



PUBLIC HEALTH

2.5

2024

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Amendment Register

Administration and Governance

Purpose of the plan

The Public Health Operational Plan forms part of the Weipa Local Disaster Management Plan and has been approved by the Weipa Local Disaster Management Group.

The Public Health Operational Plan is designed to cover a variety of specific public health needs during the response and recovery stages of a disaster and to assist in the protection of the community, via temporary or preventative health measures to minimise the threats to public health.

- To assist and coordinate in the provision and safety of water, shelter, food, refuse disposal, emergency ablution, vermin and vector control, and infectious disease control.
- To assist with the initial assessment of the disaster affected area and coordinate health surveillance teams to minimise the dangers to public health.
- To assist the Weipa Local Disaster Management Group in the provision of relevant personnel to respond to the disaster emergency and advise the Chair and Local Disaster Coordinator on relevant environmental and public health needs and to initiate effective response.
- To assist in the protection of the Community, by surveillance of the disaster affected areas regarding public health aspects.
- To implement temporary preventative health measures to minimise the threats to public health.
- To assist other municipalities affected by a disaster at the request of the affected municipality or if requested.
- Defines the responsibilities of WTA Environmental Health Officer in the event of a disaster and the support given by Queensland Health.

Functional Responsibility

Weipa Town Authority has the functional responsibility for Public Health. It is the LDMG's responsibility to ensure the community is protected from threats to Public Health following a disaster, although QLD Health will be the lead Agency. The *Public Health Operational Plan* is to be updated annually in accordance with the WLDMP, preferably prior to the annual cyclone season.

Context

A major event may cause significant disruption to the community and present a number of risks to public health.

The following issues may need to be prioritised and addressed:

- Provision of safe and adequate water
- Shelter
- Food and food related concerns
- Provision of emergency ablution facilities
- Refuse disposal
- Vermin and vector control
- Infectious disease control
- Personal hygiene
- Disposal of dead stock and domestic animals
- Disinfection of buildings; and
- Provision of public information.

Some or all these public health issues may continue for some time after the event.

This document may be utilised for field use for Environmental Health Workers and teams working in emergency situations.

Planning Assumptions

The LDMG is activated as a response to a worsening situation or at the request of the responsible lead agency (in situations where no prior warning is possible). This plan provides the guidelines for Public Health by the LDMG and sets out the process and procedures for addressing these issues and advice, before, during and after an event.

Support Agencies

Supporting agencies include all member organisations (Core and Advisory) of the Local Disaster Management Group. Weipa Town Authority is supported in this Public Health Operational Plan by Queensland Health and the following personnel:

Table 1.0

Issue	Responsibility	Contact Number
Sewage	WTA Public Works Coordinator	0436 605 422
	Remondis	1300 660 453
Emergency Ablution Facilities	WTA Public Works Coordinator	0436 605 422
	WTA Public Works Supervisor	0477 360 972
Water	WTA Public Works Coordinator	0436 605 422
	WTA Public Works Supervisor	0477 360 972
	WTA Environmental Health Officer	07 4030 9400
	RTA Civil Utilities (Superintendent)	0447 076 374
Refuse Disposal	WTA Environmental Health Officer	07 4030 9400
	Remondis	1300 660 453
Shelter	WTA Communities Supervisor	0439 444 650
	Sodexo Operations Manager	0402 567 292
Food Safety	WTA Communities Supervisor	0439 444 650
	WTA Environmental Health Officer	07 4030 9400
Vermin control	WTA Communities Supervisor	0439 444 650
	WTA Environmental Health Officer	07 4030 9400
Infectious Disease Control	Queensland Health	07 4082 3900

All tasks performed should be underpinned by:

- An impact assessment of the disaster (See *LDMG Folio – Impact and needs Assessment*)

- Availability and appropriate management of resources (staff, volunteers, tools and materials)

Circumstances of the disaster may result in some interchange of responsibility within the varying response units. Additional assistance may be required from the District Disaster Management Group.

Activation of Plan

The Local Disaster Coordinator (LDC) of the LDMG is responsible for the activation of *the Public Health Operational Plan* after consultation with LDMG and Environmental Health Officer. An Operational Checklist is provided in **Appendix A** identifying Actions and Roles of members when this plan is activated.

Any formal activation of this plan must be conveyed to the WTA Chair and Superintendent. The stages of activation include:

- Alert - Notify relevant personnel
- Stand-by - Report to designated place
- Action - Carry out specific roles
- Deactivation - Stand down
- Debriefing

Public Health Assessment

The priority is to determine the nature of the disaster which will indicate likely public health issues. Secondly, an immediate rapid qualitative assessment should be completed to identify any staffing and resource issues that need to be addressed in order to adequately be able to respond to the disaster affected area. This assessment should include:

- Availability of staff (including animal control)
- Availability of transport
- Identify/recognise potential threats and hazards and assess health risks
- Identification of major public health problems (water, shelter, food safety, storage and serving at evacuation centres, availability of generators for food refrigeration, etc)
- Determine objectives, priority actions and resource allocation needed to address each situation (whether local capacity is adequate or external assistance/resources are required)
- Operational status of Rio Tinto water laboratory
- An estimate of the number of people affected
- Identification of what further information is needed immediately
- The presence of continuing hazards/public health issues

Assistance from the District Disaster Management Group will be paramount in supporting of any long-term facilities, assets and issues. An Environmental Health Rapid Assessment Form is in **Appendix B**.

Authorisation

The issuing of warnings on disaster related matters to the public shall be authorised by the Chair of the LDMG after liaison with the Local Disaster Coordinator or the Officer in Charge of the lead agency.

Community Assessment

The responsibility for the formation of Field Surveillance Teams and their areas of responsibility is that of the Environmental Health Officer or any other person acting in this role.

WTA Environmental Health Officer will be the lead in forming a Field Surveillance Teams to assess the disaster affected area. The number and composition of teams will be decided upon as required, as the number of available officers may be limited. All results of inspections are to be reported back to the Environmental Health Officer or their delegate. A contact list of WTA personnel is provided in **Appendix C**.

A checklist of the resources provided in the Environmental Health Emergency Kits is at **Appendix D**.

Water treatment and Sources

Ensuring safe, potable water following a disaster is a critical function of the environmental and public health role. Weipa’s town water is sourced from underground aquifers and is naturally good quality and needing little treatment. This means damage in the water catchment during a disaster is unlikely to impact raw water quality. However, the town’s water treatment, storage and reticulation system could be damaged. If the town’s drinking water system is impacted by a disaster, alternative safe drinking water supplies will be needed until the water supply system is repaired, inspected and deemed safe through laboratory testing.

If the town’s water supply has been compromised, environmental health staff will liaise with the WTA Works Supervisor and Rio Tinto Weipa (RTAW) to assess drinking water quality and ensure that alternative safe drinking water is available. This will be achieved by:

- Plan for the delegated officer to publish a temporary boiled water notice
- Inspect the town’s drinking water treatment, storage and distribution system to identify sources of contamination
- Liaise with transporters and drinking water testing laboratory to ensure priority analyses of samples can be undertaken
- Establish a drinking water testing program
- Coordinate distribution of emergency potable water supplies, including bottled water collection points and tinkered water supply points
- Provide fact sheets about availability of bottled and tanked water, rationing, storage and water disinfection
- Provide advice or assistance about the recommissioning of the towns drinking water supply system

Consideration should be given to the quality and quantity of water available, educating the community of risks, availability of alternate water sources and the ability to test and treat the water supply. Water of doubtful purity should be treated before being consumed. The bacteriological, chemical and physical condition of water for human consumption should comply with *the Australian Drinking Water Guidelines 2011* and WTA’s *Drinking Water Quality Management Plan (DWQMP)*. In an emergency, all water should be contaminated and require disinfection/purification.

Where water supply is limited and there may not be an adequate supply consideration must be given to rationing and/or controlling the use of water.

