

LAO PEOPLE'S DEMOCRATIC REPUBLIC
PEACE INDEPENDENCE DEMOCRACY UNITY PROSPERITY



-SPRE II
Environmental Management Plan (EMP)

Sub-project : Champhone 1 District, Savannakhet Province

2005

ELECTRICITE DU LAO

BANFAI, NONGBONE ROAD, P.O. BOX 309, VIENTIANE, LAO PDR.

TEL: (856-21) 451521, 31-171, 172, TLX: 4311 EDL VTE LS, FAX: (856-21) 415039

Table of Contents

Environment Part

- 1. Objective of the Guidelines**
- 2. Sub-Project**
- 3. Mitigation**
- 4. Monitoring**
- 5. Institution Arrangement**
 - a. Institutional Responsible and Capacity**
 - b. Environment Information Flow**
- 6. Consultation with Local and Affected Groups**
- 7. Schedule**

Social Part

- 8. Property affected datasheet**

1. Objective of the Guidelines

The objective of this EMP to assist Savannakhet EDL brand staff responsible and carry out environmental and social management associated with construction of transmission lines to the village.

2. Sub-project Description

This sub-project will be electricified to Namseuanoi village belong Tapangtong District, Savannakhet Province. For this Sub-Project is not passing Industry area. This will be passed through the degradation forest and some will and rice paddy field and some of them will be at the road side. For line route delection was full consulted with local people with aim of avoiding the properties damages and to aciod village repected area. In the case that some trees could be removed from the line. EdL explained to villages about the needs. Villagrs are welcome to the project and not requested for any compensation.

• Technical Description of the sub-project

Village	House hold	Medium Voltage			Low Voltage	
		22 kV Line (m)	Number of Concrete Pole	Number of Transfor-mers	0.4 kV Line (m)	Number of Concrete Pole
Pongsima	33	75	2	1	1,160	21
Nongpet tay	51	1,920	23	1	542	13
Nongpet neua	36	15	1	1	850	20
Gnang soung	86	1,500	18	1	875	24
Dong kham khene	88	1,340	19	1	1,225	31
Khok kang	39	1,760	23	1	560	16

3. Mitigation Plan

This construction of this transmission line project. There is not a major impact because this line route will be passed through some degradation forest and some rice paddy field. Some area will be passed small stream with cross by existing road. There is novillage respected area therefore no damage to an environment.

Phase	Issues	Mitigation Measure	Responsible
Construction	Diminished ecological and social values due to the improper disposal of construction debris and wastes	- Main waste should be a small amount of scrub debris from rights-of-way clearing activities which should be stacked and burned on-site	Contractor
	- Injury and sickness of workers	- Monitoring workers's health and safety periodically. - Must have medicine in site and - Should have safety wear such as: hat, shoes and advise each person have for working.	Contractor
	Cutting the trees out of the way of medium and low voltage.	- Before survey have to remark and cutting the trees if nessecery avoiding effective as least as possible.	EDL & Contractor

	Uncontrol erosion and sedimentation.	- Construction work must be in the dry season this to avoid flooding and lead to erosion in some area. Transportation of the materials for construction works should use of existing road.	
	Noise pollution	- Construction would only take place during daytime, if village holiday but EDL is required to work, would first be consulted sufficiently in advance villagers.	
Operation	Clearing and cutting the trees by the way of the construction	- Be careful of cutting the trees and do not burn the trees under the power line.	EDL branch
	Transformer leaks	- Monitoring transformer oil leaking. If any leaking fix it or change a new one.	EDL

4. Monitoring Plan

Phase	What <i>Parameter is to be monitored</i>	Where <i>Is the parameter to be monitored/type of monitoring equipment?</i>	How <i>Is the parameter to be monitored/type of monitoring equipment?</i>	When <i>Is the parameter to be monitored frequency of measurement or continuous?</i>	Responsibility
Construction	Health and safety of workers and local people	Sub-project 22kV and 0,4 kV	<ul style="list-style-type: none"> - Monitoring the workers and local people's health and safety. - Advice for avoiding sickness 	Review of health and safety of contractor's workers before starting the construction and monitoring periodically	EdL; and Independent Third Party Monitor
Operation	Transformer insulating and cooling oils leaks to contaminate water courses or soils	Transformer installed area	- 6 months inspection on leaking of the transformer, clean out and disposal of any spilled insulating/ cooling oils	As per EdL substation systems inspection schedule	EDL and population report

5. Institutional Arrangement

5.1 Institutional Responsibility and Capacity

Environmental and social unit will make sure all conditions of the environment will be incorporated into environmental management plan and comply with government regulation. This environmental and social unit is under Construction and Installation Department and under management of EdL Savannakhet Branch. There also recommendation of the establishment of the Environmental Coordination Committee to work with this subproject.

