd.,
                                      5th Floor, Building No. 8, Tower C,
                                      DLF Cyber City,
                                      Phase II, Gurgaon,
                                      Haryana- 122022
                                      Telephone No. 095124–4696300
                                      Fax No. 095124–4696311

6. Monitored with : Ms Kusum Gurung, DFO (Env. and land use)
                   West Sikkim
                   Mr Murugan, DFO (T)
                   West Sikkim

PRESENT STATUS

The Ministry has accorded clearance for construction of 96 MW hydroelectric project on Rathongchu River in West Sikkim District, Sikkim. The total land requirement is 17.854 ha out of which 4.3592 ha is forest land. The proposed site is about 5.8 Km away from Fambonglho Wildlife Sanctuary.

It was observed that construction of approach road of about 4.8 kms to barrage, Adit and power house sites has been completed. Excavation works for HRT, surge shaft etc. were found to be in progress. (Photograph 1 & 2).

Photograph-1: Stone Crushing Unit near Power House Site

Photograph-2: A view of approach road to barrage/adit site
STATUS OF COMPLIANCE

A. Specific Conditions:

**Stipulation I:** Catchment Area Treatment Plan as has been proposed should be completed in 3 years. The plan is given below:

Physical targets for biological and Engineering Measures:

<table>
<thead>
<tr>
<th>Treatment Measures</th>
<th>Unit (ha)</th>
<th>Year I</th>
<th>Year II</th>
<th>Year III</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A) Biological Measures</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Afforestation (ha)</td>
<td>23</td>
<td>9.2</td>
<td>9.2</td>
<td>11.4</td>
<td>52.8</td>
</tr>
<tr>
<td>Aided Natural Regeneration(ha)</td>
<td>24</td>
<td>9.6</td>
<td>9.6</td>
<td>11.8</td>
<td>55</td>
</tr>
<tr>
<td>Medicinal plantation (ha)</td>
<td>4</td>
<td>1.6</td>
<td>1.6</td>
<td>2</td>
<td>9.2</td>
</tr>
<tr>
<td>Seed sowing, dibbing and broadcasting(ha)</td>
<td>14</td>
<td>5.6</td>
<td>5.6</td>
<td>6.8</td>
<td>32</td>
</tr>
<tr>
<td>Broom Grass plantation(ha)</td>
<td>10</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>23</td>
</tr>
<tr>
<td>Bamboo Plantation</td>
<td>7</td>
<td>2.8</td>
<td>2.8</td>
<td>3.4</td>
<td>16</td>
</tr>
<tr>
<td>Silvi-pasture development (ha)</td>
<td>10</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>23</td>
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<tr>
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<tr>
<td>Nursery creation (Nos)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nursery maintenance</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>(B) Engineering Measures</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dry Stones wall (ha)</td>
<td>264</td>
<td>105.6</td>
<td>105.6</td>
<td>52.8</td>
<td>52.8</td>
</tr>
<tr>
<td>Dry stone sausage wall (ha)</td>
<td>211</td>
<td>84.4</td>
<td>84.4</td>
<td>42.2</td>
<td>422</td>
</tr>
<tr>
<td>CCM wall (ha)</td>
<td>117</td>
<td>46.8</td>
<td>46.8</td>
<td>23.4</td>
<td>234</td>
</tr>
<tr>
<td>Catch Water Drain (box drain)</td>
<td>114</td>
<td>45.6</td>
<td>45.6</td>
<td>22.8</td>
<td>228</td>
</tr>
</tbody>
</table>

**Status of Compliance: Partially Complied with.** The project authorities have deposited an amount of Rs 63,48,000/- under CAMPA fund for undertaking the CAT works by the State Forests, Environment & Wildlife Department.

**Stipulation II:** Five dumping sites have been identified for dumping 380858 m3 of excavated material. For retaining the dumped/ unused material for subsequent stabilization along the hill slopes and along the stretch of the road sausage-cum-retaining walls shall be developed. These need to be built prior to the dumping of muck at these sites. These walls would range from 70 to 290 m length at the proposed dumping sites.

**Status of Compliance: Being complied with.** It was observed that at some places sausage-cum-retaining wall has been broken. It was informed by project officials that heavy downpour resulted in massive landslides along the approach road resulting in breaking of sausage-cum-retaining wall at muck dumping places. The same shall be repaired during the dry season of winter.

**Stipulation III:** It should be ensured that the dumping yards blend with the natural landscape by developing the sites with gentle slopes, bunds, terraced and water ponds, patches of greenery in and around them.

**Status of Compliance: Compliance stage is yet to come.**

**Stipulation IV:** For maintaining environmental flow in the river two cumec water should be released during lean season.