Communication with the affected population is also important to minimise the risk of infection and to reduce health problems associated with poor water quality. In the event of an emergency, taste and clarity (while desirable to the population) are less important than ensuring the safety of the supply. However, the community may require reassurance to feel confident about drinking water of a dirty appearance.

The ideal minimum quantities of water for all purposes per person per day are as follows:

Category	Litres	

	<i>per person</i>	<i>These figures are ideal, but should be used as a guide</i>
Person	20	
Feeding units, per person	30	
Medical unit, per casualty	60	

Note: the drinking water part of this allowance (4 litres) should be increased in hot conditions or where heavy work is being done.

To conserve available potable water for drinking and food preparation, other sources of water should be used, where risk to health is least likely (i.e. flushing toilets).

In an emergency, it may be necessary to find new sources of water and arrange for emergency disinfection and distribution. If in doubt about water purity, water for drinking or food preparation should be contaminated and require disinfection/purification. Laboratory testing services may not be available.

These may be adequate to supply the volume required, however, they must be checked to ensure:

- the catchment is not polluted
- the treatment plant is working correctly
- the reticulation system has not been damaged
- the water quality is maintained

Private Systems

There may be water tanks installed on some private premises that must be checked as above.

Bores and Wells

Ground water is less subject to gross contamination than surface water and may need no treatment, except disinfection.

Portable De-Salination Plants (if used)

These may be adequate to supply the volume required, however, they must be checked to ensure:

- the catchment is not polluted
- the treatment plant is working correctly
- the reticulation system has not been damaged
- the water quality is maintained

Surface Waters

All surface waters must be treated as contaminated. Choose a spot for the water point as far away from potential pollution as possible and protect the water and catchment area from contamination by humans or animals.

Bottled Water

In a disaster situation, bottled water is a safe alternative supply for drinking purposes. Bottled water consists of water that has been packaged for sale such as mineral or spring water.

Water Testing

In most instances, the provision and treatment of water will be the responsibility of WTA, however, there may be circumstances where a Water Officer or EHO or a person trained in that capacity may need to take a water sample for analysis. Brief instructions on how to take a bacteriological water sample are provided in **Appendix E**.

Water Treatment - Raw Water

Water can either be treated chemically (see tables below for correct dosage) or boiled before being consumed. Below are the two stages to the treatment of raw water:

Clarification

- Allow sedimentation to take place (a very slow process); or
- Add a coagulating agent, E.g. Aluminium sulphate (alum) and allow water to settle. A simple jar test can assist in estimating quantity. Water Officers have a pH meter if required. If the water is acidic, the addition of lime, sodium bicarbonate, baking soda, soda ash beforehand so that the pH is 7 - 7.5 may assist in coagulation.
- Filtering water through sand (a slow process) or through a finely woven cloth. If storage is available, a side stream filtration loop using a swimming pool filter powered by a diesel or electric pump can assist.

Chlorination

Where the water reticulation system has been contaminated, it will be necessary to flush and disinfect all water pipes, including domestic systems, and empty all hot water tanks, and maybe normal external water tanks (both above and below ground). This may be carried out by boiling or by the addition of chemicals, such as chlorine, as detailed below:

- Add in enough chlorine to give a concentration of 1mg/L (ppm) after 30 minutes contact time.
- It is recommended an initial dose to give a concentration of 5 mg/L (ppm) be added and maintain not less than 1mg/L (ppm) residual in the water after initial treatment.
- The chlorine level can be checked after 30 minutes using a calorimeter or comparator (see Water Officer). If none is available, there should be a strong smell of chlorine from the water.

Sources of available chlorine (read label on container - a food grade chlorine is always preferred over pool chlorine):

- General household bleach 4% approximately
- Liquid swimming pool or factory chlorine (sodium hypochloride) 12.5% approximately
- Granular pool chlorine (calcium hypochloride) 65% approximately

The following tables illustrate the chlorine dilution factors required for each type of concentration of chlorine used to treat the water supply.

Dilution of concentrated chlorine **4% available chlorine**

Water Volume to be Treated	Concentration Required				
	50 ppm	100 ppm	200 ppm	500 ppm	5000 ppm
5 litres	6.25 ml	12.5 ml	25 ml	62.5 ml	625 ml
10 litres	12.5 ml	25 ml	50 ml	125 ml	1250 ml
50 litres	62.5 ml	125 ml	250 ml	625 ml	6250 ml

Dilution of commercial grade concentrated chlorine **12.5% available chlorine**

Water Volume to be Treated	Concentration Required				
	50 ppm	100 ppm	200 ppm	500 ppm	5000 ppm
5 litres	2.5 ml	5 ml	10 ml	25 ml	250 ml

10 litres	5 ml	10 ml	20 ml	50 ml	500 ml
50 litres	25 ml	50 ml	100 ml	250 ml	2500 ml

Dilution factors for **small water supplies**

Water Volume to be Treated	Available Chlorine	Quantity of Chlorine to be Used
1000 litres	4%	125 ml or 125 g
1000 litres	12.5%	40 ml or 40 g
1000 litres	65%	8 ml or 8g

Water Sterilising Tablets (containing iodine)

These should not be used continuously for more than a week because of the danger of iodine overdose. The addition of two drips of Tincture of Iodine (available from pharmacies) to 600ml of water, which is allowed to stand for 30 minutes, can be used on a short-term basis.

Boiling

Bring the temperature of the water to a rolling boil for a minimum of three minutes.

A “Boil Water Advice” notice is provided in **Appendix F**.

Storage of Treated Water

Storage vessels for treated water should:

- be clean
- have covers
- be above ground level
- be in a cool position
- be cleaned periodically
- be mosquito proof

Practical Guidance Information

Drinking water fact sheets on the following topics will be available from WTA for distribution during disasters:

- Water treatment of raw water
- Water storage
- Water rationing
- Emergency water supplies

Food Safety

In a disaster situation conditions are favourable for an outbreak of food-borne illness. Rapid assessment planning and response is essential with all relevant personnel involved in the provision of food to develop a plan for the supervision of food in both registered food premises and in temporary kitchens or evacuation centres.

Vital services, such as supply of electricity and water can be impacted, food businesses can be damaged, and demand for mass catering can result in food production by volunteers untrained in food safety practices for mass catering.

Medical and health services may already be short staffed and focused on other emergency situations. It is, therefore, important that food related concerns be monitored throughout the

disaster period. Planning and management of food production in disaster situations includes all aspects of the following:

- Prevent foodborne disease in the community
- quantities and types of food
- lines of supply
- compliance with FSANZ Code for Food Safety Practices
- premises and preparation
- means of distribution

Advice and constant supervision must be given on:

- Quality control for incoming foods
- Safe water supply
- Temperature control (Food kept cold should be at or below 5oC, Frozen food should be at or below -15oC, Hot food should be stored above 60oC)
- Adequate food storage
- Waste disposal
- Vector control

Food safety priority activities

In a situation that poses a threat to food safety, there are several specific tasks that environmental health staff need to do if there is a threat to food safety:

- Provide technical assistance and consultation to owners/managers of food establishments regarding general food safety issues.
- Provide information to owners/managers of food establishments on salvaging and protecting perishable foods.
- Provide information to owners/managers of food establishments on sorting and proper disposal of foods, which may have been contaminated.
- Provide advice and assessment of donated food.
- Ensure that contaminated foods are properly collected and disposed of at landfills.
- Provide technical assistance at mass feeding centres, if established, to ensure safe food handling practices and personal hygiene for workers and attendees.
- Provide information to the public addressing protection of perishable foods, and advice on the sorting and disposal of food that may be contaminated.

Practical Guidance Information

As demand for food safety guidance is likely fact sheets on the following topics will be available from WTA for distribution during disasters:

- power failure
- frozen foods
- food storage
- Food donation

Foodborne disease

Foodborne disease outbreaks can occur following a disaster, taking steps to quickly identify and eliminate possible sources, as well as preventing the spread of illness is a priority that the environmental health team must be ready to respond too.

