



# **SABAH FORESTRY DEPARTMENT**

DERAMAKOT FORESTRY DISTRICT  
(DERAMAKOT FR-FMU 19A & TANGKULAP/SG. PINANGAH FR-FMU 17A)

Standard Operating Procedures

## **Campsites & Health**

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## **1.0 BACKGROUND & PURPOSE**

Sabah Forestry Department (SFD) has initiated a policy to pursue certification by meeting the requirements of FSC as well as national standards in its management systems for Sabah. To ensure that its operations are in line with FSC requirements the SFD has developed a series of Guidelines for forest management in 2008 that has been adopted into procedures for use in FMU 19A and FMU 17.

The purpose of this procedure is to define the process of maintaining of a safe and healthy campsite on the ground based on ILO concept to meet the requirements of the FSC Forest Management Standard for FMU 19A & FMU 17A.

## **2.0 SCOPE**

The scope of this procedure is limited to **maintaining a safe and healthy campsite** within FMU 17A manage by SFD. The procedure is to ensure that work may be completed in a controlled, consistent and effective manner.

## **3.0 RESPONSIBILITIES**

The Head of Occupational, Health & Safety is responsible for:

- Implementing health and safety practices
- Location planning of health facilities & campsite
- Training of forest officers
- Ensuring the implementation of this procedure

The Forest Officer (Safety & Health) is responsible for:

- Maintain cleanliness and hygiene practice in campsite
- Management of disposal sites for collection and disposal of dangerous goods
- Training of supervisors and rangers
- Reporting on the implementation

## **4.0 DEFINITIONS**

This procedure contains definitions of common terms used by FSC & SFD in the procedures for forest management.

**FSC:** Forest Stewardship Council, an international non-government organization who governance the Forest Management and Chain of Custody standard.

**FMU:** A clear defined forest area with mapped boundaries, managed by a single managerial body to a set of explicit objectives, which are expressed in a self –contained multi-year management plan.

**ILO:** The International Labour Organization (ILO) in rights at work is working extensively throughout the world to promote a solid legal framework for respecting basic economic and social rights.

## **5.0 INTRODUCTION**

Forestry is one most of the hazardous industrial sectors in most countries. Around the world, there have been discouraging trends of rising accident rates and high incidence of occupational diseases and early retirement among forest workers. Implementing health and safety practices in forestry contributes to reduce e.g. sick leave, medical bills, and down times. Maintenance of safe, healthy and pleasant living and working conditions for personnel is a prerequisite for a motivated and fit workforce, hence productivity. Establishing, enhancing, and maintaining safe work places, systems and practices is a primary task for forest managers and contractors. Trained forest workers are responsible for the establishment and maintenance of a safe and healthy camp site, in order to avoid or minimize risks to their health.

Health and fitness of forest workers can be supported and sustained through the following conditions:

- All forest workers shall observe the established health and safety guidelines and regulations.
- Forest managers and contractors shall ensure that forest workers possess the necessary knowledge and means to apply health and safety guidelines in operational practice.
- As a basic rule, forest workers should not work longer than an average 8 working hours per working day (ILO Recommendation No. 116 (1962)).
- Though flexibility of working times must be maintained according to the employer's requirements and individual job specifications the recommended average in working time should not be exceeded for extended periods.
- Forest managers and contractors must provide adequate rest times and short breaks to ensure physical and mental fitness of forest workers throughout the day.
- Under no circumstances shall forest workers be allowed to work under the influence of alcohol, migraine, medicine, or other drugs.
- Healthy conditions for forest workers should be provided for both workplace and campsites.