**Status of Compliance: Compliance stage is yet to come.**
**Stipulation V:** The scheme for disposal of solid waste should cover the integrated project area including from labour colony during construction phase. Solid waste from the labour camps shall be collected in beans/masonry vats and the same shall be dumped/disposed to nearby municipal landfills/authorized dump sites. No dumping of solid waste will be allowed near any water body or a stream to have any health hazard problem to the community.

**Status of Compliance: Being complied with.** It was observed that solid waste is collected in bins and then disposed of in pit far from any water body. It was also informed that conversion of solid wastes into biogas is also explored.

**Stipulation VI:** Jobs should be provided to at least one member of all the 30 affected families as per their skill.

**Status of Compliance: Complied with.**

**Stipulation VII:** Fishery Management Plan as proposed in the EMP should be implemented in totality.

**Status of Compliance: Compliance stage is yet to come.**

**Stipulation VIII:** The proposed site is about 5 km away from the buffer zone of Khangchendzonga Biosphere Reserve as per Supreme Court order clearance from NBWL may be obtained (if required).

**Status of Compliance: Not complied with.** The project also falls within 10 kms from the Fambonglho Wildlife Sanctuary. As such, NBWL clearance needs to be obtained.

**Stipulation IX:** The Project proponent should carry out a study on post construction period during O & M stage in between 3 to 5 years after commissioning of the project to examine the actual environmental impact of the project on its surrounding compared to what was planned initially. The study should be conducted by a reputed institute/consultant.

**Status of Compliance: Compliance stage is yet to come.**

**B. General Conditions:**

**Stipulation 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.
**Status of Compliance:** Complied with. Contractors are providing mess facilities to all the labourers where food is cooked using LPG.

**Photograph-4:** Meals sent to the laborers working at sites using mobile van

**Photograph-5:** Mess facilities at site

**Stipulation 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.
Status of Compliance: Being complied with. Though fuel depot has not been opened but mess, medical and recreational facilities are provided to the labourers as stipulated.

Stipulation III: All the labourers to be engaged for construction works should be thoroughly examined by health personnel and adequately treated before issuing them work permit.

Status of Compliance: Complied with.

Stipulation IV: Restoration of construction area including dumping site of excavated materials should be ensured by levelling, filling up of burrow pits, landscaping etc. The area should be properly treated with suitable plantation.

Status of Compliance: Compliance stage is yet to come.

Stipulation V: Financial provision should be made in the total budget of the project for implementation of the above suggested safeguard measures.

Status of Compliance: Complied with.

Stipulation VI: Six monthly monitoring reports should be submitted to the Ministry and its Regional Office, Shillong for review.

Status of Compliance: Complied with.

Stipulation VII: 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.

Status of Compliance: Complied with.

Stipulation VIII: The responsibilities of implementation of environmental safeguards rest fully with the M/s Shiga Energy Pvt. Ltd. & Government of Himachal Pradesh.

Status of Compliance: Agreed with.

Stipulation IX: The total amount of Rs. 466.76 lakh kept in the budgetary provisions for implementation of environment management plan should be strictly adhered and not to be diverted for any other purpose.

Status of Compliance: Agreed with.
**Stipulation X:** In case of change in the scope of the project would require a fresh appraisal.

**Status of Compliance:** Agreed with.

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

**Status of Compliance:** Agreed with.

**Stipulation XII:** This clearance letter is valid for a period of 10 years from the date of issue of this letter for commencement of construction work.

**Status of Compliance:** Agreed with. Construction activities have already commenced.

**Stipulation XIII:** A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Prishad/ Municipal Corporation, Urban local body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal. The Clearance letter shall also be put on the website of the company by the proponent.

**Status of Compliance:** Complied with.

**Stipulation XIV:** The Project Proponent should advertised within seven days at least in two local newspaper that are 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 letter are available with the State Pollution Control Board/ Committee and also at website of the Ministry of Environment and Forest at http://www.envfor.nic.in.

**Status of Compliance:** Complied with.

**Stipulation XV:** The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MOEF, the respective Office of CPCB and SPCB.

**Status of Compliance:** Complied with.

**Stipulation XVI:** Any appeal against this environment clearance shall lie with the National Environment Appellate Authority, if preferred within a period of
30 days as prescribed under section 11 of the National Environment Appellate Authority Act, 1997.

**Status of Compliance: Agreed with.**

**General Remarks:**
1. The EC does not include the stipulation for constitution of the Multi-Disciplinary Committee to oversee the implementation of environmental safeguards similar to the other environmental clearances accorded to hydroelectric projects. As such, the Ministry may consider addition of this safeguard as per Condition 9 of EC.
2. It was observed that sausage-cum-retaining wall has been broken at some places due to heavy downpour. The same needs to be repaired at the earliest to contain the excavated earth materials/muck within designated muck disposal areas.
3. The NBWL clearance needs to be obtained immediately as stipulated.
4. Six monthly compliance report needs to uploaded on the Company’s website under intimation to the Ministry/Regional Office.

(DR S C KATIYAR)

SCIENTIST ‘D’