

Environmental Impact Assessment

Project Number: 41924
May 2014
Document Stage: Final

Nam Ngiep 1 Hydropower Project (Lao People's Democratic Republic)

Appendix L: Emergency Response Procedure

Prepared by Nam Ngiep Power Company Ltd. with assistance from ERM-Siam Co., Ltd. and Environmental Research Institute, Chulalongkorn University for the Asian Development Bank. This is an updated version of the draft originally posted in January 2012 available on <http://www.adb.org/projects/documents/nam-ngiep-1-hydropower-project-results-eia>

The final report is a document of the borrower. The views expressed herein do not necessarily represent those of ADB's Board of Directors, Management, or staff, and may be preliminary in nature. Your attention is directed to the "Terms of Use" section of this website.

In preparing any country program or strategy, financing any project, or by making any designation of or reference to a particular territory or geographic area in this document, the Asian Development Bank does not intend to make any judgments as to the legal or other status of any territory or area.

Appendix L

Emergency Response Procedure

L.1 PURPOSE

The purpose of this Emergency Response Procedure is to provide measures and guidance for the establishment and implementation of emergency preparedness plans for the Nam Ngiep 1 Hydropower Project. The aim of the Emergency Response Procedure is to:

- 1) Ensure all personnel and visitors to the office/job sites are given the maximum protection from unforeseen events.
- 2) Ensure all personnel are aware of the importance of this procedure to protection of life and property.

L.2 EMERGENCY PREPARATION AND RESPONSE MEASURE SCOPE

The emergency management program is applied to all Project elements and intend for use throughout the Project life cycle. The following are some emergencies which may require coordinated response.

- 1) Construction Accident
- 2) Road & Traffic Accident
- 3) Hazardous material spills
- 4) Structure collapse or failure
- 5) Trauma or serious illness
- 6) Sabotage
- 7) Fire
- 8) Environmental Pollution
- 9) Loss of person
- 10) Community Accident

L.3 RESPONSIBILITIES

The roles and responsibilities detail of certain key members of the Emergency Response Team available to assist in emergency.

Table L.1 Emergency Response Team

Action Group	Responsibility
Emergency Coordinator	<ul style="list-style-type: none">- Overall control of personnel and resources.- The Emergency Coordinator will support and advise the Site Safety Supervision as necessary.- Serves as public relations spokes persons, or delegates to some staff member the responsibility for working with news media regarding any disaster or emergency. Also assure proper coordination of news release with appropriate corporate staff or other designated people.

Action Group	Responsibility
Site Safety Supervision (Emergency Commander)	<ul style="list-style-type: none"> - Overall responsibility for activating emergency plan and for terminating emergency actions. - Be alternative of emergency response chairpersons. - Disseminates warnings and information as required to ensure all people in the immediate area have been warned and evacuated either by alarms or by word of mouth. - Supervise the actions of the Emergency Response Team to ensure all persons are safe from the danger. - Notify outside authorities if assistance required. - Carries the responsibility for coordinating actions including other organizations in accordance with the needs of the situation. - Ensure maximum Co-operation and assistance is given to any outside groups called to respond to an emergency. - Establish and appoint all emergency organization structure and team. - Assures adequate delegation of responsibilities for all key positions of assistants on the Project to assist with any foreseeable emergency. - Ensure resources available to purchase needed emergency response equipment and supplies. - Assures that all persons on the Emergency Response Team aware and fully understand their individual responsibilities for implementing and supporting the emergency plan. - Establish the emergency drill schedule of all identified emergency scenarios, track the status and evaluate the emergency. - The Emergency Commander shall ensure that senior management personnel have been reported of the emergency as soon as practical after the event.
Security Team	<ul style="list-style-type: none"> - Ensure that the exit route is regularly tested and maintained in good working order. - Maintain station at the security gate or most suitable location to secure the area during any emergency such that only authorized personnel and equipment may enter, prevent access to the site of unauthorized personnel. - Assist with strong/activation of services during an emergency. - Ensure vehicles and obstructions are moved to give incoming emergency vehicles access to the scene, if ambulance or emergency services are attending the site, ensure clear access and personnel are located to direct any incoming emergency service to the site of emergency.
Rescue & Medical Team	<ul style="list-style-type: none"> - Protect the injured from further danger and weather. - Provide treatment to the victim(s) to the best of their ability by first aid and then transfer to hospital. - Remain familiar with the rescue activities and rescue apparatus. - Assist outside medical services personnel when they arrive
General Administration Team	Response to support any requested general facilities for assist Emergency Response Team in their work.