If a foodborne disease outbreak is suspected the regional office of Queensland Health will take the lead investigation role, the environmental and public health role will liaise with Queensland Health and the LDMG to facilitate the investigation. This role may include:

- Maintaining frequent communication (conference calls, emails, faxes) with all involved agencies
- Supporting the epidemiologists by gathering menus from food suppliers implicated, and undertaking patron and food service worker interviews
- Liaison with food suppliers and facilities
- Using authority to take action to control risk as needed

Donated Food

Environmental Health Officers should assess the safety of the food. If it is not suitable it should be disposed of. Disposal should occur after the donator has left. In most cases, because the integrity of the donated food cannot be determined, it should not be used.

Damaged food should be checked and often it will be safe if it is used quickly and handled properly. If safe, prioritise for its order of consumption. Perishable foods can be sorted out and used first. In the event of power loss of more than 36 hours, all frozen food will have to be consumed or destroyed. If power is cut off or even rationed, refrigerators should be reserved for essentials.

Temporary Feeding Kitchens

In certain situations, it may be necessary to set up temporary kitchens. Siting and construction should be in accordance with the Queensland Health Guidelines (An application package and guide for the licensing of Temporary Food Premises under the Food Act 2006).

Some important points for the organisation of mass feeding centres are as follows:

- The location and layout of mass feeding centres should be identified to ensure reasonable sanitary safeguards.
- Whenever possible, use should be made of existing buildings such as Community Centres, Sports Stadiums, schools, public assembly halls and churches, which may offer suitable conditions, e.g.: water, toilets, kitchen, power for maintaining a satisfactory standard of cleanliness, and protection against the invasion of rodents and insects.
- Only safe potable water may be used for drinking in mass feeding centres; where there is no piped supply, water must be transported, stored and handled in a sanitary manner.
- The source of the water must be known, as well as the means of conveyance of the water to the disaster site.
- Enough basins, each with soap, nail brush and clean disposable towelling must be provided exclusively for the use of food handlers.
- Separate basins should be provided for washing and rinsing of eating and cooking utensils.
- Before washing, any grease or food scraps on the eating and cooking utensils, they should be scraped into a refuse bin.
- Serving of raw vegetables and soft skinned foods should be avoided unless for dietary reasons: in such cases the vegetables and fruits must be thoroughly washed.
- Separate toilet installations for the food handlers should be provided (if possible) close to the mass feeding centres: it being assumed that people eating at the feeding centres can make use of the general facilities: toilets (and where applicable, latrines), must be always kept in the best possible state of cleanliness.
- Solid wastes from kitchens must be deposited immediately into refuse bins (garbage cans). No filled bins may remain in the preparation and cooking areas. Bins must be covered and removed outside for collection and disposal (the use of garbage bags is recommended).

- A refuse removal service must be promptly started as proper collection and disposal prevents many problems, particularly fly breeding, rodent invasion and fire risk. Attempts should be made to separate refuse into categories of:
 - Dry refuse - papers, cartons, cardboard
 - Putrescible - food scraps, fruit, vegetables; and
 - Indestructible - tins, bottles and plastics.
- Where refrigeration facilities are non-existent or inadequate, perishable foods should only be bought daily and cooked and served as soon as possible.
- Condensed or powdered milk must be reconstituted with safe potable water only, and under the best possible sanitary conditions. If fresh milk is available for infants and hospital patients, it must be boiled before use.
- An adequate supply of detergents, disinfectants, brushes, clean cloths, brooms and other cleaning necessities must be provided.
- Disposable plates and cups should be used in mass feeding centres.
- Ensure a regular roster is developed so that adequate rest periods are taken to reduce the risk of failing hygiene standards of kitchen staff.
- Regular inspections of temporary mass feeding kitchens and regular supervision of feeding areas, particularly during the early state of a disaster when personnel are operating 24 hours a day, usually in shifts of six hours; and they be emotionally and physical exhausted. An Evacuation Centre inspection form is provided in Appendix G. This inspection form should be used for the initial inspection post disaster.

Inspecting Licensed Food Businesses - Post Disaster

The provision of safe food to disaster affected communities through food premises registered with the WTA will be achieved by supervision of storage, preparation and distribution of food.

WTA Environmental Health Officer should carry out these responsibilities by:

- Determining which food premises should be inspected first within the Community. Determined by possibility that the premise may still be able to operate and supply food to the public, quantities of high-risk foods e.g. Frozen or refrigerated goods.
- Having information prepared in advance for the owner / operator (written) about what will happen (inspection), why it's important, cooking the food does not make it safe, how they will be affected, why they must comply (with seizures/destruction of foodstuffs), business card with contact details for business to be able to contact officer for follow-up inspection.
- Ensuring Inspections are carried out checking compliance with Food Safety Standards under the powers of the Food Act 2006. A food premises inspection form is provided in Annex H. This inspection form should be used for the initial inspection post disaster and any further inspections of the same food premise should be conducted using the standard carbonated food business inspection forms.
- Focus should be made on cold rooms and cold stores. Check for backup generators, are they effectively keeping foods cold (maintaining integrity of insulation). Have some sort of recommendation we can give to business for timeframes of power outage (in cold rooms) where food will still remain relatively safe. If there has been a power outage the EHW should provide the food operator with the Power Outage fact sheet located in Annex I.
- Unsafe Food Label (located in Appendix J) should be used where food is considered unsafe for consumption.
- Considerations for PPE: is PPE needed, if anything more than gumboots / gloves / goggles / face mask are needed, is it a risk to EH workers? Should they be entering the premise? If PPE is to be used, disposable towels and at least a spray bottle with a cleaning concentrate for initial cleaning (before entering vehicle) until being able to thoroughly clean PPE at office.
- Records should be kept of premises that require disposal of food, and also if there are large quantities.

- Disposal of food - contact Supervisor to determine if extra waste services have been put in place and for the correct procedure for disposal of large amounts of food items.
- Consider what food suppliers have been affected and whether food premises are still capable of delivering safe food.

Note: In a disaster situation people in the Community will have been under a large amount of stress. For this reason, EHOs should adopt an 'educative' approach and advise of the risk of food borne illness associated with inadequate temperature control, vermin and other issues associated with the nature of the disaster, rather than a strict 'legislative' approach.

Requirements of Food Handlers

The kitchen supervisor will probably have to use whatever workforce is available, i.e.: volunteers or organised responders. Any person who has displayed any of the following symptoms must be excluded from preparation and handling of food:

- Diarrhoea
- Vomiting
- Infectious lesions or exposed areas of infected skin
- A recent history of illness

Sanitation

Introduction

Sewerage infrastructure can be overwhelmed during natural disasters resulting in human waste contaminating homes, buildings and public spaces. Keeping people away from human waste and effective sanitation needs to be one of the main priorities to prevent illness after a disaster strikes.

Sanitation objectives

In the event inadequate sanitation poses a health threat to the public; the following environmental and public health objectives will be established:

- Prevent human exposure to, and the spread of disease-causing microorganisms
- Prevent contamination of water supplies
- Prevent degradation of surface and groundwater quality
- Re-establish the towns sewerage system

Sanitation priority activities

If the town's sewerage system is overwhelmed environmental health staff will liaise with RTAW and WTA officers to manage threats related to inadequate sanitation services. Actions will include:

1. Coordinating provision of emergency waste disposal facilities for affected neighbourhoods.
2. Providing technical advice about public toilet and handwashing requirements and their servicing.
3. Providing technical advice about alternate human waste disposal methods if public toilets are not available.
4. Providing educational information/recommendations to the public regarding personal hygiene and illness prevention.

Practical Guidance Information

Sanitation fact sheets on the following topics will be available from WTA for distribution during disasters:

- Sanitising water
- Human waste disposal
- Personal hygiene and sanitation during disasters
- Cleaning up storm and flood damaged properties

Safe Disposal of Refuse

The primary aim of disposing of waste material is to prevent the transmission of disease and make areas safe and accessible. Disaster conditions may overwhelm normal garbage facilities and planning for the utilisation of emergency methods of disposal may be necessary. In a disaster, the control of public health problems such as vector/vermin control depends a lot on the efficiency which all refuse is collected and removed.