5.2 Environmental Information Flow

Environment unit will report directly to the head of construction and installation Division, Director of EdL Savannakhet Branch after that will make copy to ESU in Development Department and reporting need to be send to the concerning District for mitigation the issues in the project.

6. Consultation with Local People and Project Affected Groups

Consulation

- Date/venue of consultation meeting

Date: 18.01.04	Venue: Khok kang Village
Participants Name	Responsibility
Mr. Neuat	Member of Politic party
Mr. Ham	Member of Politic party
Mr. Nou	Head of village
Mr. Thongma	Villager Elderly
Mr. Kom	Woman Union
Mr. Sioaw thong	Head of Youth
Mr. Mane	Villager
Mr. Seng	Villager
Mr. Neua	Villager
Mr. Bounma	Security
Mr. Chanh	Villager
Mr. Phone	Villager
Mr. That	Villager
Mr. By	Villager
Mr. Nouane	Villager
Mr. Phadi	Villager
Mr. Leung	Villager
Mr. Dom	Villager
Mr. Bounlom	Villager
Mr. Somneuk	Villager
Mr. Simeuang	Villager
Mr. Song	Villager
Mr. Bouth	Villager
Mr. Hat	Villager
Mr. Say	Villager
Mr. Home	Villager
Mr. Soubinh	Villager
Mr. One	Villager
Mr. Ham	Villager
Mr. Songchai	Teacher
Mr. Ek	Villager
Mr. Vong	Villager
Mr. Nouat	Villager
Mr. Fouark	Villager
Mrs. Nouane	Villager
Mr. Ki	Security
Mr. Somdy	Villager
Mrs. Eung	Villager
Mrs. Thiem	Villager
Mr. Khammouane	Villager

Agenda:

1. Discussion about planning to electrify in the village.
2. Discussion about impact of properties such as: trees, rice paddy field.

3. Discussion about development plan and policy of the government and requirement of the villagers for electricity that can improve their living standards.

Summary minute of meeting, comment, question and response by presenter.

1. All Villagers have a pleasure to participate in this transmission line project to the Khok kang village and villagers will not request for any compensation for any impact to land, garden and other structure. Because villagers are expecting of electricity for a long time. This to help development of the village.

Sealed and signed

Signed

Signed

Signed

Mou

Thongma

Oday

Homsanith

Village head

Village elderly

Women union

EdL staff

Sealed and signed

Pe Kounlavong
District governor

Consulation

- Date/venue of consultation meeting

Date: 17.01.04	Venue: Khamkhene village
Participants Name	Responsibility
Mr. Bounyong	Head of village
Mr. Phoune	Villagers
Mr. Yeng	Elderly village
Mr. Bao	Villagers
Mr. Phoutha	Villagers
Mr. Vong	Villagers
Mr. Ang	Villager
Mr. Kaloun	Villager
Mr. Lo	Villager
Mr. Chomsy	Villager
Mr. Khichea	Villager
Mr. Cheng	Villager
Mr. Sou	Villager
Mr. Bounleut	Villager
Mr. Khoune	Villager
Mr. Ae	Villager
Mr. Bounma	Villager
Mr. Ham	Villager
Mr. Khampheuy	Villager
Mr. Meuy	Villager
Mr. Lome	Villager
Mr. Sieng tho	Villager
Mr. Lay	Villager
Mr. Kay	Villager
Mr. Kong	Villager
Mr. Chom	Villager
Mr. Pang	Villager
Mr. Souni	Villager
Mr. Sali	Villager
Mr. Tha	Villager
Mr. Lay	Villager
Mr. Mout	Villager
Mr. Tet	Villager
Mr. Loun	Villager
Mr. Ma	Villager
Mr. Ha	Villager
Mr. Noy	Villager
Mr. Phouvieng	Villager
Mr. Vieng	Villager
Mr. Say	Villager
Mr. Sone	Villager
Mr. Ngoy	Villager
Mr. Ngom	Villager
Mr. Phoudong	Villager
Mr. Yoth	Villager