Action Group	Responsibility
Government Relation Team	<ul style="list-style-type: none"> - Coordinate with local government on a matter of concerned in the emergency response plan to liaise with local officers in their affair for support Emergency Response Team. - Coordinate emergency plan with the government authorities, local community.
Environment Team	In case of emergency related to the environmental pollution such as the chemical spill, oil spill into the ambient, the environment team will support the technical advice to control and mitigate the pollution until return to the normal situation
Department Heads	<ul style="list-style-type: none"> - Call up of personnel into the safe location for protective life and property. - Take immediate and appropriate action while Emergency Response Team is being mobilized. - Keep in touch with the Emergency Commander - Control and supervise operators and contractors on the implementation of this procedure, with consultation with Safety Team as necessary. - Provide and maintain emergency equipment of their responsible areas.
Other Staff and Employees	<ul style="list-style-type: none"> - All other staff and employees will remain at their workstations or assembly point unless directed otherwise from Emergency Response Team. - Each supervisor will ensure that all members of his work group are accounted for and keep in touch with each of their Department Head.

L.4 **PROCEDURE**

Emergency situation and injuries to person can occur at any time or place either on Project site or elsewhere. The most two common types of emergencies on site are fire and serious accident.

Figure L.1 Emergency Procedure for Fire

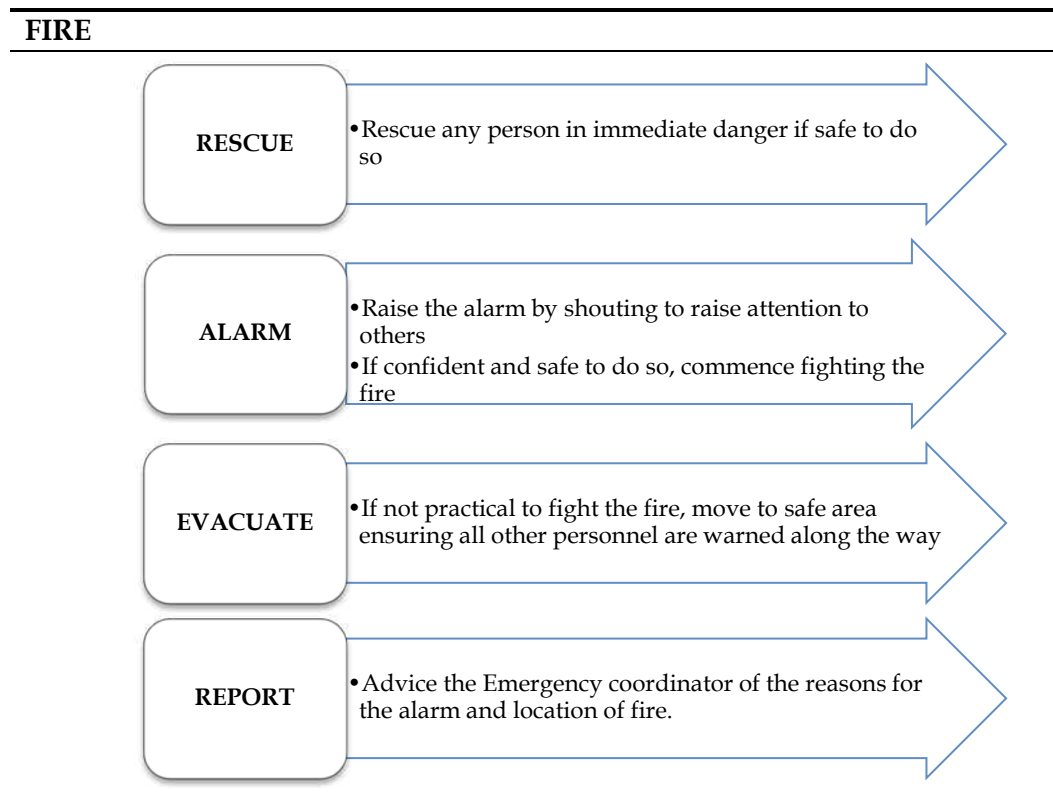
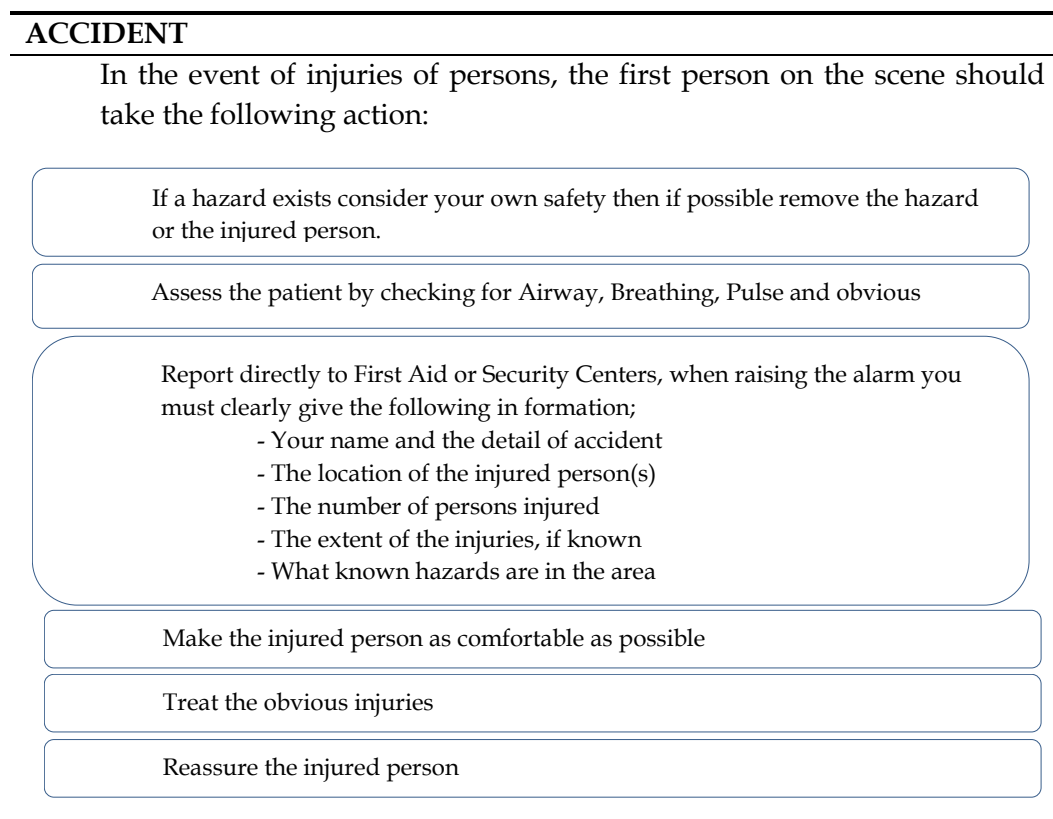


Figure L.2 Emergency Procedure for Serious Accident



L.5 *COMMUNICATION WITH AUTHORITIES/PRESS AT SITE*

In the event of an accident or incident, only senior staff is permitted to give factual information to the authorities for resource of liability exposure. The press must be avoided politely, at all costs, with the terse comment that “the matter is under investigation and relevant information when available will be provided by our Head Office” Do not ever give your opinion or story.

First Aid Persons

Upon advice of medical emergency, make immediate assessment to response required and if necessary, advise security to summon ambulance or medical assistance, the qualified first aid attendant should also,

- Provide treatment to the victim(s) to the best of his/her ability.
- Ensure the safety of victims by ceasing any work activity in the area.
- Protect the injured from further danger and weather.
- Assist medical services personnel when they arrive.