Sanitary landfill and incineration are the preferred methods of refuse disposal in a disaster situation. Refuse can be categorised for removal as follows:

- Putrescible garbage (wet garbage) such as food scraps, discarded fruit, kitchen waste, vegetables
- Dry refuse/non-putrescible garbage - ashes, cinders, papers, old iron, tins, bottles, rags, cardboard
- Indestructible rubbish such as used building material

Bashing and Burning

In a disaster, it will be necessary to 'save space' due to the lack of sufficient bulk refuse receptacles or the lack of special vehicles required to move same. The 'bash and burn' technique may have to be employed in disaster situations in spite of the undesirable effects of burning refuse (this would apply to dry material only). 'Bashing' or compressing metal containers reduces bulk, thereby giving more space in the refuse bin.

Storage

Plastic garbage bags are ideal for the temporary storage of putrescible material and should be used if available, however, care should be taken to ensure; bags are not damaged in any way and that dogs, cats and other animals are not likely to have access to them. Where plastic garbage bags are used, it is essential they are securely sealed at the top, and care is taken to avoid putting jagged objects inside such as glass and tins.

Selection of Waste Disposal Sites

All attempts must be made to try and utilise normal waste disposal sites. Should the usual garbage disposal sites be either inaccessible or unusable for any reason, alternative facilities must be established. An Environmental Health Officer must be consulted in the decision-making process and permission must be sought from Public Works Supervisor Weipa Town Authority. In selecting an alternative site, the factors which must be considered are:

- suitability of terrain - soil quality
- availability of surface coverage soil
- likelihood of leaching
- height of water table
- accessibility - all weather road
- proximity of rivers, streams and creeks
- likelihood of nuisances being caused, e.g.: flies, vermin, breeding factors, environmental pollution

WTA or Rio Tinto should be consulted in determining any additional land space for refuse removal, particularly green and bulk structural waste.

Sanitary Landfill

This is the preferred disposal method involving the use of depressions, gullies or low-lying lands. The following points should be applied:

- Where possible, only putrescible wastes should be transported to a sanitary landfill site
Putrescible waste should be covered with soil to a depth of 300mm for bulk sanitary landfill sites and to a depth of 150mm for small local burial sites
- Where possible, bulky non-putrescible wastes should be stored at alternative sites away from the sanitary landfill site
- It may be necessary to burn timber, however sorting materials also puts a strain on resources
- Other indestructible matter such as steel lintels, car bodies, heavy machinery, gas cylinders, refrigerators or freezers should be separated, where possible

Mobile garbage Bins

Mobile Garbage Bins (wheelie bins) may be useful in disaster areas. In the event of mobile garbage bins not being available, other receptacles may be provided, e.g.: 200 litre drums, together with properly fitted lids. Constant surveillance of these receptacles is required to ensure only domestic rubbish is being placed in them and they are cleaned and disinfected regularly.

Transportation of Refuse

Should conventionally refuse removal not be temporarily unavailable, use any vehicle fitted with a tray and high sides. Care should be taken to ensure any liquid or semi-liquid waste, which may be present in the load, does not leak on to the road while being transported. To avoid this, line the tray with plastic membrane prior to loading where possible. Ensure the load is covered with a suitable tarpaulin or plastic sheet.

Open Dumping

Debris, such as bricks, concrete and roofing iron, are suitable for open dumps; however, flies and odours will result if general garbage is disposed of in this manner. Vector and Vermin Control
The primary aim of monitoring vector and vermin is to prevent the transmission of disease and make areas safe and accessible.

Disaster conditions may lead to increased levels of vermin and planning for the utilisation of emergency methods of monitoring may be necessary. In a disaster, the control of public health problems such as vector/vermin control depends a lot on the efficiency which all refuse is collected and the monitoring of potential breeding sites due to the nature of the disaster.

Vector and Vermin-related Diseases

Vermin and vectors (flies, fleas, lice, mites, mosquitoes, ticks, etc.) are disease carriers that can develop rapidly in an uncontrolled environment.

Carrier / Cause	Disease
Mosquitoes	Malaria Dengue Fever Ross River Fever Viral Encephalitis Filariasis
House Flies	Diarrhoea Dysentery Salmonellosis
Cockroaches	Diarrhoea Dysentery Salmonellosis

Lice	Endemic Typhus Pediculosis Relapsing Fever Trench fever Skin Irritation
Bed Bugs	Severe Skin Inflammation
Ticks	Rickettsial Fever Tularaemia Relapsing Fever Viral Encephalitis
Rodent Mites	Rickettsial Fever Scrub Typhus
Rodent Fleas	Endemic typhus Plague
Rodents	Rat-bite fever Leptospirosis Salmonellosis Melodises

Disasters do not generate 'new' diseases in an area; however, by altering the environment, disasters may increase transmission of diseases already existing in a region. Transmission could occur through:

- direct effect of the physical event itself, such as faecal contamination.
- indirect effects which may result in such conditions as overcrowding and poor sanitation.
- promoting or causing increase in the movement of populations.
- disrupting routine vector control programmes.
- altering the distribution of vector species.

Assessment and Situation

The potential of transmission of vector-borne and vermin-related disease should be assessed early in the post-disaster period. It is important to note natural disasters do not necessarily lead to outbreaks of infectious diseases. Environmental factors should be considered in each event. For example, flooding may flush out or destroy mosquito breeding sites; however, can subsequently create additional habitats to produce greater mosquito densities.

When water and sewerage systems are damaged, increased storage of potable water can provide additional breeding sites for mosquitoes, while temporary pit latrines can provide habitats for flies and mosquitoes.

Inadequate food storage, poor sanitation and contamination by debris, animal carcasses and excreta may produce breeding areas for flies and an increase in rodent populations.

Problems related to vectors and vermin may not be confined to the affected region. Human movement away from the region may contribute to crowding in peripheral areas and, as a result, provide opportunity for the proliferation of diseases associated with vectors and vermin. For example, following water-related disasters, these peripheral areas may harbour potential mosquito breeding habitats that are more conducive as immediate breeding sites than in the disaster area.

Determining Action Priorities

Community areas of high priority of receiving control efforts should be determined by considering:

- population at risk / density
- number of confirmed or suspected disease outbreaks
- recent history of disease transmission

- relative density of potential disease vectors
- significant increases in new breeding sites
- presence of potential disease reservoirs
- seasonal accessibility by ground transport
- the number and types of complaint calls regarding mosquito activity

Surveillance and Control

Increased monitoring of and control of potential sites needs to be actioned promptly and prioritised for efficient control methods.

Immediate Action

The major activities in vector and vermin control should occur during the immediate post-disaster period. If initial surveys and other sources of information indicate a potential problem, the sooner post-disaster programmes are implemented to reduce disease potential, the less is the chance epidemics will occur. Delaying action may be medically and economically disastrous.

Routine Operations

Re-establishing and upgrading routine control operations, surveillance and training of staff will minimise the risk or impact of an arthropod-borne epidemic.

Risk Perceptions

Very few mosquitoes are disease carriers, however, most people in a disaster environment will associate the presence of mosquitoes with disease even though their presence may be no more than a nuisance.

Sites of Concern

Whatever the disaster, certain areas are likely to need surveillance to control vermin and vector proliferation. They include:

- food areas (preparation, storage and eating)
- refuse collection area and tips
- sanitary depots
- sewerage farms/depots
- damaged food premises, food manufacturers, shops, cold stores, commercial kitchens, food storage areas
- dead stock/animals
- domestic kitchen (particularly box freezers or refrigeration which are buried under rubble)
- burst sewerage pipes
- damaged septic tank systems or domestic treatment plants, particularly those made with fibreglass or connected to PVC piping
- areas/properties reduced to rubble
- any area where people accumulate

Note: Mosquito information suitable for public distribution can be found in **Appendix L** if current mosquito brochures are not accessible.

Personal Hygiene and Infectious Disease Control

The primary aim of documenting personal hygiene and disease control procedures is to prevent the transmission of disease.