Mr. Some	Villager
Mr. Tha	Villager
Mr. Sena	Villager
Mr. Binh	Villager
Mr. Ny	Villager
Mr. Chantha	Villager
Mrs. Vanhny	Villager
Mr. Tane	Villager
Mr. Tong	Villager
Mr. Souane	Villager
Mr. Yeung	Villager
Mr. Ta	Villager
Mr. Heng	Villager
Mr. Ngoy B	Villager
Mr. Vanh	Villager
Mr. Boummy	Villager
Mr. Chanlay	Villager
Mr. Ngong A	Villager
Mr. Ngong B	Villager
Mr. Lea A	Villager
Mr. Sing	Villager
Mr. Lea B	Villager
Mr. Sang	Villager
Mr. Thonh	Villager
Mr. Theung	Villager
Mrs. Chanh	Villager
Mr. Tia	Villager
Mr. Tone	Villager
Mr. Done	Villager
Mrs. Home	Villager
Mr. Done	Villager
Mr. Ome	Villager
Mr. Say	Villager
Mr. Khiene	Villager
Mr. Manh	Villager
Mr. Monh	Villager
Mr. Lay	Villager
Mr. Touang	Villager
Mr. Neuang	Villager

Agenda:

1. Discussion about planning to electrify in the village by SPRE II project.
2. Discussion about impact from project implementation.
3. Discussion about cooperation with village authority and villagers.
4. Discussion about District's policy on poverty eradication.

Summary minute of meeting, comment, question and response by presenter.

1. To implement this transmission line project to village. Village authority will provide full cooperation. Village authority and villagers will not request for any compensation for any impact to land, garden, tree and other structure. Because villagers are expecting of electricity for a long time. This to help development of the village.

Sealed and signed	Signed	Signed	Signed
Bounngong Khamsong	Bounyeng	somma	Homsanith
Village head	Village elderly	Women union	EdL staff
Sealed and signed			
Pe Kounlavong			
District governor			

Consulation

- Date/venue of consultation meeting

Date: 18/01/04	Venue: Gnang Soung village
Participants Name	Responsibility
Mr. Bounna	Secretary of politic member
Mr. Visay	Villager
Mr. Lienthong	Head of soldier
Mr. Lea gnay	Head of unit
Mr. Leuam	Deputy Head of unit
Mr. Lamphone	Villager
Mr. Tha	Villager
Mr. Khouane	Villager
Mr. Kham	Villager
Mr. Nor	Villager
Mr. Liep	Villager
Mr. Pak	Villager
Mr. Dam peuk	Villager
Mr. Lea noy	Villager
Mr. Thoun	Villager
Mr. Seuth	Villager
Mr. Nok	Villager
Mr. Kone	Villager
Mr. My	Villager
Mr. Hiow	Villager
Mrs. Vone	Villager
Mrs. Lenh	Villager
Mr. Keo	Villager
Mr. Na	Villager
Mr. Vanh	Villager
Mr. Peo	Villager
Mr. Pheng	Villager
Mr. Ty	Villager
Mrs. Hang	Villager
Mr. Neun	Villager
Mr. Pane	Villager
Mr. Thanh	Villager
Mr. Chanh	Villager
Mr. Tanh	Villager
Mr. Souk	Villager
Mr. Mone	Villager
Mr. Teu	Villager
Mr. Nola	Villager
Mr. Ongnoy	Villager
Mr. Ea	Villager
Mr. Toy	Villager
Mr. Vy	Villager
Mr. Say	Villager
Mr. Lieng	Villager
Mr. Mok	Villager