## **6.0 REQUIREMENTS AND MANAGEMENT OF CAMPSITES**

### **6.1 General**

Campsites (base camps, forward camps) can be permanent or temporary settlements established within the Forest Management Unit, serving as a logistic and administrative centre point for forest managers and contractors. Such camps typically consist of the following buildings:

- administration offices (planning, monitoring, and accounting of forest operations, etc)
- stores for basic supplies (food, fuel, oil, lubricants, chemicals, spare parts, consumables)
- workshops (vehicle repair and maintenance)
- staff quarters (accommodation)
- staff canteens and shops

Detailed site plans for construction or expansion of permanent campsite buildings should include designs for buildings, drainage systems, water supply, sewage systems, and waste disposal. Hygiene requirements should meet the International Labor Standards (ILO).

### **6.2 Permanent Camp Location, Camp Construction and Management**

Permanent campsite here is referred to as an infrastructure that is going to be used for a period of 1 - 5 years. The permanent campsite location and construction should be planned and carried out with due consideration of the following aspects:

- The number of rooms should be in proportion to the number of staff to be occupying the site. There should not be more than 4 people sharing a bedroom room.
- The camp should have proper facilities for eating, resting and recreation.
- The camp should have proper shower and toilet facilities where there should be at least one shower and toilet for every 10 staff. These facilities should be properly maintained.
- There should also be adequate facilities to clean and dry laundry.
- Convenient clean water supply: campsite should be near a clean water source, e.g. at the boundary of a protected catchment area or buffer zone but where there is no risk of flooding.
- Control of insects that may be around the campsite. Campsite should be located away from logging debris and should not have any stagnate water near by that may breed for malaria or dengue.
- Safe entry and exit points: campsite should provide easy all weather access for all kinds of vehicles.
- Camps should have fire extinguishers located in canteen and other key areas.
- Full camp functionality should be ensured at all times, i.e. forest managers shall carry out regular camp maintenance.

### **6.3 Water Supply and Management**

The continuous provision of clean water shall be given absolute priority, due to the health risks occurring from the use of polluted and contaminated water:

- Camp must be supplied with good quality drinking water at all times, obtained from watercourses, rainwater or wells.
- Water storage tanks shall be properly installed and regularly screened to prevent the breeding of mosquitoes and outbreak of diseases.
- The source of water should be cleared of dangerous chemicals. (e.g. oily water surface, high contents of sediments, bad smell, etc). Where necessary, effective water filter systems shall be installed to ensure drinking quality. As a key preventive measure, drinking water shall always be boiled for several minutes to ensure safe potability.
- All camp areas should be well drained so that water does not cause ponding, create slippery surface conditions, or create mosquito-breeding areas.

### **6.4 Food Storage and Preparation**

Food must be stored in appropriate places, with provisions for refrigeration of perishable goods to prevent a deterioration of food quality. Food preparation should be carried out in clean kitchen areas to prevent spreading of bacteria and diseases that could affect all workers at the campsite. Canteens shall provide wash-basins for personal hygiene before taking food. Toilets should be located at a reasonable distance from the dining area. Food and drinks shall be served using properly cleaned glasses, tableware, and cutlery. Pets shall not be allowed in and in the immediate vicinity of kitchen or eating areas.

### **6.5 Camp Shifting**

When camps need to be shifted efforts shall be made to dismantle and reuse buildings for the new camp site. All other mobile camp equipment, including fuel and water tanks, drums and containers, electrical fittings, water pipes, etc shall be cleaned before removal to the new location, to avoid the spread of weeds, or pests and diseases. Materials and equipment that cannot be used any longer shall be disposed of as described in Chapters 9 and 11.4. Special care must be taken when transporting dangerous goods to prevent leaks and spillages during transportation.

## **6.6 Shelters and Forest Camp Specification, Construction and Management**

Shelters and forest camp here is referred to as an infrastructure that is going to be used for a period of 1-3 months. These camps are usually located in remote areas specially for shelters of forest workers carrying out Timber Stand Improvement (TSI) and forest restoration (planting).

Shelters and forest camp specification are given due consideration of the following aspects:

1. Constructed in a way to provide protection from inclement weather, for spending breaks, taking meals and drying and storing clothing, at or within easy access of the worksite.
2. Should be equipped with facilities for the preparation and cooking of food.
3. Camp sites should be located away from flooding sites and other natural hazards.