Responsibility

The surveillance and management of any outbreak of infectious diseases will be the responsibility of Queensland Health.

The chance of a disaster-related infectious disease occurring in an area depends on the variables of:

- the existing pattern of disease; and
- the nature of the disaster.

All individuals affected by a disaster can assist in preventing infectious disease by demonstrating good hygiene practices.

Transmission Methods

Infectious disease can be transmitted by the following means:

- Airborne: Micro-organisms spread through the air from a source to a person, e.g. influenza, Legionnaires' disease and fevers.
- Direct or Indirect Contact with Source: Micro-organisms are transmitted from source to person, including transmission by body fluids, e.g.: hepatitis B, leptospirosis and scabies.
- Waterborne/Foodborne: Micro-organisms are carried in water or food and ingested, e.g.: typhoid, cholera and hepatitis A.
- Vector borne: Micro-organisms are transmitted to a person by another host, e.g.: Ross River virus, malaria and plague.

Mitigation Measures

Epidemic control measures should include:

- reduction of population density to reduce person-to-person contact
- provision of appropriate sanitation and water
- awareness of existing disease prevalence in the disaster area and evacuation/relocation areas
- adequate control of disease vectors

Personal Hygiene

Personal hygiene may be neglected in times of emergency, especially in densely populated areas, increasing the risk of spreading disease. While personal hygiene is the responsibility of the individual, it should be promoted to the community as it limits the spread of infectious diseases, especially those transmitted by direct contact.

All affected persons, particularly emergency workers or volunteers should be advised to:

- wash hands in soap and water immediately after going to the toilet and always before handling and/or eating food; (refer to **Appendix L** for correct technique)
- avoid the use of common or unclean eating utensils, toothbrushes, razors, drinking cups, towels, handkerchiefs, combs and hairbrushes
- avoid coughing and sneezing on others
- ensure that cuts and abrasions are cleaned and covered (high risk of tropical ulcers)
- wash hands thoroughly after handling a patient or his/her belongings
- promptly advise a supervisor if they start to feel unwell
- avoid handling food if they are feeling any signs of illness

Disinfection of Equipment and Materials

Where equipment or materials require disinfection to prevent the spread of disease, the following methods are recommended:

- All equipment and surfaces must be cleaned before disinfection.

- Choose heat for disinfection where possible.
- If the application of heat is not possible use a chemical disinfectant such as a hypochlorite solution using a concentration giving 100 to 200 ppm of available chlorine for a scrupulously clean surface. Where absolute cleanliness cannot be assured, a concentration giving 1,000 ppm or more of available chlorine will be required.
- Chemical disinfection solutions are to be prepared fresh daily, in clean, dry and preferably heat-treated containers.

Blood and Body Fluid Precautions

When cleaning blood or body fluid spills:

- Wear gloves
- If gloves are not available, use paper towels or plastic bags to avoid direct contact
- For solid material, use disposable towels or toilet paper to remove as much of the matter as possible
- For liquid material, cover the spill with disposable towels or toilet paper, then cover the area with freshly prepared bleach for 10 minutes (or a suitable Hospital Grade Disinfectant to be diluted according to manufacturer's instructions) with gloved hands remove towels and wipe clean
- Wipe with warm water and detergent
- Place gloves and all disposable towels in a plastic bag, seal the bag and place inside another plastic bag then dispose of according to guidelines for disposal of infectious waste
- Wash hands thoroughly

Note: Hot water will make blood stick to the surface it is on. Use cold water for the first contact with blood or blood-stained articles.

When disinfecting blood-spillage or blood-contaminated surfaces:

- Use hospital grade disinfectant, or equivalent, which are included on the Australian Register or Therapeutic Goods (ARTG), or the Australian Therapeutic Goods List (ATGL).
- For areas where the bulk of the soiling has been removed with a detergent solution, use 0.05% (500ppm) chlorine.
- Benches, floors, walls and other inanimate objects that are likely to be contaminated, but may not visibly soiled, should still be cleaned and disinfected.
- When the area cannot be adequately cleaned prior to disinfection, (e.g.: porous surfaces), then the disinfectant should be used first to clean the area and then again to disinfect.
- The disinfectant solutions should be left in contact with the surface for at least the time recommended on the label.

Mass Care

Introduction

A range of services are likely to be needed in the event that a disaster results in the displacement of residents or critical infrastructure is damaged. These include gathering places, temporary accommodation, food services, ablution and sanitation facilities, health and counselling, and places to donate goods.

Mass gathering objectives

Where circumstances dictate mass gathering services are required the following objectives will be established:

- Safe shelters with adequate space and sanitation services (accommodation, toilet, showers, laundry and waste collection)

- Adequate supplies of safe food and water

Mass gathering priority activities

Environmental health staff will undertake a number of tasks to manage public health risks associated with mass gathering, this includes:

1. Advise about selection, design and layout of mass gathering sites
2. Oversight of food safety practices
3. Water supply and quality
4. Advice about number, position and design of personal hygiene amenities (e.g., toilets, hand wash sinks, soap, disposable towels, showers and laundry)
5. Advice about wastewater management
6. Advice about management of solid waste
7. Monitor housekeeping, cleaning and sanitation
8. Advice about vector/pest related concerns and pest management
9. Provision of educational information to the public, volunteers and attendees regarding health and safety issues

Practical Guidance Information

The following reference is used for public health standards relating to mass gatherings:

AUSTRALIAN EMERGENCY MANUALS SERIES PART III Emergency Management Practice SAFE AND HEALTHY MASS GATHERINGS

Pest control

Introduction

Disasters frequently create conditions that result in population increases in insects (e.g. mosquitoes and flies) and rodents or increased contact between humans and vector/nuisance species. In such situations, the chances of disease transmission increase sharply. For example, floods and heavy rains will create new mosquito breeding sites in rubble and/or standing water. Solid and food waste from damaged buildings can also serve as harbourage and a food supply for rodents and insects.

In addition to disease hazards posed by insects and rodents, they can contribute to psychological stress by being a major nuisance.

Pest control objectives

If a disaster, the WERT will aim to:

- Control conditions that provide sites for harbouring and breeding pests.
- Minimise pest bites.
- Establish an integrated community wide vector control strategy.

Pest control priority activities

To protect the public from illness caused by vectors and pests following a disaster, WERT will undertake the following activities:

- Identify hazards that harbour vectors and pests (e.g. standing water, damaged or flooded sewer system, build-up of solid waste, uncollected food waste).
- Request the responsible agency to control hazards that harbour vectors and pest (e.g. site clean-up, treatment of standing water).
- Liaise with Queensland Health to facilitate vector control measures to the affected area.
- Provide education information for the public about avoiding mosquito and insect bites.

Waste Management

Introduction

In the event of a natural disaster, arrangements that routinely deal with the collection and disposal of solid waste (i.e. non-hazardous residential, commercial and industrial waste) may be interrupted anywhere from a few days to several months.

Disasters generally generate extra waste from increased activity at mass gathering facilities, hospitals, and clean-up of damaged properties. Hazardous wastes such as asbestos and chemicals can also be present presenting a risk to residents, the public and workers.

Waste management objectives

To manage public health risks from waste following a disaster the following objectives will be established:

- Re-establish town's waste management system
- Public awareness about potential public health risks from waste
- Additional services to collect and dispose of household and building waste caused by the disaster and response activities
- Management of hazardous and infectious waste such as asbestos, dead animals and medical waste
- Identification and management of additional or temporary land fill and disposal sites
- Public awareness about disaster waste management clean-up

Waste management priority activities

There are several specific tasks environmental health staff will undertake do to minimise health hazards and nuisance conditions posed by waste, including:

1. Liaise with waste management contractor to determine the extent of solid waste management system disruption, including both disruptions to facilities and equipment, and to transportation routes to establish a strategy to ensure continuity of solid waste management services.
2. Provide advice about establishing emergency disposal and or transfer sites.
3. Provide regulatory oversight as needed for licensed facilities and waste hauler and determine if regulatory waivers are necessary.
4. Provide information and guidance to businesses and the public about changes in the solid waste management system resulting from the disaster.
5. Provide information and guidance to businesses and the public about hazardous materials, including asbestos, chemicals and medical waste.
6. Work with RTAW and other governmental agencies to manage different categories of waste within the debris, including the extent of possible contamination of the solid waste (e.g. by hazardous materials or hazardous wastes).
7. Provide regulatory oversight and technical assistance as needed for material segregation and material handling, waste evaluation/classification, proper management of infectious and hazardous waste types, and reporting.
8. Serve as a liaison between disaster site clean-up operations, waste haulers, and disposal facilities.

