

Nam Theun 2 - Hydropower project (1080 MW)

Technical assistance and environmental audit



Country

Laos

Client

Electricite de France
/ Centre d'Ingénierie
Hydraulique (CIH)

Date

2004-2008

Sogreah's services

- ▶ Environmental technical assistance
- ▶ Environmental audits



Context

Nam Theun 2 hydropower project has a production capacity of 1080 MW. Most of the energy produced is exported to Thailand. Nakai dam has created a reservoir covering 450 km² and involved the resettlement of 6000 villagers. Water is transferred from the Nam Theun basin to that of the Xe Bang Fai, where it is restored after passing through the turbines at the rate of 300 m³/s via a 27 km long canal.

The energy is carried to Thailand by a 500 kV transmission line 138 km long and to the Laotian national grid by a 115 kV transmission line 70 km long.

Sogreah's role

On behalf of the main contractor responsible for the turnkey project (EDF-CIH), Sogreah provided assistance in setting up the environmental management plan applicable to the construction sites (35 main sites):

- Environmental management plan in conformity with contractual obligations and the requirements of ISO 14001, which defines all the organisational, planning, operational and monitoring measures to be taken by the main contractor and his subcontractors.
- 19 operational thematic plans defining the means and measures to be implemented at the various sites to ensure effective environmental management.

GNB/BYN/ebd/0608



- The following fields were covered:
 - erosion and sedimentation;
 - management of excavated materials and quarries;
 - management of clearance works;
 - management of hazardous materials and waste;
 - waste water treatment and control of water pollution;
 - management of atmospheric emissions, dust and noise,
 - protection of the landscape and replanting,
 - protection of cultural resources,
 - management of workers' camps,
 - staff health programme,
- management of the reservoir during the filling period,
 - environmental training plan,
 - manual of best environmental practice applied to construction works.
- Methodology for preparing specific environmental management plans for each site and assistance to