General Administration Team

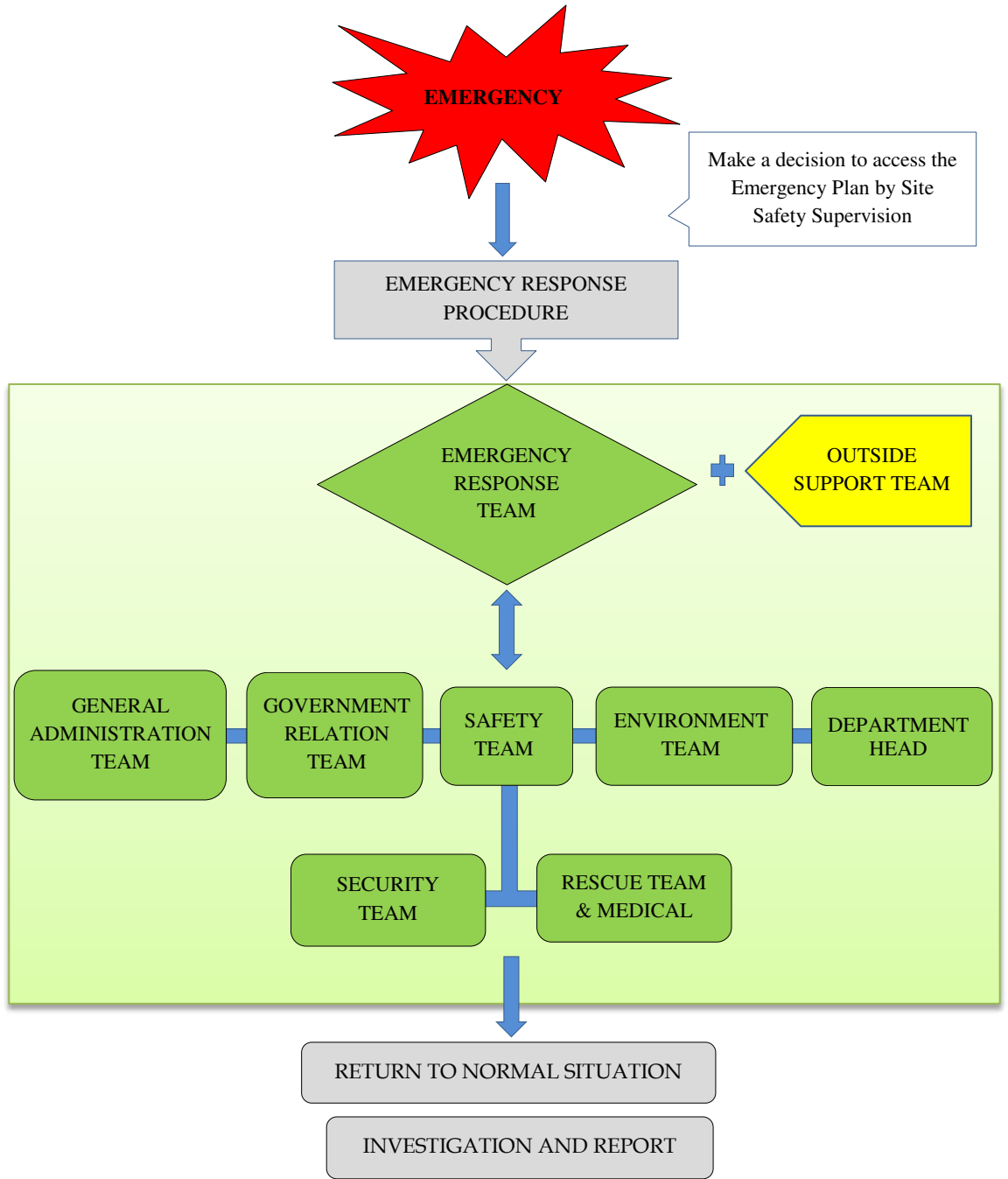
Upon advice of medical emergency, maintain contact with first aid personnel and summon ambulance if required.

Security Team

- If ambulance or emergency services are attending the site, ensure clear access and personnel are located to direct vehicle closest to the scene.
- Prevent access to the site of unauthorized personnel (press, etc.).

Emergency Coordinator

- The Emergency Coordinator shall assist emergency personnel at the scene as required through allocation of company resources.
- The Emergency Coordinator shall ensure next-of-kin are properly notified as soon as possible and give whatever company support and assistance is necessary to assist them bundle the situation
- The Emergency Coordinator shall ensure that senior management personnel are advised of the emergency as soon as practical after the event.



Note: Name of contact person and call number from Owner/Contractor to be determined.

NAM NGIEP 1 HYDROPOWER PROJECT INCIDENT & ACCIDENT REPORT										
Section A: Identification Data										
Report No:		Date of Reported:			Reporter:			Sign:		
Job Title:					Company Name:					
Section B: Violence Rate										
Accident Violence: <input type="checkbox"/> 01-Death <input type="checkbox"/> 02-Serious Injury <input type="checkbox"/> 03-Lost Time Injury <input type="checkbox"/> 04-First Aid <input type="checkbox"/> 05- Not Injury <input type="checkbox"/> 06-Near Miss Property Damage Cost: <input type="checkbox"/> 1-2,000 USD <input type="checkbox"/> 2,001-10,000 USD <input type="checkbox"/> 10,001-50,000 <input type="checkbox"/> > 50,001										
Section C: Environmental Impact										
Affected area		<input type="checkbox"/> Construction area			<input type="checkbox"/> Public area					
Receptor		<input type="checkbox"/> None			<input type="checkbox"/> Workers		<input type="checkbox"/> Community			
Type of pollution		<input type="checkbox"/> Physical			<input type="checkbox"/> Chemical		<input type="checkbox"/> Biological			
Toxicity		<input type="checkbox"/> Non-toxic			<input type="checkbox"/> Low - toxic		<input type="checkbox"/> High - toxic			
Return to Normal		<input type="checkbox"/> 1 day			<input type="checkbox"/> 1 day to 1 week		<input type="checkbox"/> ≥ 1 week			
Cumulative impact		<input type="checkbox"/> Non-cumulative			<input type="checkbox"/> Cumulative					
Section D: Injured/Illness Employee										
1.Name:		Sex:	Date of Birth:			Age:	Regular Job Title:		Experience:	
		<input type="checkbox"/> Male <input type="checkbox"/> Female	Month	Day	Year				In this job title	In this Project
								Years	Weeks	Years
Site:	Company:		Reference:			Phone No:		Social Security Number		
Part of Body Injured or Affected:					Nature of Injury or Illness:					
<input type="checkbox"/> Head	<input type="checkbox"/> Hands	<input type="checkbox"/> Face	<input type="checkbox"/> Nose	<input type="checkbox"/> Laceration	<input type="checkbox"/> Amputation	<input type="checkbox"/> Puncture	<input type="checkbox"/> Fracture			
<input type="checkbox"/> Eyes	<input type="checkbox"/> Legs	<input type="checkbox"/> Teeth	<input type="checkbox"/> Neck	<input type="checkbox"/> Strain & Sprain	<input type="checkbox"/> Burns	<input type="checkbox"/> Contusion	<input type="checkbox"/> Dry Heat Friction			
<input type="checkbox"/> Trunk	<input type="checkbox"/> Toes	<input type="checkbox"/> Elbow	<input type="checkbox"/> Shoulder	<input type="checkbox"/> Hernia	<input type="checkbox"/> Foreign Body	<input type="checkbox"/> Chemical	<input type="checkbox"/> Contamination			
<input type="checkbox"/> Back	<input type="checkbox"/> Ankle	<input type="checkbox"/> Wrist	<input type="checkbox"/> Foot	<input type="checkbox"/> Skin (Occupationnel)	<input type="checkbox"/> Rash	<input type="checkbox"/> Irritation				
<input type="checkbox"/> Arms	<input type="checkbox"/> Thump	<input type="checkbox"/> Fingers	<input type="checkbox"/> Internal							
Remark:					Remark:					
Section D: Injured/Illness Employee										
2.Name:		Sex:	Date of Birth:			Age:	Regular Job Title:		Experience:	
		<input type="checkbox"/> Male <input type="checkbox"/> Female	Month	Day	Year				In this job title	In this Project
								Years	Weeks	Years
Site:	Company:		Reference:			Phone No:		Social Security Number		
Part of Body Injured or Affected:					Nature of Injury or Illness:					
<input type="checkbox"/> Head	<input type="checkbox"/> Hands	<input type="checkbox"/> Face	<input type="checkbox"/> Nose	<input type="checkbox"/> Laceration	<input type="checkbox"/> Amputation	<input type="checkbox"/> Puncture	<input type="checkbox"/> Fracture			
<input type="checkbox"/> Eyes	<input type="checkbox"/> Legs	<input type="checkbox"/> Teeth	<input type="checkbox"/> Neck	<input type="checkbox"/> Strain & Sprain	<input type="checkbox"/> Burns	<input type="checkbox"/> Contusion	<input type="checkbox"/> Dry Heat Friction			
<input type="checkbox"/> Trunk	<input type="checkbox"/> Toes	<input type="checkbox"/> Elbow	<input type="checkbox"/> Shoulder	<input type="checkbox"/> Hernia	<input type="checkbox"/> Foreign Body	<input type="checkbox"/> Contamination	<input type="checkbox"/> Chemical			
<input type="checkbox"/> Back	<input type="checkbox"/> Ankle	<input type="checkbox"/> Wrist	<input type="checkbox"/> Foot	<input type="checkbox"/> Skin (Occupationnel)	<input type="checkbox"/> Rash	<input type="checkbox"/> Irritation				
<input type="checkbox"/> Arms	<input type="checkbox"/> Thump	<input type="checkbox"/> Fingers	<input type="checkbox"/> Internal							
Remark:					Remark:					
Section E: Accidents/incident Details										
Date Accident/Incident Occurred:			Time Accident/Incident Occurred:				Exact Location of the Accident / Incident:			