Practical Guidance Information

Waste management fact sheets on the following topics will be available from WTA for distribution during disasters:

- Changes to domestic waste collection during the disaster recovery period

- Disposal of damaged material and household goods following a disaster
- Protecting yourself from hazardous materials when returning home after a disaster
- What to do with pets and other animals that died as a result of the disaster

Disposal of Dead Animals

Disposing of dead animal carcasses, products and waste materials will help ensure no spread of disease occurs to either humans or to other animals and minimise opportunity for vermin and flies to access and breed. Care must be taken at all times when handling dead animals, including wearing of rubber boots, gloves, proper protective clothing and adequate personal disinfection.

Selection of Destruction and Disposal Sites

A decision must first be made on burning versus burying of carcasses. Factors to be considered are:

- availability of sites available for burial or burning adjacent to the destruction site
- availability of machinery
- nature of soil/rock formation in the available area
- level of water table
- proximity to water catchment areas, bores and wells
- presence of underground services, e.g.: water, gas, electricity, telephone lines
- drainage, sewerage, other improvements or structures
- proximity to build up areas and dwellings (particularly in the case of burning)
- other weather conditions including prevailing winds (it may be easier to burn in excessively wet conditions)
- availability of supplies of suitable fuel for burning
- restrictions on the use of fire
- presence of overhead structures such as power lines. These must be avoided when selecting both burial and burning sites
- quantities of carcasses and other material for disposal
- subsequent plans for the use of the area, e.g.: soil may be unstable where burial pits are placed
-

Burial is generally the preferred method of disposal because it is:

- quicker
- cheaper
- environmentally cleaner
- easier to organise (fewer outside resources required)

The following burial procedures should be followed when disposing of dead animals:

- As a rule, a three-metre wide and five-metre-deep pit filled to within 2.5 metres of ground level will accommodate five adult horses per linear metre. One adult horse carcass is equivalent to 3 - 4 large dogs.
- Carcasses and other material for disposal should be dumped on the side opposite the excavated soil. The abdominal cavities of all animal carcasses must be opened prior to placement in the pit. Carcasses of horses and dogs should be slashed widely open using long handled machetes or short barred chainsaws.
- The operation should be undertaken at the side of the pit to minimise contamination of the other areas. Under no circumstances should personnel enter the pit.

Appendices:

- A. WTA Operational Checklists
- B. Immediate Assessment Form
- C. Environmental Health Emergency Kit
- D. How to Take a Bacteriological Water Sample
- E. Boil Water Advice
- F. Evacuation Centre Inspection
- G. Food Premises Inspection
- H. Food Safety During Power Outage
- I. Unsafe Food Warning
- J. Protection from Mosquitoes
- K. Handwashing Techniques
- L. Annual update Checklist

OPERATIONAL CHECKLIST			
Weipa LDMG			
RESTRICTED DOCUMENT			
GENERAL PLANNING STAGE			
Action	Responsible Agency / Officer	Contact Information	Status
Design suitable Warning or Alert advice to Communities	LDC	0477 393 644	Assigned Completed
	Chair	0407 369 851	
Utilise Food Premises Inspection Form	LDC	0477 393 644	Assigned Completed
	WTA Chair	0407 369 851	
Prepare to deploy Field Surveillance Teams (availability of staff)	LDC	0477 393 644	Assigned Completed
	WTA Environmental Health Officer	07 4030 9400	
Ensure water testing equipment is available	LDC	0477 393 644	Assigned Completed
	WTA Environmental Health Officer	07 4030 9400	
Identify suitable Plant and equipment if necessary.	WTA Public Works Coordinator	0436 605 422	Assigned Completed
	WTA Superintendent	0477 393 644	
Liaison with Public Health officials re public health implications of the loss of service	LDC	0477 393 644	Assigned Completed
	WTA Environmental Health Officer	07 4030 9400	
Liaise and work closely with QFES and DDMG	LDC	0477 393 644	Assigned Completed
TO BE IMPLEMENTED AT ACTIVATION STAGE			
Action	Responsible Agency / Officer	Contact Information	Status
Activate the Plan	WTA Superintendent	0477 393 644	Assigned Completed
Organise and deploy Field Surveillance Teams	LDC	0477 393 644	Assigned Completed
	WTA Environmental Health Officer	07 4030 9400	

Assess Disaster affected area	LDC WTA Environmental Health Officer	0477 393 644 07 4030 9400	Assigned Completed
Inspections of Water and Sewer facilities	WTA Public Works Coordinator	0436 605 422	Assigned Completed
Continuity of water and sewer supply	WTA Public Works Coordinator	0436 605 422	Assigned Completed
Determination of alternative water supply	WTA Public Works Coordinator WTA Environmental Health Officer	0436 605 422 07 4030 9400	Assigned Completed
Emergency restoration of water supply systems and the provision of water for firefighting.	WTA Public Works Coordinator WTA Public Works Supervisor (provision of water for firefighting) WTA Environmental Health Officer	0436 605 422 0477 360 972 07 4030 9400	Assigned Completed
Liaison with Public Health officials re safety of supply	LDC WTA Environmental Health Officer	0477 393 644 07 430 9400	Assigned Completed
Co-ordination of clearance of debris	WTA Public Works Coordinator WTA Public Works Supervisor	0436 605 422 0477 360 972	Assigned Completed
Emergency debris clearance for reconnaissance of damage areas and passage of emergency personnel and equipment.	WTA Public Works Coordinator WTA Public Works Supervisor	0436 605 422 0477 360 972	Assigned Completed
Identification of emergency landfill areas for debris disposal (in conjunction with Public Health Operational Plan)	WTA Public Works Coordinator WTA Public Works Supervisor WTA Environmental Health Officer	0436 605 422 0477 360 972 07 4030 9400	Assigned Completed

Weipa Local Disaster Management Group



IMMEDIATE ASSESSMENT FORM

Date		Time	
Name of Officer			
Position			
Name of EHO (or acting)			
Phone No.			

Available Public Health Staff

Name	Phone	Section / Position

Available Vehicles

Type	Rego	Fuel	Location

Are there any Evacuation Centres activated? (circle one)		Yes	No
Name of Evac Centre	Address/Community	# of Evacuees	Inspection Reqd?
			Y / N
			Y / N
			Y / N
Approximately how many food premises are affected?			
Will an additional disposal site for unsafe food be required?		Yes	No

If 'Yes' complete the table below

Disposal Site Location	Hours of Operation	Contact Person / Number

Is water testing equipment available? (circle one)	Yes	No
--	-----	----

Are there any existing / ongoing Public Health issues or hazards for consideration? <i>(i.e. current Dengue outbreak? Water quality issues? etc) Please describe below</i>

Are additional resources required? (circle one)	Yes	No
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If 'Yes' complete the table below

Additional Resource Required	Reason / Purpose

Email a copy of this completed report to the Weipa Disaster Coordination Centre.
Email: wdmg@weipatownauthority.com.au

Weipa Local Disaster Management Group



General Rules of Water Sampling

DO NOT

- Contaminate the bottle by touching the inside of the bottle
- Contaminate the lid of the bottle by touching the inside of the rim
- Place the lid of the bottle on a contaminated surface (such as the ground) while taking the sample
- Rinse the bottle

ALWAYS

- Label the bottle before sampling
- Discard damaged or contaminated bottles
- Wash your hands thoroughly before collecting the sample.
- Consider the transportation timeframes (to lab) to ensure that it complies with limitations (refer to "Transporting the Sample").