Mr. Mat	Villager
Mr. Ka	Villager
Mr. Eang	Villager
Mr. Tane	Villager
Mr. Phoy	Villager
Mr. Teuay	Villager
Mr. Ngot	Villager
Mrs. Boun	Villager
Mrs. Khong	Villager
Mr. Nga	Villager
Mr. Chanhpheng	Villager
Mr. Ki	Villager
Mr. Hiow noy	Villager
Mr. Thay	Villager
Mr. Phouk	Villager
Mr. Sy	Villager
Mr. Mountha	Villager
Mr. Thong	Villager
Mr. Sommay	Villager
Mr. Khamphay	Villager
Mr. Souane	Villager
Mr. Nouane	Villager
Mr. Teu	Villager
Mrs. Kongmy	Villager
Mr. Say	Villager
Mr. Ongnay	Villager
Ms. Tem	Villager
Mr. Toykhamthene	Villager

Agenda:

1. Discussion about planning to electrify in the village by SPRE II project.
2. Discussion about impact from project implementation.
3. Discussion about cooperation with village authority and villagers.
4. Discussion about District's policy on poverty eradication.

Summary minute of meeting, comment, question and response by presenter.

1. To implement this transmission line project to village. Village authority will provide full cooperation. Village authority and villagers will not request for any compensation for any impact to land, garden, tree and other structure. Because villagers are expecting of electricity for a long time. This to help development of the village.

Sealed and signed

Signed

Signed

Signed

Bounngong Khamsong

Bounyeng

somma

Homsanith

Village head

Village elderly

Women union EdL staff

Sealed and signed

Pe Kounlavong

District governor

Consulation

- Date/venue of consultation meeting

Date: 18.02.04	Venue: Nongpet Noy (Tay)Village
Participants Name	Responsibility
Mr. Khamkong	Head of village
Mr. Bounma	Head of land
Mr. Khampheua	Head of village assistant
Mr. Lom	Forest
Mr. Loum	Deputy head of village
Mr. Boua	Elerly village
Mr. Gngang	Politic district unit
Mr. Somvang	Villager
Mr. Khampheng	Villager
Mr. Poum	Villager
Mr. Nao	Villager
Mr. Lao	Villager
Ms. No	Villager
Mrs. Thy	Villager
Mr. Sithanh	Villager
Mr. Meuane	Villager
Mrs.Sone	Villager
Mrs. Seng	Villager
Mr. Kam	Villager
Ms. Chomsy	Villager
Mr. Nga	Villager
Mr. Som	Villager
Mr. Va	Villager
Mr. Pay	Villager
Mr. Siene	Villager
Ms. Gnanh	Villager
Mr. Pinh	Villager
Mrs. Manh	Villager
Mrs. Louay	Villager
Mr. Boune	Villager
Mr. Lea	Villager
Mr. Khom	Villager

Agenda:

1. Discussion about planning to electrify in the village by SPRE II project.
2. Discussion about impact from project implementation.
3. Discussion about cooperation with village authority and villagers.
4. Discussion about District's policy on proverty eradication.

Summary minute of meeting, comment, question and response by presenter.

1. To implement this transmission line project to village. Village authority will provide full cooperation. Village authority and villagers will not request for any compensation for any impact to land, garden, tree and other structure. Because villagers are expecting of electricity for a long time. This to help development of the village.

Selaed and signed	Signed	Signed	Signed
Khamkong	Boua	Teun	Homsanith
Village head	Village elderly	Women union	EdL staff
Selaed and signed			
Pe Kounlavong			
District governor			

Consulation

- Date/venue of consultation meeting

Date: 18.02.04	Venue: Nongpet Neua
Participants Name	Responsibility
Mr. Manh	Head of unit
Mr. Khampiw	Village Elderly
Mr. Somchai	Secretary of politic
Mrs. Tha	Villager
Mr. Sithat	Villager
Mr. May	Villager
Mr. Khamsay	Villager
Mr. Bounthanh	Villager
Mr. Ta	Villager
Mr. Nouthak	Villager
Mr. Houay	Villager
Mrs. Ea	Villager
Mr. Khamphong	Villager
Mr. Ki	Villager
Mr. Ly	Villager
Mr. Nay	Villager
Mr. Comsy	Villager
Mr. Kom	Villager
Mr. Kout	Villager
Mr. Pia	Villager
Mr. Va	Villager
Mr. Tane	Villager
Mr. Kheuang	Villager
Mr. Houp	Villager
Mr. Poui	Villager
Mr. Lath	Villager
Mr. Phomma	Villager
Mr. Noune	Villager
Mr. Phoune	Villager
Mr. Sitha	Villager
Mr. Pay	Villager
Mr. Bounmy	Villager
Mr. Yeng	Villager
Mr. Kong	Villager
Mr. Kheng	Villager
Mr. Onechanh	Villager
Mr. Say	Villager
Mr. Nor	Villager
Mr. Sai	Villager
Mr. Wong	Villager
Ms. Vanhthong	Villager
Mr. Thod	Villager
Mr. Sithan	Villager
Mr. Phong	Villager
Ms. Ring	Villager