NAM NGIEP 1 HYDROPOWER PROJECT INCIDENT & ACCIDENT REPORT

Details of the actual Job Being done at the time:

Details of Accident / Incident / What actually happened?

Section F: Accident Cause (Basic cause mark X/ Contributing cause, if any mark O)

UNSAFE CONDITIONS

- 1 Inadequately Guarded
- 2 Unguarded
- 3 Defective Tools, Equipment, or Substance
- 4 Unsafe Design or Construction
- 5 Hazardous Arrangement
- 6 Unsafe Illumination
- 7 Unsafe Ventilation
- 8 Unsafe Clothing
- 9 Insufficient Instruction
- 10 Lack of system of work

UNSAFE ACTS

- 1 Operating Without Authority / Training
- 2 Operating at Unsafe Speed
- 3 Marking SHE Device Inoperative
- 4 Using Unsafe Equipment or Equipment Unsafely
- 5 Unsafe Loading, Placing, Mixing
- 6 Taking Unsafe Position
- 7 Working on Moving or Dangerous Equipment
- 8 Distraction, Teasing, Horse Play
- 9 Failure to use Personal Protective Devices
- 10 Lack of effective instruction or supervision

Why was the unsafe act committed? _____ Why did the unsafe condition exist? _____

Section G: Guide to Corrective Action (Base on the cause checked above, I am taking the following corrective action)

UNSAFE ACT	UNSAFE CONDITION	If Supervisor can't handle, then recommend to
<input type="checkbox"/> Stop the Behaviour	<input type="checkbox"/> Remove	<input type="checkbox"/> Site Engineer, or
<input type="checkbox"/> Study the job	<input type="checkbox"/> Guard	<input type="checkbox"/> Site Manager, or
<input type="checkbox"/> Instruct (tell-show-try-check)	<input type="checkbox"/> Warn	<input type="checkbox"/> Project Manager, or
<input type="checkbox"/> Follow Up	<input type="checkbox"/> Supervisory Training	<input type="checkbox"/> Safety Committee
<input type="checkbox"/> Enforce		

Detail below any immediate remedial actions that have been taken:

Detail below any corrective and preventative actions that could be taken to prevent future re-occurrence:

Responsible

Completion Date

NAM NGIEP 1 HYDROPOWER PROJECT INCIDENT & ACCIDENT REPORT

Section H: Witness Statement

Witness Name	Interviewer Name
---------------------	-------------------------

Section I: Reviewed & Recommend by

Recommendation:

Reviewed By:	Position:	Signature:	Date:
--------------	-----------	------------	-------

Remarks : If Accident or Incident happened with lost time injury and affected to the publicity must further report to Safety Department;
 : First Aid Cases will not applicable to this form;
 : The accident report shall submit to Safety Department within 3 days
 : Attached the photograph or sketch the location of accident / incident;