Shelters or forest camps should be equipped with the following:

- Camping tents, in which the number of people should not exceed six, to allow for workers' privacy;
- Lockers for keeping personal belongings;
- Seating area;
- Kitchen;
- Food store;
- Adequate supply of clean water;
- Sanitary facilities (showers and toilets), separated from sleeping, dining, kitchen and storage areas;
- Facilities for washing and drying clothes;
- General material store;
- Stores for inflammables constructed at a safe distance from the temporary shelters;
- Recreational facilities;
- Means of pest control (rodents, etc.) and;
- Fire extinguishers and first aid kits located in key areas.

## **7.0 HEALTH MAINTENANCE AND MEDICAL FACILITIES**

Forest workers usually settle down in forest campsites for extended periods. In order to make their living conditions away from home as comfortable as possible under the given harsh environment their physical and mental health and fitness must be well maintained. An unhygienic camp environment can cause the spreading of various types of diseases affecting the health of camp staff and forest workers. One of the more frequent diseases is *Gastroenteritis*, causing severe stomach pain, vomiting, and diarrhea. It can be easily transmitted among people using a common eating area, and in locations where personal hygiene practices may lapse.

### **7.1 Health Facilities**

Health facilities are available in Telupid, which is about 50 km (1- 1.5 hour drive) from Deramakot and Tangkulap FR. Thus there is no critical need for fully maintained medical facilities on site. SFD and all contractors working within the forest reserves are required to maintain adequate transportation so field staff can have ready access to medical attention.

### **7.2 Medicines**

The clinic and base camp shall stock prescription & general medicines as appropriate. All medicines shall be maintained in a locked storage area and kept up to date & not expired.

### **7.3 General Health Awareness**

The following key aspects of health maintenance prevention shall be actively promoted by forest managers/contractors, and observed by their staff:

- hold information meetings to highlight the need for a clean camp and personal hygiene
- practice personal hygiene at all times, and in particular before eating or drinking
- keep a clean environment in camp offices and staff quarters (provide sufficient number of dustbins)
- provide all staff with a balanced food diet to maintain personal health
- encourage all staff to practice physical exercise to ensure body fitness throughout the day
- arrange and encourage social activities for camp staff and forest workers, e.g. through sport facilities, social gatherings, etc
- provide spiritual facilities, as required (prayer room, church, retreat area, etc)
- provide medication for frequently occurring diseases and injuries, as well as First Aid kits in strategic locations of camps (workshop, store, office, canteen, etc)

For larger camps located in remote areas forest managers/contractors should have a cline with a full time medical doctor / assistant or experienced nurse, enabling an instant care in the case of serious injury or disease.



## **8.0 WASTE COLLECTION AND DISPOSAL**

Regular waste collection and disposal is a prerequisite for a clean and healthy camp environment. Typical non-toxic waste includes all types of camp waste includes all kinds of package materials for food and drinks, cardboard boxes, paper, organic food waste, etc. The location and management of disposal sites is described in the following sub-chapters. For collection and disposal of dangerous goods (fuel, oils, chemicals) refer to Chapter 9.

### **8.1 Refuse Disposal Areas for Non-toxic Waste**

Provide refuse disposal area:

- at least 50 m away from any water body (water course, pond, lake)
- where runoff water cannot enter
- pit to be located above the water table
- regularly cover refuse with soil of a depth of at least 30 cm, final layer: at least 0.5.m
- provide adequate drainage around disposal area

### **8.2 Pit Toilets**

Pit should be located at least 100m away from surface water bodies used for drinking water, and areas subject to inundation. Sewage should be discharged in a way that prevents its flow

- into a water catchment area used as a source of drinking water
- into a watercourse or any other water body, where it may cause a health risk to camp staff and forest workers, or populations of any nearby community