Ms. Pin	Villager
Mr. Nuah	Villager
Mr. Nak	Villager
Mr. Sen	Villager
Mr. Pone	Villager
Mr. Kae	Villager
Mr. Thiddy	Villager
Mr. Nou	Villager
Mr. Lao	Villager

Agenda:

1. Discussion about planning to electrify in the village by SPRE II project.
2. Discussion about impact from project implementation.
3. Discussion about cooperation with village authority and villagers.
4. Discussion about District's policy on poverty eradication.

Summary minute of meeting, comment, question and response by presenter.

1. To implement this transmission line project to village. Village authority will provide full cooperation. Village authority and villagers will not request for any compensation for any impact to land, garden, tree and other structure. Because villagers are expecting of electricity for a long time. This to help development of the village.

Sealed and signed

Signed

Signed

Signed

Khampoui

Tieng

Homsanith

Village head

Village elderly

Women union

EdL staff

Sealed and signed

Pe Kounlavong

District governor

Consulation

- Date/venue of consultation meeting

Date: 18/02/2004	Venue: Health center of the Phong sim ma village.
Participants Name	Responsibility
Mr. Boua	Head of village
Mr. Phone xai	Deputy head of village Village Elderly
Mr. Somphone	Security of village
Mr. Souk	Head of unit and security of village
Mr. Chan	Head of unit and security of village
Mr. Kian	Security of village
Mr. Thao	Villager
Mr. Thong	Villager
Mr. Ben	Villager
Ms. Ngeao	Villager
Mr. Ngeun	Villager
Mr. Somnan	Villager
Mr. Deun	Villager
Mr. Yong	Villager
Mr. Phom	Villager
Mr. Thui	Villager
Mr. Sonephet	Officer
Mr. Loam	Village
Mr. Nga	Village
Mr. Vhan	Village
Mr. Jian	Village
Mr. Bai	Village
Mr. Kod	Village
Mr. Mum	Village
Mr. Eine	Village
Mr. Boun	Village
Mr. Bountiane	Village
Mr. Ong	Village
Mr. Vene	Village
Ms. Kum	Village
Mr. Som Yai	Village
Ms. Keo	Village
Mr. Kao	Village
Mr. Boun jeing	Village
Mr. Long	Village

Agenda:

1. Discussion about planning to electrify in the village by SPRE II project.
2. Discussion about impact from project implementation.
3. Discussion about cooperation with village authority and villagers.
4. Discussion about District's policy on proverty eradication.

Summary minute of meeting, comment, question and response by presenter.

1. To implement this transmission line project to village. Village authority will provide full cooperation. Village authority and villagers will not request for any compensation for any impact to land, garden, tree and other structure. Because villagers are expecting of electricity for a long time. This to help development of the village.

Selaed and signed	Signed	Signed	Signed
Boua	Ngan	Vantha	Homsanith
Village head	Village elderly	Women union	EdL staff
Selaed and signed			
Pe Kounlavong			
District governor			

7. Schedule

Sub-project Champhone 1 Dist. Savannakhet Prov.	Construction (day)				Operation		
	22kV		0,4kV		22kV	0,4kV	Transformer
	Pole erection	Line stringing	Pole erection	Line stringing			
Pongsima			5	5	2 times/ years		
Nongpet tay	6	5	5	5			
Nongpet neua			5	5			
Gnang soung	6	5	5				
Dong kham khene	6	5	6	5			
Khok kang	6	5	5	5			

Based on those above schedule for the mitigation and monitoring could be:

Sub-project	Survey	Design	Approval	Pre- Construction	Construction	Operation
Pongsima		—		—
Nongpet tay		—		—
Nongpet neua		—		—
Gnang soung		—		—
Dong kham khene		—		—
Khok kang		—		—

— Mitigation
 Monitoring