TAKING THE SAMPLE

- Run the water
- Flame the tap
- Remove lid from container and take water sample, being careful to hold bottle at the base and not contaminate the lid.

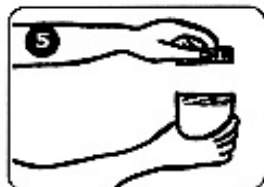
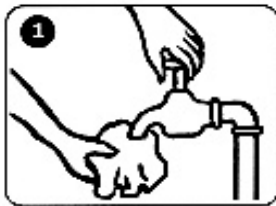
LABELLING THE SAMPLE

- Date
- Time of sampling
- Site location
- pH or free available Cl (if possible)
- name of sampler

TRANSPORTING THE SAMPLE

- Bacteria water samples should be immediately stored within a chilled insulation container (esky) at a temperature below 250C. (The temperature is necessary to prevent multiplication of bacteria which may result in false bacterial counts.)
- Samples must be taken and delivered to the accredited laboratory within 24 hours (samples received at a lab after 24 hours cannot be cultured)
- The Laboratory is to be phoned to advise that samples will be sent, and the flight and courier details.

Collecting water samples for Bacteriological Examination



- 1 Clean the tap**
Remove from the tap any attachments that may cause splashing and, using a clean cloth, wipe the outlet to remove any dirt.
- 2 Open the tap**
Turn the tap on at maximum flow rate and let the water flow for about 1 minute and then turn tap off.
- 3 Sterilise the tap**
Sterilise the tap for one minute with the flame from a gas burner. Heat only the inside and outside of the mouth of the tap. Excessive heating can damage the tap. Alternatively wash the tap with methylated spirits.
- 4 Open the tap before taking sample**
Carefully turn on the tap and allow the water to flow for about 1 minute at a medium flow rate - this cools the tap down. Do not touch the sterilised mouth of the tap.
- 5 Open the sterilised bottle**
Unscrew the lid. Hold the lid open side down. Do not touch any part of the inside of the lid as this will contaminate the sample.
- 6 Fill the bottle**
Fill the bottle almost to the top leaving a small air space of approximately 1 cm. (Do not rinse the bottle) The mouth of the bottle must not touch anything.
- 7 Close the bottle**
Screw the lid onto the bottle firmly. Place the bottle into an esky cooled with a freezer brick. Do not use ice or freeze the water sample.

*Samples for bacteriological examination must be delivered to the laboratory **within 24 hours** after collection. Please notify the laboratory by phone immediately after sending the water samples.*



Weipa Local Disaster Management Group



BOIL WATER ADVICE FOR AFFECTED RESIDENTS

You have received this advice because your property may be receiving an unsafe water supply.

As a precaution, you should consider boiling water that is to be used for the following purposes:

- Drinking
- Washing or preparing food that is not going to be cooked prior to consumption
- Making ice

To boil water effectively it should be kept at a 'rolling boil' for a minimum of three minutes.

You will be advised when the 'Boil Water Alert' has been lifted.

Should you require any further information please contact Weipa Town Authority on **07 4030 9400**.

Weipa Local Disaster Management Group



EVACUATION CENTRE INSPECTION FORM

Date		Time	
Name of Centre			
Name of Community			
Inspecting Officer			
Name of Centre Coordinator			
Number of Evacuees			

SANITATION AND HYGIENE *(Please circle)*

Are there adequate toilet rolls?	Yes	No	Other
Is there an adequate supply of soap?	Yes	No	Other
Is the cleaning equipment adequate?	Yes	No	Other
Are rubber gloves available?	Yes	No	Other
Is there a mop available?	Yes	No	Other
Is there disinfectant?	Yes	No	Other

WATER

Is there potable water?	Yes	No
Is there an adequate supply of potable water for the number of people (20L per person per day)?	Yes	No

WASTE DISPOSAL

Is the waste being stored in an appropriate location?	Yes	No
Is there an adequate supply of garbage bags?	Yes	No
Are there garbage bins?	Yes	No
Is the garbage being removed on a frequent basis?	Yes	No

VERMIN AND VECTOR CONTROL

Is there an adequate supply of insect repellent?	Yes	No
Are there any mosquito breeding sites?	Yes	No
Is treatment required?	Yes	No

COMMENTS / FEEDBACK TO LDMG

Email a copy of this completed report to the Weipa Disaster Coordination Centre.
Email: wdmg@weipatownauthority.com.au

Weipa Local Disaster Management Group



FOOD PREMISES INSPECTION FORM

Date		Time	
Premises Name			
Name of Community			
Licence Number			
Contact Person		Phone No	
Inspecting Officer			

OVERALL STATE OF PREMISE

Please circle

Is the premise intact?	Yes	No	Other
Is the premise damaged?	Yes	No	Other
If yes, to what extent is the premise damaged?	Severe	Moderate	Mild
Is the premise clean?	Yes	No	Other
Is the premise cleared for use?	Yes	No	Other

ELECTRICITY

Has power supply been interrupted?	Yes	No
How long has the power been off?		
Has power supply been restored?	Yes	No
Has power supply been checked by Ergon or an electrician?	Yes	No
Does this premise have a generator?	Yes	No

GAS

Is the property connected to gas?	Yes	No
If yes, what form of supply?	Mains	Bottle Other
Has the gas been restored?	Yes	No
If yes, has the gas connection been inspected by licensed gas fitter?	Yes	No

WATER

Is there an operational water supply to the block?	Yes	No
What is the source of water supply?	Mains	Tank Other

WASTEWATER

Is there an operational toilet in the food premise?	Yes	No
Is the property connected to sewer?	Yes	No
Is there evidence of sewage spillage or overflow?	Yes	No
Is the property connected to a septic tank system?	Yes	No
What type of septic tank system is used?	Mechanical Sand Filter Ag Drain Dome Drains	Transportation Bed
Does the septic tank system have an electrical pump?	Yes	No
Has the septic tank and disposal area been identified?	Yes	No

GENERAL WASTE

Is waste being collected from the premise?	Yes	No
Is waste being disposed of appropriately (ie stored in bags, waste receptacle before being taken away, etc)	Yes	No

TEMPERATURE OF FRIDGES

Have freezer and refrigerator contents been removed?	Yes	No
Was the contact person instructed to dispose of food?	Yes	No
If yes, what type of food was disposed?		
If yes, where was the food from that was disposed of?	Dry Product	Fridge Freezer
Is any remaining food fit for immediate consumption	Yes	No
If yes, what types of food?		

GENERAL COMMENTS AND OBSERVATIONS

Does a report on the structural aspects of this premise need to be referred to another department or organisation? ie. Ergon Energy / Gas etc.	Yes	No
--	-----	----

COMMENTS

Email a copy of this completed report to the Weipa Disaster Coordination Centre.
 Email: wdmg@weipatownauthority.com.au

Weipa Local Disaster Management Group



FOOD SAFETY DURING POWER INTERRUPTIONS

When power interruptions occur and refrigerators and freezers stop working, the safety of the food stored in them can be affected. There are a number of things that you can do to reduce food wastage and prevent food-borne illness.

Prior to potential power loss (i.e. if a cyclone watch/warning has been issued):

- Check the seals on refrigerators and freezers to ensure they seal effectively. Replace damaged seals where necessary. Door seals in a good condition will enable refrigeration equipment to maintain the food colder for longer.
- Freeze water if there is time or purchase ice. Freeze water in plastic drink bottles or ice cream containers that have been thoroughly cleaned and sanitised.
- Any perishable food stored in a refrigerator that can be frozen should be transferred to a freezer. Make sure perishable food is still within its use-by date. Avoid freezing food in packaging that has already been open.
- Ensure that refrigerators and freezers are full. Freeze extra water if space is available. A full refrigerator or freezer will stay colder for longer than one that is half empty.
- Ensure that all perishable food that cannot be frozen is used first.
- Once a cyclone warning is declared, avoid stocking up on perishable food that cannot be frozen.
- Use an accurate thermometer to measure the temperature of perishable foods twice a day. Perishable food must be stored at the right temperature to keep it safe for human consumption.
- Perishable food must be kept.
 - Frozen solid, or
 - Below 5°C, or
 - Above 60°C once it has been cooked.

When the power supply is interrupted:

- Note the time when the power supply is lost so you can determine the length of time that food has been without refrigeration.
- Avoid opening refrigerator and freezer doors unless necessary. This will help to keep the food cold for longer.
- Ensure that all meat, poultry or fish is stored in suitable containers or packaging and placed in the coldest section of your refrigerator (generally adjacent to vents or elements).
- Always store raw foods below cooked and ready-to-eat food as juices from raw meat, poultry and fish can drip onto ready-to-eat foods and contaminate them.
- Avoid leaving food in open refrigerated display cases. Move as much perishable food as possible to sealed refrigerators and freezers.
- Use ice and frozen bottles of water to keep perishable food below 5°C. Purchase extra ice if necessary.

What if a power failure occurs during cooking?

- Do not put hot food in your refrigerator or freezer as this will cause the refrigerator or freezer to warm up much faster.
- Discard food that has not been properly cooked. Processed meats, pork, poultry and fish products should reach an internal temperature of 75°C to ensure they are thoroughly cooked. Check to make sure these products are cooked right through and the juices run clear.
- If the food has been properly cooked, it should be consumed within 4 hours or thrown out.

How long will food stay cold without power to refrigerators and freezers?

- A refrigerator with door seals in a good condition should keep your food cold for around 4 to 6 hours.
- A full freezer with door seals in a good condition should keep food frozen for up to 48 hours, while a half full freezer with door seals in a good condition should keep your food frozen for up to 24 hours. Note that these times are dependent on:
 - How often refrigerators and freezers are opened
 - The temperature of the food immediately before power supply was interrupted. The colder the food, the longer it will stay cold or frozen.
 - The size and insulation of the refrigerator or freezer.
 - The ambient room temperature.
 - Potentially hazardous foods should not be refrozen once thawed.

What to do when the power comes back on?

Once power is restored you will need to determine if your food is still suitable for use. This will be dependent on the temperature of the food and the time spent at this temperature.

- You may keep food frozen in the freezer if it shows no signs of defrosting (i.e. frozen solid). If food has thawed but is still below 5°C, then move it to a working refrigerator and use it within 48 – 72 hours or as specified by the manufacturer. Remember to always store raw food below any ready to eat food.
- If the internal (core) temperature of perishable food in the refrigerator or freezer is above 5°C, then the following time frames apply:
 - If the food has been above 5°C for less than 2 hours, you can re-refrigerate it or use it immediately.
 - If the food has been above 5°C for between 2 and 4 hours, it should be used immediately or discarded.
 - If the food has been above 5°C for longer than 4 hours, you must dispose it.
- Discard any food that has an obvious strange colour or odour. Keep in mind that appearance and/or smell is not always a reliable indicator of food safety. Unsafe food may look and smell fine but can contain enough bacteria to cause foodborne illness.
- Clean and sanitise refrigerators, freezers, bench tops and other areas that have been contaminated by juices of raw foods such as meat, poultry and fish.
- Council Environmental Health Officers can provide further advice on whether food should be disposed.

Remember the basic rule of food safety...

"If in doubt - throw it out"

Should you require any further information please contact Weipa Town Authority on 07 4030 9400.

Weipa Local Disaster Management Group



WARNING

**UNSAFE FOOD
DO NOT USE**

.....

**Power failures
have rendered foodstuffs unsafe
at the above-named premises**

Environmental Health Officer _____

Date _____

Should you require any further information please contact Weipa Town Authority on 07 4030 9400.

Weipa Local Disaster Management Group



Protect Yourself against Mosquito-Borne Illnesses

After a disaster there may be a greater risk of being exposed to mosquito borne illness. Several diseases are transmitted by mosquitoes including Dengue Fever, Australian Encephalitis and Ross River virus.

Everyone is at risk especially if houses have lost flyscreens, windows etc. There may also be debris that can hold water and potentially become breeding sites.

Personal protection is the best way to reduce the chance of being bitten by mosquitoes. The following tips will help protect you and your family:

- Burn insect repellent coils/sticks.
- Ensure flyscreens are properly fitted to doors and windows.
- Avoid being unprotected when mosquitoes are most active – around dusk and dawn.
- Wear light-coloured loose-fitting clothes, including long sleeved shirt, long pants and enclosed footwear.
- Apply a chemical repellent that contains approx. 20% DEET (diethyl toluamide) should be used on exposed areas of skin.

In the days and weeks following a disaster your home could be a potential breeding site for mosquitoes, so take steps to reduce mosquito numbers and your exposure to mosquito-borne disease:

- Keep guttering clear.
- Regularly flush out pot plant bases.
- Make sure openings of water tanks are covered and screened securely (1mm mesh)
- Change water regularly in bird baths, pet water bowls, water features and water holding plants.
- Empty and store undercover any tyres, plastic containers, children's toys etc.
- Keep your yard well-maintained, if possible, keep the lawn short and clear vegetation areas of moist, tangled undergrowth.

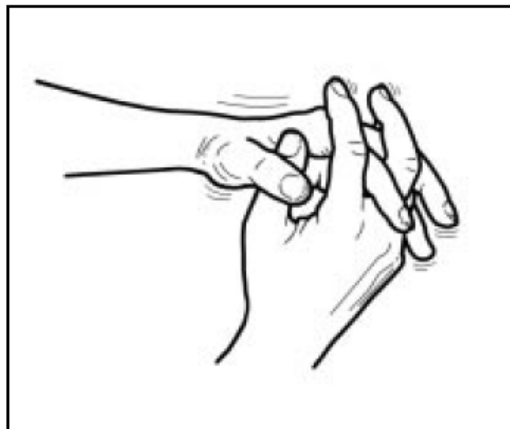
Should you require any further information please contact Weipa Town Authority on 07 4030 9400

Hand Washing Technique

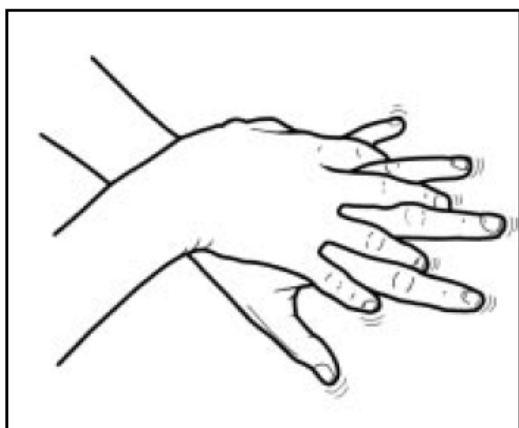
1. Use soap and water
2. Vigorously wash hands for 20 to 30 seconds, using the following pictures as guides
3. Rinse hands with water
4. Dry hands thoroughly



1. Wash palms



2. Wash between fingers



3. Wash back of hands



4. Wash wrists

Annual Update Checklist

No.	Task	Date	Officer's Name	Signature	Comment
1	Review & check contents of Environmental Health Kits (refer to Annex D)				
2	Identify staffing levels for Environmental Health Unit for the period 1 November through to 30 April				
3	Review contact details for staff to be used in the event of an emergency – update Annex C				
4	Review contact details for support agencies to be used in the event of an emergency – update Table 1.0.				
5	Develop / update spreadsheet list of all food premises.				
6	Check staff have been vaccinated against Hep A and identify who may require Hep A injection.				
7	Check there is adequate supply of insect repellent, hats and sunscreen.				
8	Review & update Public Health media releases – see Annexes				

9	Ensure all new staff are aware of all procedures involved in Disaster Management, specifically those members belonging to a Community Disaster Management Group				
10	Public Health plan is to be reviewed and updated				
11	Ensure there is a hard copy of fact sheets that may be needed in a disaster. see Annexes				

Authorised by Environment and Health Officer		
Name:	Date:	Signature:

