ACT Government
Environment and Sustainable Development

FIELD OFFICERS HANDBOOK

Prepared by the

Environment Protection Authority

2014

TABLE OF CONTENTS

1 WORKING IN THE FIELD 1
1.1 YOUR RESPONSIBILITY 1
1.2 ASSESSING THE RISKS 2
1.3 RISK CATEGORIES 2
1.4 ATTENDING FIELD ACTIVITIES 3
1.5 DANGEROUS SITUATIONS 4
1.6 COMPLEX ENVIRONMENTAL SITUATIONS 5
1.7 REPORTING IN THE CASE OF AN INCIDENT/ACCIDENT 5
1.8 DEALING WITH MEMBERS OF THE PUBLIC 5
1.9 PROCEDURES FOR OFFICERS ATTENDING INCIDENTS 7
1.10 CALL-IN PROCEDURES FOR BACKUP ON-CALL OFFICERS 8
2 INCIDENT RESPONSE AND INVESTIGATION 8
2.1 PREPARATION AND RESPONSE 9
2.2 SCENE / INCIDENT MANAGEMENT 11
2.3 EVIDENCE 12
2.4 INTERVIEWING 12
2.5 ENFORCEMENT 13
3 STATEMENTS, CAUTIONS, DECLARATIONS & DEMANDS 14
3.1 WITNESS STATEMENTS 14
3.2 RECORDS OF INTERVIEW 14
4 INSPECTIONS 16
4.1 REGULATION OF PREMISES 16
4.2 WHY CONDUCT AN INSPECTION? 16
4.3 PREPARATION FOR AN INSPECTION 17
4.4 UNDERTAKING AN INSPECTION 17
4.5 REVIEW AND FOLLOW-UP OF INSPECTION 18
5 CONTAMINATED SITES 19
5.1 WHAT IS A CONTAMINATED SITE? 19
5.2 EVIDENCE OF CONTAMINATION 19
5.3 RECORDING EVIDENCE OF CONTAMINATION 20
5.4 SAFETY AND HEALTH 20
6 NOISE MEASUREMENTS 22
6.1 MEASUREMENT POSITION 22
6.2 DOMINANT NOISE SOURCE 22
6.3 RECORDED OBSERVATIONS 22
6.4 INSTRUMENT USE 23
7 DEALING WITH WOOD SMOKE 24

7.1 SMOKE 24
7.2 ENVIRONMENTAL HARM 24
7.3 ODOUR 25
7.4 DETERMINING ENVIRONMENTAL HARM FROM WOOD SMOKE 26
8 TAKING A SAMPLE 27
8.1 CHAIN OF CUSTODY 27
8.2 DECONTAMINATION OF EQUIPMENT 28
8.3 COLLECTION TECHNIQUE 29
8.4 SAMPLE PRESERVATION 30
8.5 NOTES FOR SPECIFIC PARAMETERS 30
8.6 QUICK REFERENCE TABLE 34
9 APPENDIX 1: BASIC FIRST AID 37
9.1 D.R.A.B.C 37
9.2 BURNS 38
9.3 BITES AND STINGS 40
9.4 BLEEDING 40
9.5 SHOCK 40
9.6 DEHYDRATION 41
9.7 HEAT CRAMPS 41
9.8 HEAT EXHAUSTION 42
9.9 HEAT STROKE 42
10 APPENDIX 2 CONTACT LIST 44
11 APPENDIX 3 ILLICIT DISCHARGE INDICATORS 49

1 WORKING IN THE FIELD

1.1 YOUR RESPONSIBILITY

It is your responsibility to:

- Recognise personal safety is the over-riding consideration;
- Know how to assess the risks of working in the field and working alone;
- Ensure policies and procedures are understood;
- Ensure correct personal protective equipment is issued and used;
- Ensure you know how to contact the Agency Representative, Manager, backup on-call officers and the Police emergency contact number (13 14 44);
- Ensure if working outside mobile phone coverage the unit satellite phone is taken;
- Ensure when you are on-call you know who your backup on-call officer is and their contact number; and
- Ensure you utilise call-in procedures when attending an activity outside standard hours.

You should undertake the following for any field activity regardless of the level of risk involved:

- Check Complaints Database for prior history;
- Maintain up-to-date phone contact lists, including information manuals in the office and vehicles;
- Pre-program emergency telephone numbers, managers and Agency Representative phone numbers and police into your mobile phone;
- If working in remote areas ensure you have notified your manager of your destination and expected time of return. You should take the satellite phone and ensure it is in good working order prior to leaving;
- You should make regular contact with your manager (every 2 hours) when working in a remote area;
- Ensure you have the correct personal protective equipment for the situation and use it;
- Advise your manager of your movements during working hours;

- Outside standard working hours, inform a family member or friend or the backup on-call officer of your destination and time of return;
- Adopt a friendly interpretive approach in the first instance and/or where the situation warrants rather than a law enforcement role when dealing with the public; and
- In situations that are confrontational and/or involve illegal activity, you should only approach the situation after consulting with your manager or on-call backup officer and deciding on action to be taken and the level of risk involved.

1.2 ASSESSING THE RISKS

- You are responsible for assessing the risk of a situation you undertake;
- You should continuously assess the situation you are involved in and if required change your assessment as the circumstances change;
- Categorise the risk into low, medium or high, see categories below;
- You should take into account natural hazards such as poisonous reptiles, animals and foliage in your assessment; and
- Follow the procedures outlined for attending situations in each category below. When assessing the situation take into account your skill level, self presence and safety.

1.3 RISK CATEGORIES

1.3.1 Low risk

Low risk situations do not present or are unlikely to present a danger to attending staff. Low risk situations may display the following:

- Normal working hours;
- Routine in nature;
- Contact person is well known;

- Circumstances do not or could not reasonably to be expected to indicate a potential danger;
- Clearly defined activity; and
- Staff from other emergency services are present if required.

1.3.2 Medium risk

A medium risk situation may potentially escalate or be vague in detail. A medium risk situation may display the following characteristics, as well as those of a low risk situation:

- Contact person is unknown or known as an adverse person;
- Alcohol or other substances are possibly involved; and
- Details of activity are vague or unknown.

1.3.3 High risk

A high risk situation is one where there is a significant risk of staff being under threat of harm or injury. A high risk situation may display the following characteristics as well as those of a medium risk activity:

- Time of activity is late at night;
- A threat is made or aggressive behaviour is demonstrated;
- Person is known or reported to be uncooperative; and
- A large number of people under the influence of alcohol or mind altering substances are present.

1.4 ATTENDING FIELD ACTIVITIES

1.4.1 Low risk situations

Where you are required to attend a low risk situation, use your discretion as to what procedures to implement, use the following as a guide:

- During standard hours inform your manager; and
- Outside standard hours inform a family member/friend/backup on-call officer of your destination and expected time of return, follow the procedures for on-call officers outlined in section 1.9.

1.4.2 Medium risk situations

It is preferred that two staff members attend medium risk situations. If you are required to attend what is possibly a medium risk activity or the level of risk in unknown, then you should:

- Contact your manager during standard hours to inform them of your destination and expected time of return;
- Outside standard hours, inform a family member/friend of your destination, contact your backup on-call officer for assistance and follow the call-in procedure below; and
- Follow the procedures outlined in section 1.9 below.

1.4.3 High risk situations

Under **NO** circumstances should you attend a situation you deem to be high risk alone. Your manager (during standard hours) or backup on-call officer (outside standard hours) should be contacted and requested to attend. Meet the Manager or backup on-call officer in a safe location before approaching the high risk situation.

Where you attend a situation and reassess it as high risk or possible high risk, leave the area and contact your Manager (during standard hours) or backup on-call officer (outside standard hours) as soon as possible. An assessment of what action to take is discussed and under no circumstances should you proceed alone. Follow the procedures outlined in section 1.9.

1.5 DANGEROUS SITUATIONS

Your safety is more important than any work issue

- Where a threat is made, violence occurs or a weapon is produced, leave the area immediately and contact the Police and your manager or a senior manager;
- If a person becomes aggressive, uncooperative or visibly agitated, remain calm and do not become involved in arguments. Allow the person to have their say and if possible explain the EP&WR position on the matter. If the person remains aggressive, agitated or

uncooperative, leave the area immediately and seek assistance;
- If you are unable to leave the area, remain calm. Comply with the person's requests within reason until you are able to leave the situation; and
- Do not attempt to overpower or disarm the person, except as a last resort to defend yourself.

1.6 COMPLEX ENVIRONMENTAL SITUATIONS

A complex environmental situation is a situation that:

- Involves a number of agencies; and/or
- Has media interest or is contentious; and/or
- Has activated the Emergency Incident Control Centre (ECC).

When a situation is a complex environmental situation the Agency Representative must be contacted by the officer.

1.7 REPORTING IN THE CASE OF AN INCIDENT/ACCIDENT

If you are involved in an incident/accident you should:

- Report the incident/accident to your manager; and
- Follow the procedures outlined in the Procedures for Working Alone in the Field.

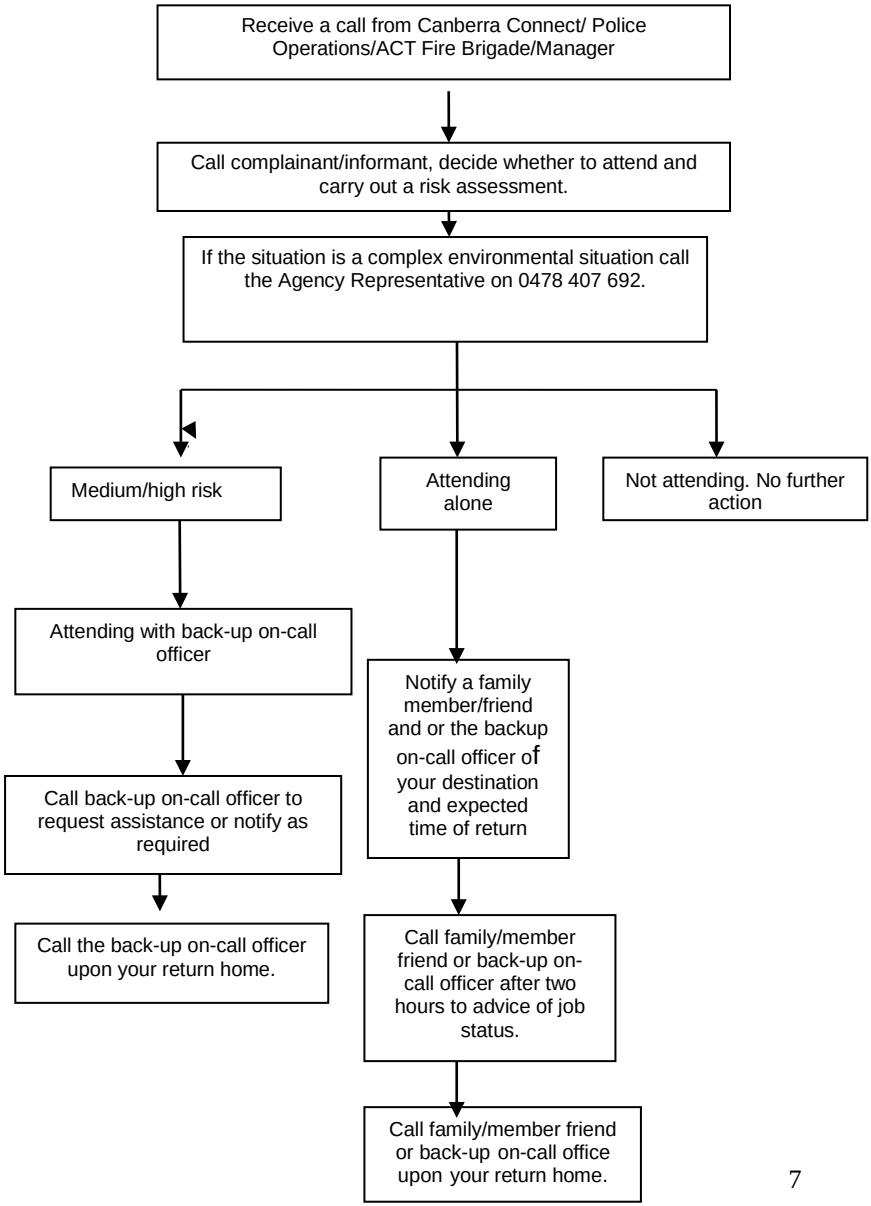
1.8 DEALING WITH MEMBERS OF THE PUBLIC

Your safety is more important than any work issue

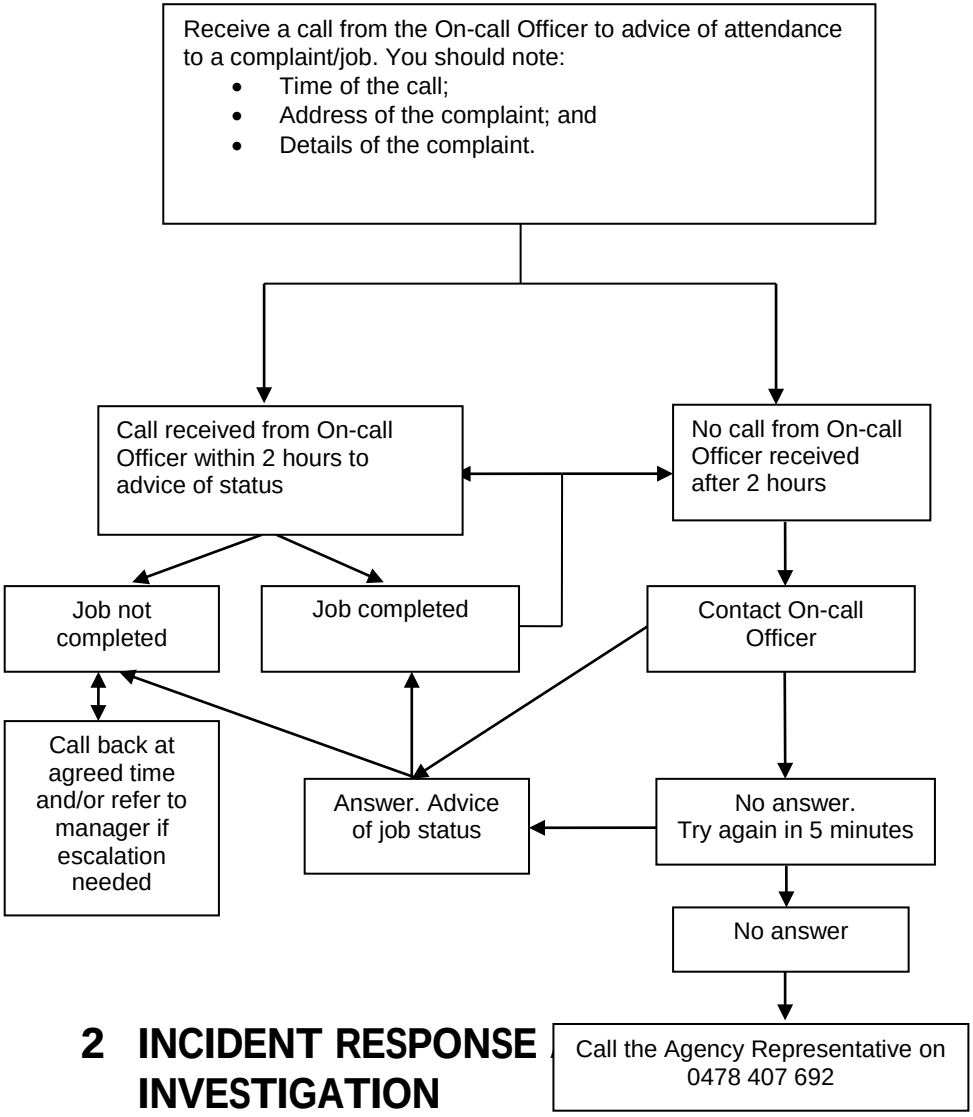
- EP&WR staff members should be wearing a uniform (if applicable staff should have the uniform and PPE in the vehicle) and a name badge (to identify themselves as representative of EP&WR) when meeting members of the public;

- Staff required to attend a customer's premises should knock on the front door on arrival, state their name, clearly display their official photo identification and advise the person of the purpose of their visit;
- Adopt a calm, helpful and friendly approach when speaking to members of the public;
- Listen, show genuine interest in their issues or concerns. Do not admit liability but acknowledge their concerns if possible;
- Position yourself at a slight angle to the person(s) you are addressing. This gives you a better balance and ability to react if the person becomes aggressive;
- Position yourself between the person you are speaking with and your vehicle;
- Always remove the keys from the ignition and take the keys with you when leaving your vehicle;
- If you are concerned about the person becoming aggressive indicate to them that you will need to check some details at the office, indicate that you will get back in contact with them and leave the site;
- Always map out an exit strategy before entering a property;
- Always keep a safe distance between yourself and the person. If the person becomes abusive, calmly advise them that if they continue their abuse you will leave;
- If dealing simultaneously with more than one hostile person, try to keep all people within your field of view;
- If you are presented with a situation that may pose some conflict or danger – contact your on-call backup officer or manager immediately **before** you get out of your vehicle. In the event you are unable to contact your manager or on-call backup officer, proceed to an area where communication is possible;
- Where assistance from other staff or Police is required, **await their arrival before** you enter or return to a scene; and
- If you come across a 'crime scene' (e.g. Stolen/burnt out car, deceased person, illegal plantations etc) do not approach or touch anything. Contact the Police.

1.9 PROCEDURES FOR OFFICERS ATTENDING INCIDENTS



1.10 CALL-IN PROCEDURES FOR BACKUP ON-CALL OFFICERS



2 INCIDENT RESPONSE / INVESTIGATION

2.1 PREPARATION AND RESPONSE

Prior to responding to an incident or commencing any investigation the following minimum steps should be undertaken:

- If the incident is of an extremely serious nature, or may involve protracted investigations or multiple interviews, contact should be made immediately (24hrs – 7 days) with the Assistant Manager or Manager of Environment Protection;
- Identify under which legislation you will be investigating ensuring you are fully aware of your powers of entry, search and seizure;
- Identify the possible offence/s that you will be investigating – breach of an Act, Regulation, authorisation condition, permit etc;
- Identify the elements you will need to prove in your investigation – when investigations involve authorisation conditions ensure that it is enforceable;
- Identify the person or company of interest and examine any historical information that may assist you e.g. previous offences or investigations undertaken – contact officers involved;
- Identify what actions are required and the resources required to undertake those actions e.g. collect physical evidence, statements, records of interview, equipment required (notebook, camera, sampling equipment etc); and
- Create a file for the investigation.

2.1.1 Arrival

- Identify if there are any hazards or personal risks to you or others in the area. If hazards or risks exist, move to a safe location. If there is any doubt about safety STAY OUT; and
- Approach, Identify, Communicate and Scene Management (see below).

2.1.2 Approach

- Is there a need for you to approach the scene? Can you obtain sufficient information using other means such as binoculars, zoom lenses or witnesses?
- If there is a need to approach the scene do it safely. UPHILL – UPWIND – UPSTREAM.

2.1.3 Identify

- Assess the severity of the incident: do you need assistance? Identify if pollution is leaving the site or causing environmental harm;
- First priority is to stop, contain and manage any further impact to the environment.
- Appropriate agencies to assist may be Emergency Services (6207 8333), Roads ACT (13 22 81).
- If there are containers, determine container types, labels, UN Numbers, placards and Material Safety Data Sheets, if available
- Note condition of any containers: are there any leakages?
- Are there any injuries or illness? Identify nature of injuries and symptoms.
- Other environmental indicators – dead fauna or wilted / burnt flora.
- Look, smell, hear but unless you have the qualifications and experience **DON'T** touch and **NEVER** taste.
- Who is in charge? If no one has been nominated, appoint a controller or assume the role yourself, which includes Plan/Organise/Lead/Control.

2.1.4 Communicate

- Notify your Manager in the case there is a potential for material or serious environmental harm;
- Notify relevant authorities if assistance is required – ACT Fire Brigade (6207 8333), Ambulance Services (000), AFP (13 14 44), ACT WorkCover (13 22 81);
- When providing information, give your name and contact number first in the event you are disconnected; and
- Provide key information on location and type of incident, amount and type of product involved, nature

of injuries and symptoms, environmental impacts and weather conditions.

2.1.5 Protocol when Emergency Service Agencies in Attendance

- Request to speak to the Officer in charge;
- Identify yourself and obtain Situation Report;
- Emergency Services retain control of the scene while in attendance;
- Protection of Life and Property takes precedence over the environment, however provide advice on ways to minimise environmental harm;
- At the end of the emergency provide advice on clean-up and controls to manage pollution; and
- EPA does not take responsibility for disposal of any waste or removal of any controls.

2.2 SCENE / INCIDENT MANAGEMENT

- In the absence of Emergency Services Agencies, establish a control point in the vicinity of the scene;
- Cordon off and guard – if applicable or practicable;
- Deny entry and exit to all unauthorised persons until the scene is examined by Environment Protection Officers;
- Entry to a scene is on a needs only basis – a court appearance may result from every entry;
- Commence "running sheet" to record all actions and decisions;
- Communicate clearly and precisely all relevant information to any person or authority that you may require assistance from (ongoing task);
- Record (notes and running sheet) the name, occupation, contact details, time of entry and exit and purpose of entry for any person who enters;
- Ensure that entry and exit is made by an identifiable route that is least likely to disturb any physical evidence or contamination of evidence; and
- Give consideration to logistical support and resource allocation.

2.3 EVIDENCE

- Capture all evidence or items of interest that is meaningful to the investigation that shows where, how, why, when;
- Use best practice of evidence handling, recording, preservation and continuity;
- Photographs, video, drawings;
- Make notes;
- Record the following information:
  CONTAINER TYPES
  ANY IDENTIFYING LABELS OR PLACARDS
  IDENTIFY WHAT IS THE CONTENTS
  CONDITION OF ANY CONTAINERS
  ARE THERE ANY LEAKAGES AND IF SO, AT WHAT RATE
  LIKELIHOOD OF ANY ENVIRONMENTAL IMPACT
  WEATHER CONDITIONS (WIND SPEED AND DIRECTION, WET OR DRY, TEMPERATURE, CLOUD COVER)
- Is the scene adequately protected to prevent the contamination of evidence or items of interest?
- Is the perimeter of the scene adequate? - Better to be too big than too small;
- Secure the scene – protect the area around the site of the incident to prevent onlookers gaining access and for the preservation of evidence. Record the names of the onlookers, as you may need to contact them later in case they saw the incident;
- The investigator should endeavour to identify and resolve all avenues of inquiry within the first 24 to 48 hours after incident. This will reduce corruption of evidence;
- Media considerations, only those Staff members approved by the Director are approved to speak to the media.

2.4 INTERVIEWING

All avenues of inquiry should be exhausted prior to any approaches being made towards a Person of Interest (POI). If it is necessary to approach the POI early in the investigation, all

avenues of inquiry should be exhausted immediately thereafter. When interviewing POI you **must** advise them of the nature of the inquiry prior to the commencement of the interview.

- Have any actions been undertaken to locate and retain witnesses?
- Interview all witnesses and obtain statements – their recollection will be fresh and untainted;
- In the event that POI may need to be detained, Police assistance will be required. EP Officers will not detain a person;
- Remain until inquiries are completed or you are relieved by other personnel;
- Has everything that needs to be done, been done?

2.5 ENFORCEMENT

The investigation must be completed prior to considering any enforcement action. All elements of an offence must be proven prior to a Letter of Warning, Infringement Notice or other action commencing.

Your preparation will reflect your investigative professionalism

3 STATEMENTS, CAUTIONS, DECLARATIONS & DEMANDS

3.1 WITNESS STATEMENTS

To prepare a witness statement, use the templates provided by the DPP and located in the network drive G.

3.2 RECORDS OF INTERVIEW

All Records of Interview are to be undertaken at the Environment Protection office. All Records of Interview must follow the template located in G drive. (Regulation, Investigations/Templates).

In the instance that a person declares their intent to be interviewed in the field the following must be used:

Note: All questions and answers must be recorded accurately in the 'I said, he/she said' format.
The record of interview cannot be used in a court of law as evidence unless the interviewee signs each page of the record of interview prior to the interview concluding.

Record the date, time and location of the interview.

I said: **What is your full and correct name?**
He/she said:
I said: **Do you have a middle name?**
He/she said:
I said: **What is your date of birth?**
He/she said:
I said: **What is your current residential address?**
He/she said:
I said: **Do you have a driver's licence?**
Her/she said:
Record the details of the driver's licence.
I said: **I am going to ask you some questions in relation to (state offence)**
I said: **Do you understand?**
He/she said:

I said: Before doing so I must caution you that you do not have to say or do anything but that anything you do or say may be taken down and used as evidence. Do you understand?
He/she said:

Body of Record of Interview

Questions should be posed to establish what has happened, who is responsible and why. If the person being interviewed is a potential defendant questions should explore the excuse, justification or explanation for non-compliance given.

I said: Have the answers given during this record of interview been given of your own free will?
He/she said:
I said: Has any threat, promise or inducement been held out to you to make the answers you have given in this record of interview?
He/she said:
I said: I am going to read this record of interview. (Read the record of interview to the person)
I said: Is this a true and accurate record of this record of interview?
He/she said:
I said: Can you sign each page of this record of interview as a true and accurate record?
He/she said:
Write down in your notebook that the pages were/ were not signed. If the interviewee refuses to sign the notebook this should be recorded along with any reason as to why.
I said: This concludes the interview. Thank you.

4 INSPECTIONS

4.1 REGULATION OF PREMISES

The EPA regulates a range of activities under various Acts by granting authorisations, licences and permits that contain restrictions and conditions. These include:

- Environmental authorisations under Part 8 of the *Environment Protection Act 1997;*
- Environmental protection agreements under Part 7 of the *Environment Protection Act 1997;*
- Waterway Work licence under Section 44 of the Water Resources Act 2007;
- Borework licence under Section 39 of the *Water Resources Act 2007; and*
- Licence to take water under Section 30 of the *Water Resources Act 2007.*

These approvals allow the Authorised holder to conduct a range of activities specific to those authorisations, licences or permits. It is an offence for a person to undertake any activities that requires authorisation without holding such an approval.

The approvals contain legally binding conditions designed to regulate the environmental impacts of the activity. It is an offence not to comply with a condition contained in such approvals.

4.2 WHY CONDUCT AN INSPECTION?

The need to undertake inspections may be the result of any of the following:

- To audit compliance with conditions, or requirements of relevant regulations;
- Follow-up of an enforcement action, such as an infringement notice;
- Incident investigation;
- Compliant response ;or
- Targeting of a certain industry type, or precinct; and

- Routine inspection under Section 96 of the *Environment Protection Act 1997.*

4.3 PREPARATION FOR AN INSPECTION

- Familiarise yourself with the history of the premises and processes;
- Complete the appropriate checklist (Water work/water exemption/bore work) for inspections under the *Water Resources Act 2007;*
- Identify any dangerous situations i.e. aggressive occupiers;
- Notify the approval holder of the inspection in advance (except for unannounced inspections where permitted under the relevant Act);
- Take a copy of the approval and any important correspondence; and
- Take relevant safety, sampling and monitoring equipment.

4.4 UNDERTAKING AN INSPECTION

- Audit compliance with conditions. **REMEMBER:** The approval holder generally commits an offence if he/she does not comply with a condition of the approval. If an offence is detected, appropriate cautions should be used;
- Assess if the conditions adequately reflect the operations;
- Check for activities being undertaken that are not covered by the approval. **REMEMBER:** It is an offence for a person to conduct an activity that requires an approval without holding a valid approval that would allow that activity to be conducted. If an offence is detected, appropriate cautions should be used;
- Discuss the approval conditions with the Licensee to assess his/her understanding of the conditions;
- Identify any failure to comply with other legislation. This should be reported to the regulators of the relevant legislation; and

- Record all observations and discussions, and take photographs/video of processes and any offences detected.

4.5 REVIEW AND FOLLOW-UP OF INSPECTION

- Review notes from the inspection;
- Compile inspection report and update internal databases;
- Prepare case decision if enforcement action is required;
- Advise approval holder of all outcomes in writing; and
- Check compliance with enforcement actions (e.g. Directions) with follow-up inspection(s).

5 CONTAMINATED SITES

5.1 WHAT IS A CONTAMINATED SITE?

- A site becomes contaminated when the soil or waters (including groundwater) become impacted with a substance at above background concentrations that presents, or has the potential to present, a risk of harm to human health or the environment;
- Small spills of chemicals that take place within sealed or bunded areas are not contaminated sites;
- The *Environment Protection Act 1997* requires the site owner, occupier, and polluter of a contaminated site to formally report the site to the EPA once they become aware that the site is contaminated in such a way to cause or is likely to cause a significant risk of harm to human health or a risk of serious or material environmental harm. It is an offence for the site owner, occupier, and polluter not to report a contaminated site once they become aware that the site is contaminated.

5.2 EVIDENCE OF CONTAMINATION

- Contamination of a site can be indicated through biological, chemical and physical means, including:
    - Soil staining [*record colour, location, extent of staining*];
    - Odours [*record type of odour e.g. petrol, diesel, other chemical*];
    - Surface water sheens/discolouration [*record presence of sheens, colour of water, condition of water body*];
    - Areas of dead vegetation [*record types of plants affected, number/area affected, possible cause*]; and
    - Fauna kills (especially fish) [*record type of animal affected, any surviving biota*].

- Potential contamination of a site can be indicated through the presence of infrastructure or the types of activities undertaken at the site. The age and condition

of this infrastructure may also influence the potential for contamination. Such infrastructure includes:

- Asbestos building material [*record location, condition*];
- Electricity substations/transformers [*record location, condition*];
- Aboveground fuel storage [*record condition of tanks, product stored, evidence of nearby spills/leaks*];
- Chemical storage [*record chemicals stored, condition of containers & storage area, evidence of nearby spills/leaks*];
- Underground storage tanks [*if details of tanks not known, record location/number of breather pipes/fill caps/bowsers*] ;
- Incinerators [*record location, likely material incinerated*]; and
- Landfills/rubbish disposal *[record location, approximate volume, type of waste*].

5.3 RECORDING EVIDENCE OF CONTAMINATION

- Take photographs of the pertinent features of the site;
- Keep a written record of features that photographs cannot convey (e.g. odours);
- Take samples of the contamination if it is safe to do so, see "Taking a Sample" below; and
- Any anecdotal evidence of former storage or spillage of chemicals or hazardous materials received from people at the site should also be recorded.
- Notify the contaminated sites officer.

5.4 SAFETY AND HEALTH

- All forms of contamination have the potential to have an adverse effect on humans. Before entering an area that is suspected to be contaminated, ensure that the appropriate level of Personal Protective Equipment is

supplied and worn. **If safety is in doubt, do not enter the area**, and seek advice from your supervisor.

6 NOISE MEASUREMENTS

6.1 MEASUREMENT POSITION

- Position microphone at least 1.2 metres above the ground or floor surface, orientated towards the noise source and where feasible 3 metres from any large plane surface;
- Validate complaint at the point where the complainant is affected by noise. If the complaint is validated then proceed to the compliance point;
- Take the measurement at the compliance point as defined in the EP Regulation unless there is sufficient reason for taking the measurement elsewhere. Any deviation from procedures must be recorded along with the justification/explanation for the deviation.

6.2 DOMINANT NOISE SOURCE

- The noise alleged to cause environmental harm must be the dominant noise source at the time of the measurement;
- The dominant noise source must be identified and noted by the authorised officer at the time of the noise measurement.

6.3 RECORDED OBSERVATIONS

- Noise measurements should not be taken if the wind speed is greater than 5m/s or if it is raining.
- Record the following in your notebook in a clear, concise and unambiguous manner:
    - Address/location of noise measurement;
    - Position of the SLM and distances from reflective surfaces;
    - Weather conditions including wind speed, temperature, wind direction and cloud cover (in oktas);
    - Time the measurement commenced;

- Dominant noise source and characteristics of the noise source (i.e. impulses, fluctuations, tones, intermittency);
- Details and times of extraneous noises;
- Time period of the measurement;
- L10 and L90 of the measurement (or descriptors outlined in the environmental authorisation;
- Details of any deviations from the procedures and circumstances which led to the deviations

6.4 INSTRUMENT USE

- If the equipment is not in good order and condition and cannot be rectified with confidence it is usually better not to collect data;
- Check the calibration in the field prior to starting the measurement and adjust if necessary;
- Ensure windshield fitted;
- Start measurement and note time;
- Observe and document noise sources and their levels throughout measurement if possible;
- Pause the SLM for extraneous noises, or if unable to pause the meter note the time of the noise;
- Measurement should be accurate representation of noise. Minimum of 5 minutes and maximum of 15 minutes should be used unless otherwise specified in environmental authorisation;
- For a constant noise source such as an air-conditioning unit a 5 minute measurement is sufficient, however for a time varying sound source a measurement of 10 minutes is more appropriate;
- Save the data on the SLM;
- Recheck the calibration; and
- Record all observations as above.

7 DEALING WITH WOOD SMOKE

7.1 SMOKE

- Investigate a complaint concerning smoke during daylight hours where possible. During periods of low or nil light, observations may be inaccurate;
- Respond to complaint and observe smoke from chimney. If the chimney is emitting smoke wait for a period of 20 minutes and carry out dot points below;
- At least 20 minutes after the initial observation of smoke from chimney, observe the smoke for 10 minutes, the following observations should be recorded in your notebook:
    - Time of day
    - Cloud cover
    - Position of the sun
    - Characteristics of the smoke such as density, volume, colour, size and duration
    - Whether the smoke is continuously emitted from the chimney
    - Whether the smoke is visible 10 metres from the chimney for a minimum of 30 seconds at a time.
- Where possible determine if the premises is occupied at the time the chimney is emitting smoke.

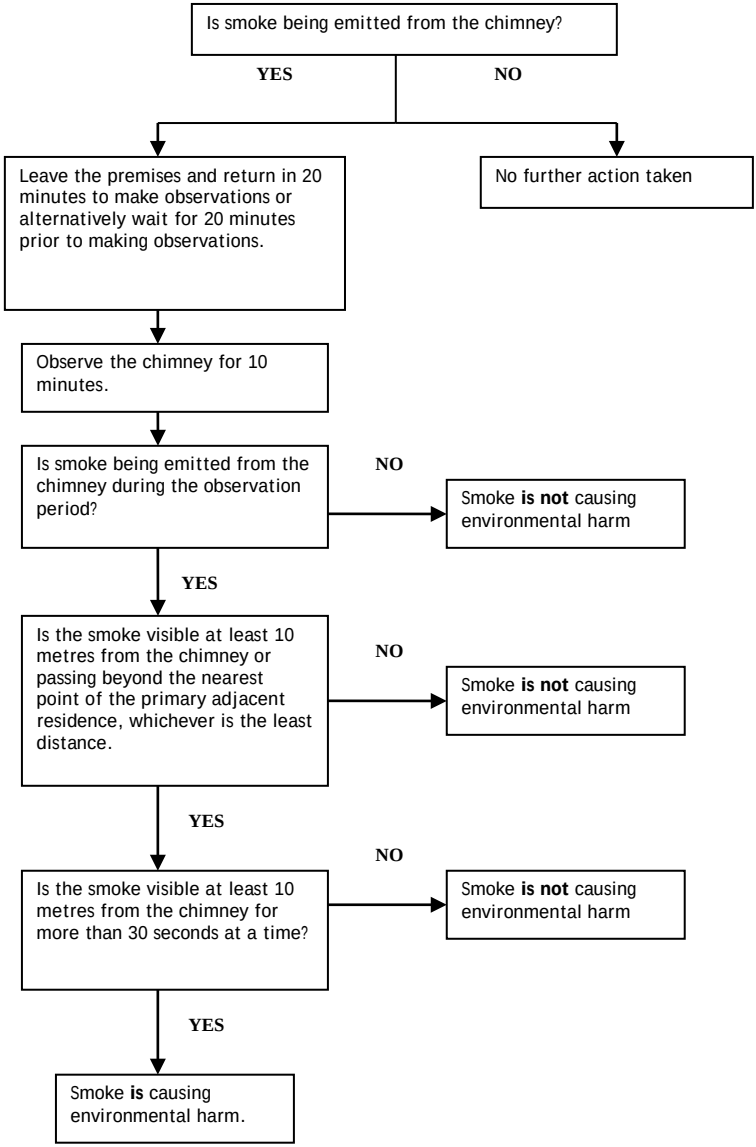
7.2 ENVIRONMENTAL HARM

- Smoke is deemed to cause environmental harm when it is:
    - Visible for 10 minutes (following the 20 minute period after the initial observation of smoke);
    - During these 10 minutes is visible for at least 10 metres from the chimney or passing beyond the nearest point of the primary adjacent residence, whichever is the least distance; and
    - Visible at the above distance for 30 seconds at a time.
- See the section 7.4.

7.3 ODOUR

- Where a complaint is made about odour from a wood heater an investigation may be undertaken at any time, however where possible the investigation should occur during daylight hours:
    - Observe the smoke as detailed above;
    - Record details regarding the odour and any distinctive smell which may indicate inappropriate materials being burnt (e.g. burning rubbish, plastic or unseasoned wood) Potential source of odour; and
    - Effect of the odour on you.
- Where you determine the odour is representative of wood smoke from correct heater operation no further action is taken.
- Where you determine that the odour has a distinctive smell consistent with burning inappropriate materials, undertake further investigation to determine the source of the odour.

7.4 DETERMINING ENVIRONMENTAL HARM FROM WOOD SMOKE



8 TAKING A SAMPLE

8.1 CHAIN OF CUSTODY

8.1.1 Labels must include*:*

- Sample name
- Sample number (1, 2 or 3)
- Name of officer
- Date and time of collection
- Place of collection
- Preservative used

8.1.2 Field logbooks or notebooks

- Field note books should be used at all times and are to be kept as a record of the sampling that took place. There should be enough information in the note book to ensure the sampling event can be clearly reconstructed. The notebook should contain:
  - Purpose of sampling;
  - Location of sampling point, clearly indentifying the location as well as the reason for choosing that location;
  - Name and address of field contact;
  - Producer of material being sampled and address (if different from sample location);
  - Type of sample;
  - Method of preservation.
- A Field Conditions sheet should also be filled in by the sampler for a set of samples, along with a field observations sheet for each sampling site (source, upstream, downstream).

8.1.3 Chain of custody record

- A chain of custody record must be included with each batch of samples. The record should include the following:
  - Sample identification;
  - Signature of collector;
  - Date, time and address of collection;
  - Sample type;

- Signatures of persons involved in the chain of possession;
- Inclusive dates of possession.

8.1.4 Sample submission form

- Sample submission forms also need to be included; these can be combined with the chain of custody record.
- Sample submission forms are filled out by both the sampler and the laboratory personnel, the sample should include the most important information from the field log book such as:
  - Sample identification;
  - Sample type;
  - Date, time and address of collection;
  - Method of preservation;
  - Determinations to be performed.
- The laboratory personnel should complete the form with the following information:
  - Name of person receiving the sample;
  - Laboratory receipt number;
  - Date of sample receipt.
- A copy of the chain of custody form must be kept by the sampler.

8.2 DECONTAMINATION OF EQUIPMENT

- Equipment used for all samples (except sample bottles), such as the boom sampler must be decontaminated between samples. 70% ethanol and deionised water have been supplied for decontamination;
- Carry out the decontamination procedures away from the immediate sample site to ensure you do not contaminate the site;
- To decontaminate the boom sampler or other equipment, rinse it with 70% ethanol thoroughly with sufficient solution to ensure the equipment is covered. Rinse the boom sampler or other equipment thoroughly with deionised water. Collect the wash and rinse solutions to ensure no contamination of the environment occurs;

- There should be 2 containers/buckets for sample collection in each vehicle, these should be kept in a sealed container or sealed bag to prevent contamination. If these containers/buckets are decontaminated after each use and kept in a sealed container/bag they should not need to be decontaminated immediately prior to use;
- It is up to the officer to ensure their vehicle contains sufficient ethanol solution and deionised water for decontamination. When delivering samples to the laboratory, ask for your supplies to be replenished. You can also request the containers/buckets used during sample collection be decontaminated at the laboratory.

8.3 COLLECTION TECHNIQUE

- Under Section 102 of the *Environment Protection Act 1997* the sample has to be divided into three parts, and in any other case the sample must be taken in triplicate;
- Each bottle should ideally have the same composition;
- To ensure the same composition the easiest way is to use an open mouthed jug to collect the sample from the source and pour it into a 5-10 litre bucket. The combined sample should be mixed thoroughly and immediately transferred into the appropriate bottles;
- However there are certain analysis which should be collected directly from the source such as microbiological analysis, fractionated hydrocarbons and volatile organics;
- The sample container used for collection is very important, the correct container must be chosen for particular analysis – see quick reference table below;
- Sample containers must be clean and not tampered with before or after sample collection;
- The sample container must be tamper proof between the time of collection and receipt to the laboratory. Only use sample bottles which have been packaged by the laboratory, with the packaging still intact. Taking a photo of the bottle to be used, before use whilst in their packaging may be helpful;

- Fill the appropriate container as required, see notes for specific parameters below, or the quick reference table below;
- Ensure the sample container is labelled appropriately;
- Create a tamperproof seal after collection. Packing tape should be put around the lid of the bottle, and a tamperproof label must be placed across the join of the tape. If a tamperproof label is not available, you must sign and date across the join of the tape;
- Place the samples upright in an esky which contains ice bricks or ice. Ice bricks are better to use as there will not be a build up of water in the bottom of the esky;
- Provide one set of samples to the alleged offender, record in your notebook their name, contact details, sample set number (e.g. 1, 2 or 3) and the time you provided them;
- Deliver the other sample sets to the laboratory.

8.4 SAMPLE PRESERVATION

- Sample preservation is not generally recommended in the field due to OH&S concerns. However some sample bottles will contain preservative, these will need to be filled in accordance with specific instructions – see notes for specific parameters below or quick reference table;
- Samples must be stored on ice or refrigerated and kept in the dark immediately after collection;
- Samples should be delivered to the laboratory as soon as possible after collection.

8.5 NOTES FOR SPECIFIC PARAMETERS

8.5.1 Basic chemical analysis

- Collected generally in 1.25L plastic bottle;
- Bottles should be rinsed with the sample at least twice and filled to the top;
- Lab has advised that all metals and nutrients can be subsampled from the 1.25L bottle if samples are collected during laboratory operating hours (If samples are not collected during operating hours, metals and

nutrients will need to be collected separately, see metals and nutrients below); and
- Ensure enough sample is taken.

8.5.2 Microbiological analysis

- Collected in the sterile bottle provided, generally plastic;
- Bottles are sterile and will remain sterile unless opened, cracked or otherwise contaminated;
- Contains thiosulfate preservative;
- Do not rinse bottle prior to filling;
- Care must be taken to avoid contamination (splashing and airborne matter can contaminate);
- Bottle lid must be held in a way to reduce the risk of contaminants from finger and airborne matter;
- Do not put lid thread down on any surface;
- Bottle must not be filled completely, leave approximately 2.5 cm of airspace;
- Contain living populations which can change over time, rate of change is dependent upon temperature therefore store on ice and deliver to the laboratory as soon as possible, preferably within 6 hours.

8.5.3 Metals and nutrients

- Both dissolved and total metals and nutrients can be subsampled by the laboratory from the 1.25L plastic chem bottle if the samples are delivered to the laboratory on the same day as collected;
- Samples collected in chem bottles should be stored on ice and delivered to the laboratory as soon as possible
- If samples are collected outside laboratory operating hours, metals and nutrients will need to be collected separately;
- Total metals are collected in 30mL tubes, rinse tube with sample prior to filling;
- Total nitrogen and total phosphorus are collected in a 50mL plastic bottle, rinse bottle with sample prior to filling.

8.5.4 Dissolved metals and nutrients

- Collected in separate tubes;

- Dissolved metals are filtered into 30mL tubes, rinse with sample prior to filling, filter at least 25mL of sample;
- Dissolved nutrients are filtered into 15mL tubes, rinse with sample prior to filling, leave a sufficient airspace to allow for freezing;
- Filtering technique:
    - A new syringe is used for each sample;
    - Rinse syringe with sample twice before filling;
    - If the sample is dirty a prefilter (white) should be used in conjunction with the 0.45µm filter (yellow);
    - Push a couple of ml of sample through the filter and use to rinse the tube;
    - Filter the sample and fill the tube, leaving an airspace;
    - Several filters may be required depending on how dirty the sample is, for each new filter push a couple of mL of sample through to rinse the filter before continuing to fill the tube.

8.5.5 Oil and grease

- Must be collected in glass containers, normally with a wide mouth to allow for quick filling;
- Collect the sample in one motion, dipping the bottle under the water. Avoid skimming the surface as this will tend to bias the result;
- Leave some airspace in the bottle to allow for acid addition and ease of pouring;
- Plastic must not be used as plasticisers may leach from the container and affect the result.

8.5.6 Total petroleum hydrocarbons – fractionated

- Collect in a 1L amber glass bottle and a 40mL glass vial;
- Fill the 40mL vial completely so as to exclude all air;
- Place the plastic septum in the vial lid so that the teflon lining is facing towards the sample;
- Leave a small airspace in the amber glass bottle;
- Plastic must not be used as plasticisers may leech from the container and affect the results.

8.5.7 Methylene Blue Active Substances (Detergents)

- Collected in clean 250mL plastic bottles;
- Leave sufficient air space for expansion as the sample will be frozen.

8.5.8 Pesticides, PAHs and PCBs

- Collect in 1L amber glass bottles with a Teflon or aluminium lined cap;
- Bottles have been thoroughly cleaned and solvent rinsed, **DO NOT** rinse the bottle with sample prior to filling;;
- Leave some airspace in the bottle to allow for expansion
- Samples should be kept out of direct sunlight; and refrigerated.

8.5.9 Volatile organic compounds

- Collect in a 40mL glass vial;
- Fill completely to exclude all air;
- Plastic septum in the lid of the vial must be positioned so the Teflon lining is facing the sample;
- Keep out of direct sunlight and refrigerate.

8.5.10 Total phenols*:*

- Collect in a 500mL amber glass;
- Bottles have been thoroughly cleaned and solvent rinsed, **DO NOT** rinse the bottle with sample prior to filling;
- Deliver to the laboratory as soon as possible for preservation.

8.5.11 Cyanides

- If cyanide is required you need to collect the bottles from the laboratory prior to attending the sampling site;
- **DO NOT** rinse the bottle with sample prior to filling;
- Collect in 100mL plastic or glass that contains caustic soda as a preservative.

8.5.12 Sulfides

- If sulfide is required you need to collect the bottles from the laboratory prior to attending the sampling site;
- **DO NOT** rinse the bottle with sample prior to filling;
- Collect in 100mL plastic bottle that contains preservative.

8.5.13 Sulfites

- If sulfite is required you need to collect the bottles from the laboratory prior to attending the sampling site;
- **DO NOT** rinse the bottle with sample prior to filling;
- Collect in 100ml plastic bottles that contains preservative.

8.6 QUICK REFERENCE TABLE

Deliver all samples to the laboratory as soon as possible. If it is outside laboratory operating hours, store samples correctly and deliver to the laboratory as early as possible the following day.

Analysis	Bottle size & Type	Storage	Comments
Routine Chemical (pH, suspended solids, BOD)	1.25L or 500mL PET Plastic	< 4ºC	Rinse container with sample
Microbiological	250mL, 500mL sterile plastic – preservative added	< 4ºC	Leave airspace. Do not rinse – preservative added
Oil & Grease	1L glass – wide mouth	< 4ºC	Do not rinse, fill to the top
Petroleum Hydrocarbon Fractions	1L amber glass + 2 x 40mL glass vials	< 4ºC	Do not rinse. Fill vials to exclude all air. Avoid direct sunlight.
Pesticides	1L amber	< 4ºC	Do not rinse.

Analysis	Bottle size & Type	Storage	Comments
(OCP/OPP/PAH/PCBs)	glass		Avoid direct sunlight.
MBAS (detergents)	500mL plastic	freeze	¾ fill to allow for freezing.
Biological	500mL – 1000mL plastic – wide mouth if possible	< 4ºC	Leave airspace
Total metals	30mL plastic tube	< 4ºC	Rinse container with sample
Dissolved metals*	30mL plastic tube	< 4ºC	Rinse syringe and filter with sample. Rinse container with filtered sample. Filter at least 25mL.
Total nutrients*	50mL plastic bottle	freeze	Rinse syringe and filter with sample. Rinse container with filtered sample.
Dissolved nutrients*	15mL plastic tube	< 4ºC	Rinse syringe and filter with sample. Rinse container with filtered sample. Leave sufficient airspace to

Analysis	Bottle size & Type	Storage	Comments
			allow for freezing.
Cyanide#	100mL plastic – preservative added	< 4ºC	Do not rinse – preservative added.
Sulfide#	200mL plastic – preservative added	< 4ºC	Do not rinse – preservative added.
Sulfite#	200mL plastic – preservative added	< 4ºC	Do not rinse – preservative added.
Phenol#	500mL amber glass	< 4ºC	Do not rinse. Deliver ASAP
Soil – chemical	500g plastic – wide mouth	< 4ºC	Composite samples
Soil - organic	500g glass	< 4ºC	Composite samples

*** Dissolved metals, mercury, total and dissolved nutrients can be subsampled from the routine chemical bottle by the laboratory during business hours.**

 # Specific bottles need to be collected from the laboratory prior to sampling for these analyses.

9 APPENDIX 1: BASIC FIRST AID

9.1 D.R.A.B.C

Administering immediate first aid in an emergency situation can make a significant difference to someone who is sick or injured.

When confronted with an emergency situation remember D.R.S.A.B.C.D. - **Dangers**, **Response**, **Send for help, Airway**, **Breathing, Circulation and Defibrillator**, to ensure that the best possible outcome is achieved.

D: DANGERS?
Assess the situation and ensure safety of yourself, the casualty and others. Don't move the victim unless there is an immediate danger from surroundings.

R: RESPONSIVE?
Check response by *talk and touch* – **C.O.W.S**. **C**an you hear me; **O**pen your eyes; **W**hat's your name; **S**queeze my hands.

S: SEND FOR HELP
If there is no response: RED radio message or call 000 or 112 from mobiles

A: AIRWAY
Ensure the airway is clear. Head tilt using jaw thrust or pistol grip, look into the mouth and remove foreign material if found.

B: BREATHING
Check Breathing **'look, listen and feel.**

- **Look** for the rise and fall of the chest
- **Listen** for breath sounds from their mouth or nose
- **Feel** for the rise and fall of chest

If the patient is breathing keep the patient on their side (recovery position).

IF NOT BREATHING: PERFORM 2 RESCUE BREATHS

C: CIRCULATION

If no breathing has been detected, start compressions. Use heel of the hand in the centre of the chest.

- Compress chest to 1/3 of its depth.
- Give 30 compressions at the rate of 100 compressions per minute and then give 2 breaths
- Repeat 30 compressions and 2 breaths sequence

D: DEFRIBILLATOR

REMEMBER:

- Always stay with the person until help arrives
- Keep the '000' (Ambulance dispatcher) informed of persons condition (if possible ask someone to do this for you)
- Check for any visible signs of injury and if present;
- Control severe bleeding by applying direct pressure to the affected area (take care to not come in direct contact with blood)
- Support broken bones (fractures) through immobilisation of the limb
- Prevent further injuries to the casualty
- Evacuate

The most effective way to protect an unconscious person's airway is put them into the recovery position

9.2 BURNS

Burn first aid is dependent upon the type of burn a person has. Here is a guideline that will help you determine the type of burn someone has so you can perform the proper burn first aid.

9.2.1 Superficial Burns

Description & Symptoms:

First degree burns only affect the outer skin layer and the layer of skin will not have burned through. The skin will be red, puffy and painful.

Treatment:
You should cool the skin down by holding it under cold water for at least five minutes. If it is impossible to put the burn under running cold water, immerse the burn in water or apply cold compresses to it. The burn can be loosely wrapped in a sterile gauze and the individual can take an over the counter pain reliever. If the burn becomes infected seek out medical help.

9.2.2 Partial Thickness Burns

Description & Symptoms:
Second degree burns are marked by blisters. This is a sign that the second layer of skin has also been burnt.

Treatment:
Do not break open the blisters and do not apply ice directly to the burn. If the burn is no larger than a few inches, treat it like a first degree burn. If the burn is larger than a few inches and it is located on the groin, major joint, face, feet, hands or buttocks, seek out medical help.

9.2.3 Full Thickness Burns

Description & Symptoms:
Third degree burns are very serious. They can include muscle, fat and bone. Burnt areas may appear white, dry or charred black.

Treatment:
Emergency medical assistance should be sought immediately. If the person is not breathing you may have to perform CPR. While you are waiting on the ambulance to arrive you should not try to remove any clothing which may be stuck to the burn. You should not immerse severe burns in cold water because the person could go into shock.

IF UNCONSCIOUS: REVERT TO D.R.S.A.B.C.D.

9.3 BITES AND STINGS

Lay casualty down and reassure
Apply compression bandage to immobilise limb
EVACUATE

DO NOT use a tourniquet **DO NOT** wash wound **DO NOT** put ice on wound

IF UNCONSCIOUS: REVERT TO D.R.S.A.B.C.D.

9.4 BLEEDING

If a person loses too much blood he or she can go into shock. The best way to help someone who is bleeding is to apply pressure to the wound using a clean cloth and your hand. If possible, you should try to elevate the bleeding area above the person's heart. Do not remove the cloth once the wound has been controlled. You should never apply a tourniquet to someone unless it involves a severed limb.

Apply DIRECT PRESSURE to wound
Apply a firm dressing
Elevate and immobilise limb
If bleeding continues, apply constrictive bandage over dressing
Use an Arterial Tourniquet ONLY as a last resort if bleeding continues
Treat for SHOCK: Lay Casualty down, Elevate legs
EVACUATE

IF UNCONSCIOUS: REVERT TO D.R.S.A.B.C.D.

9.5 SHOCK

Description & Symptoms:
A severe condition from reduced blood circulation that requires active medical intervention. It may be caused by loss of blood or

body fluids, organ injuries/disease, sepsis, spinal injury or crush injury.

Symptoms include:

- Pale, cool, clammy skin
- Thirst
- Rapid, shallow breathing'
- Rapid, weak pulse
- Nausea and/or vomiting
- Evidence of loss of body fluids, or high temperature if sepsis present
- Collapse and unconsciousness
- Progressive shutdown of the body's vital functions.

9.6 DEHYDRATION

Description & Symptoms:
Condition caused by the casualty's loss of fluids from perspiration and prolonged exposure to heat and humidity. When the casualty's fluid loss exceeds their input through drinking, dehydration occurs and the blood volume lessens.

- Pale, cool, clammy skin
- Rapid breathing
- Profuse and prolonged sweating
- Thirst
- Loss of skin elasticity
- Sunken eyes in children

Treatment:

- Complete rest in the shade, no further exertion
- Remove unnecessary clothing
- Give cool water to drink (in small amounts)
- Ensure casualty has assistance when recovered

9.7 HEAT CRAMPS

Description & Symptoms
Caused by the loss of complex salts (electrolytes) through an imbalance in the body's fluid requirements, causing muscular contraction (cramping)

- Pale, clammy skin
- Sweating if associated with exertion
- Cramping pains in the limbs or abdomen
- Nausea
- Uncontrolled spasms of affected limb(s)

Treatment:

- Rest in the shade
- Gently stretch the affected muscle
- Apply ice pack
- When nausea passes, give sips of cool water
- **DO NOT massage affected muscle**
- **DO NOT continue further exertion**

9.8 HEAT EXHAUSTION

Description & Symptoms

Caused by exertion accompanied by heat and high humidity

- Pale, cool, clammy skin
- Rapid breathing
- Profuse and prolonged sweating
- Cramps in the limbs and/or abdomen
- Thirst, nausea and/or vomiting
- Constant headache
- Exhaustion and lethargy

Treatment:

- Complete rest in the shade, no further exertion
- Lie casualty down
- Remove unnecessary clothing
- Cool casualty by sponging with water
- When nausea passes give cool water to sip
- Ensure casualty seeks medical assistance when recovered

9.9 HEAT STROKE

Description & Symptoms

This condition is **not** to be confused with 'sun stroke'. In this condition, the body's temperature regulation centre in the brain

has been rendered inoperable and the body temperature continually rises, causing eventual brain damage. Immediate, active intervention is necessary to avoid coma and death

- Flushed, hot, dry skin
- Core temperature 40.6°C or more
- The casualty has ceased sweating
- Rapid pulse, gradually weakening
- Irrational or aggressive behavior
- Staggering gait, fatigue
- Visual disturbances, headache
- vomiting
- Collapse and seizures
- Coma – DEATH

Treatment

- Medical attention is crucial
- Complete rest in shade
- Remove clothing
- Cool casualty by any means possible
- Cover casualty with wet sheet or clothing and keep wet
- Be prepared to resuscitate
- Fluids can be given to fully conscious casualty
- unconscious casualties are nil by mouth

10 APPENDIX 2 CONTACT LIST

List Current as at January 2013

SUBJECT	ORGANISATION	NUMBER	AFTER HOURS
Forests – enquiries, access, etc	Fire, Forest & Roads (TAMS) ACT Parks and Conservation Dylan Kendall	6207 2414	13 22 81
Heritage register, trees, properties, etc	ACT Heritage (ESDD) Jen O'Connell	6207 3000	0419 120 028
Housing, ACT – Northside Tenancy Team – general issues	ACT Housing	6207 1345	13 22 81
Housing ACT – Southside Tenancy Team – general issues	ACT Housing	6207 1345	13 22 81
Garbage collections & recycling	ACT NoWaste (TAMS)	6207 2840	0417 822 445 (for ACT Govt staff only)
Dangerous goods storage/handling/transportation waste (Email: dangeroussubstances@act.gov.au)	WorkSafe ACT	6207 3000	0419 120 028
Fireworks, illegal use, possession of, etc.	WorkSafe ACT	6207 3000	0419 120 028
Lights – street and pathway (blown globes, damaged, etc)	ACTEW	13 10 93	13 10 93
Electricity cabling, damage, exposed pits, complaints	ActewAGL	13 10 93	13 10 93
Natural gas pipes, damage, exposed pits, complaints	ActewAGL	13 19 09	13 19 09
Water, sewage and stormwater, blocked mains, damage, etc	ActewAGL	13 11 93	13 11 93
POLICE ATTENDANCE (police assistance, no immediate danger. suspicious activity, theft, car accident no serious injury)	**AFP**	**13 14 44**	**13 14 44**
Building/plans, site plans and unit plans, etc	ESDD	6205 0060	No A/H Contact
ACT Government Central Switchboard	Canberra Connect	13 22 81	13 22 81
Nature Parks General enquiries, northside	Canberra Nature Park (TAMS)	6207 2113	13 22 81
Nature Parks General enquiries, southside	Canberra Nature Park (TAMS)	6207 2087	13 22 81
Wildlife injured/dead (incl. vermin and stock) – Southside	Canberra Nature Park (TAMS)	6207 2087	0428 111 509

SUBJECT	ORGANISATION	NUMBER	AFTER HOURS
Wildlife injured/dead (incl. vermin and stick) – Northside	Canberra Nature Park (TAMS)	6207 2113	0428 111 509
Graffiti removal from public places	Urban Parks (TAMS)	6207 2500	13 22 81
Parks, urban open space, BBQs, playgrounds, irrigation	Urban Parks (TAMS)	6207 2500	13 22 81
Toilets, public, blocked, damaged, access	Urban Parks (TAMS)	6207 2500	13 22 81
Trees, public, damaged by acts of god, requiring pruning	Urban Treescapes (TAMS)	**13 22 81**	**13 2281**
Foliage, private, overhanging public footpaths or places	City Rangers (TAMS)	6207 7132	6207 7132
Line of sight obstructions, roads, footpaths, public places	City Rangers (TAMS)	6207 7132	6207 7132
Littering, bill postering, illegal dumping on Territory land	City Rangers (TAMS)	6207 7132	6207 7132
Sharps Hotline (collection of syringes, etc, from public land)	City Rangers (TAMS)	13 22 81	13 22 81
Signs, temporary, unapproved, requiring removal	City Rangers (TAMS)	6207 7132	6207 7132
Trees, public illegally damaged or removed	City Rangers (TAMS)	6207 7132	6207 7132
Access to unleased Territory land	City Rangers (TAMS)	6207 7132	6207 7132
Dogs/cats injured/deceased/stray (includes domestic animals)	Domestic Animal Services	6207 2253	13 22 81
EMERGENCY SERVICES	**EMERGENCY CONTACT NUMBER**	**000**	**000**
Contaminated sites, chemicals and hazardous waste	Environment Protection ESDD	6207 1819	13 22 81
Pollution noise/air/water, general complaints enquiries	Environment Protection ESDD	13 22 81	6207 7110
Trees, private, protected, illegally damaged or removed	TAMS	13 22 81	0417 727 772
Clinical waste, dumping investigation, removal	Environment Protection ESDD	6207 1819	13 22 81
Health environmental/public health inspections	Health Protection Service	6205 1700	Pager 02 9962 8612
Vehicle accidents in SGFleet vehicles	Lumley Insurance	**1800 652 256**	**1800 652 256**
National land – use of land approvals	National Capital Authority	6271 2836	6273 4458
Nature strip widths, over the phone enquiries (when urgent)	ESDD	6207 1923	No A/H contact
Leasing & map enquiries, deposited plans	ESDD	6207 1923	No A/H contact
Leased land, complaints, developments, dirty blocks, etc	ESDD	6207 1923	No A/H contact

SUBJECT	ORGANISATION	NUMBER	AFTER HOURS
Parking operations, enforcement, faulty machines, etc	Parking Operations	6207 7200	13 22 81
Hawkers & money collections, unapproved	Public Place Approvals (email sent)	13 22 81	13 22 81
Public places, use of – approvals, events, etc	Public Place Approvals (email sent)	13 22 81	13 22 81
Vehicles, registration/licensing/defective/enquiries	Road User Services (JACS)	13 22 81	13 22 81
Roads/paths/pavements – repairs and maintenance	Roads ACT	6207 6677	0417 434 977
Signs, traffic and parking, damaged, required	Roads ACT	6207 6677	0417 434 977
Stormwater	Roads ACT	6207 6677	0417 434 977
Traffic lights/signal (damaged/faulty)	Roads ACT	6207 6677	0417 434 977
Vehicle accidents, road clean ups	Roads ACT	6207 6677	0417 434 977
Vehicles, inspection on road and heavy vehicles (overloaded)	Vehicle & Technical Inspection Unit	6207 7236	No A/H Contact
Sportsground rangers, bookings, access, damage reports	Sport & Recreation Services	13 22 81	0409 791 523
Telephone cabling, damage, exposed pits, complaints	Telstra	13 22 03	13 22 03
Speed and red light cameras	Traffic Camera Office	6207 7182	No A/H Contact
TransAct, cabling, damage, exposed pits, complaints	TransACT	13 30 61	13 30 61

AREA	Contact Point	Number	After Hours
ACT Parks and Conservation	General enquiries	13 22 81	Ag Rep 0429 300 504
ACT Heritage Council (for heritage listed areas, etc)	General enquiries	6207 3000	0419 120 028
ACT Housing	Northside Tenancy Team Southside Tenancy Team	6207 1345 6207 9166	13 22 81 13 22 81
ACT NoWaste (garbage collections, landfills, recycling and waste reduction/planning)	General enquiries	6207 2840	0417 822 445 (for ACT Govt staff only)
ACT RTA – Road Transport Authority (registration and licence records checks, dangerous vehicle reporting)	Road user Services General Enquiries	6207 6677	0417 434 977

AREA	Contact Point	Number	After Hours
ACT Work Cover – dangerous goods	General enquiries/reporting	6207 3000	0419 120 028
ACT Work Cover – (issues relating to OH&S)	General enquiries	6207 3000	6207 3000
AFP – Australian Federal Police	AFT Operations	**13 14 44**	**13 14 44**
BEPCON – building, electrical, plumbing control	General enquiries	6207 1923	13 22 81
City Rangers Office (overhanging foliage, line of sight issues, abandoned vehicles, illegal dumping, hawking, damage to Government trees, sharps collection and training. Outdoor café issues, gate and power accesses, nature strip development approvals).	General enquiries/reporting SHARPS HOTLINE	13 22 81 13 22 81	0417 727 772 13 22 81
Canberra Nature Parks (stray, injured, dead – wildlife, vermin, livestock. Snakes. Maintenance and access in reserve areas.)	General enquiries/reporting	6207 2087	0429 300 504
Place Management (public parks, lakes and ponds, green space, paved areas, playgrounds, BBQ's, irrigation systems, toilets, general public amenities and tress on public land)	General enquiries/reporting	6207 2087	0429 300 504
DAS – Domestic Animal Services (stray, injured, dead – dogs, cats and general domestic animals, animal nuisance complaints and impoundment facility)	General enquiries/reporting	6207 2253	13 22 81
Environment protection(environment protection, noise/air/water pollution, chemicals and contaminated sites,	Information Centre/Helpline General enquiries/reporting	13 22 81	6207 7110
Health and Protection Service (inspections of business, etc)	Complaints/general enquiries	6205 1700	6205 1700
NCA – National Capital Authority (licensing and approvals of works, signage, use of designated land and maintenance of assets under the control of the Federal Government)	General enquiries	6271 2888	6273 4458

AREA	Contact Point	Number	After Hours
ACTPLA Planning and Land Management (maps, deposited plans, dirty blocks, leasing/planning advice, leasing titles)	Shopfront/General Enquiries	6207 1923	13 22 81
Parking Operations (parking enforcement issues including heavy vehicles parking in the suburban area)	General enquiries/reporting	6207 7200	13 22 81
Public Place Approvals (licensing and approvals of hawkers, collectors, charity bins, outdoor cafes, events and uses of parks, green space and paved areas)	Registrar of Hawkers/General enquiries	13 22 81	13 22 81
Roads ACT (pavement areas, footpaths, cycle paths, roads, street and traffic lights, street and traffic signage, road closures, accident cleanups and bridges)	General enquiries/reporting	6207 6677	0417 434 977
SG Fleet (information on government vehicles)	General enquiries Insurance 24 hour accident assistance 24 hour roadside assistance	1300 138 235 1800 652 256 1800 269 660 1800 818 885	1300 138 235 1800 652 256 1800 269 660 1800 818 885
Traffic Camera Office	General enquiries	6207 7182	No A/H Contact
Sports Ground Office (bookings, access, closures and maintenance of various sports grounds and in-closed??? ovals)	General enquiries Weather closure of grounds	13 22 81	0409 791 523
Emergency Services – General Enquiries	Police, fire Ambulance switch	6207 8333	6207 8333
Water Police	Incidents on the waters in the ACT	6245 7393	6245 7393
ESDD Agency Rep	Oncall Agency Rep	0478 407 692	0478 407 692
Ecowise (ALS Labs)	Water testing	6202 5400	6202 5400
ACTEW	Trade work agreements	6242 1129	624 21129

11 APPENDIX 3 ILLICIT DISCHARGE INDICATORS

Physical Indicators
Physical indicators are those that can be observed or sensed during dry weather field screenings and routine inspections. They can include the presence of unusual flow, colour, odour, turbidity, and floatable liquids and solids.

FLOW
Record whether there is a presence or absence of flow at the site.

Note: to measure flow, mark off a fixed flow length (about two meters) and drop a floatable object (i.e., stick, ping-pong ball, or cork) into the flow. Record the time it takes the object to travel the fixed length then calculate velocity (meters per second or m/s).

COLOUR
Collect a sample of the discharge in a clear test tube or sampling bottle.

Note: do not try to assess water colour by looking directly into the waterway. Water depth, substrate composition, aquatic plants, and sky conditions can all influence your perception of the water colour.

Field Investigation Example, Diesel spill – City of Grand Prairie
(Photo courtesy of City of Grand Prairie, USA)

	Colour	Possible Causes
1	Tan to light brown.	➢ Suspended sediments common after rainfall. ➢ Runoff from construction, roads, agricultural land. ➢ Soil erosion caused by vegetation removal.
2	Pea green, bright green, yellow, brown, brown-green, brown-yellow, blue-green.	➢ Algae or plankton bloom – colour depends on type of algae or plankton. ➢ Sewage, fertiliser runoff, vehicle wash water.
3	Tea/Coffee.	➢ Dissolved or decaying organic matter from soil or leaves. Commonly associated with tree overhangs, woodlands, or swampy areas.
4	Milky White.	➢ Paint, lime, milk, grease, concrete, swimming pool filter backwash.
5	Milky or dirty dishwater gray.	➢ Gray water or wastewater, musty odour present.
6	Milky gray-black.	➢ Raw sewage discharge or other oxygen-demanding waste (rotten egg or hydrogen sulphide odour may be present.)
7	Clear black.	➢ Caused from turnover of oxygen-depleted waters or sulphuric acid spill.
8	Dark red, purple, blue, black.	➢ Fabric dyes, inks from paper and cardboard manufacturers.
9	Orange-red.	➢ Leachate from iron deposits.
10	White crusty deposits.	➢ Common in dry/arid areas or during periods of low rainfall where evaporation of water leaves behind salt deposits.

ODOUR
Fill sample bottle at least halfway with sample water and hold about 100mm away from your nose. Use your free hand to fan the scent to your nose.

Note: never inhale the air directly off the top of a sample as many potential contaminants are harmful to nasal membranes and lung tissue. Make sure that the origin of the odour is at the outfall. Sometimes shrubs, trash, or even spray paint used to mark the outfalls can confuse the nose.

	Odour	General Causes
1	Rotten eggs/hydrogen sulphide (septic)	➢ Raw sewage, decomposing organic matter, lack of oxygen.
2	Chlorine	➢ Wastewater treatment plant discharges, swimming pool overflow, industrial discharges.
3	Sharp, pungent odour	➢ Chemicals or pesticides.
4	Musty odour	➢ Presence of raw or partially treated sewage, livestock waste.
5	Gasoline, petroleum	➢ Industrial discharge, illegal dumping of wastes, waste water.
6	Sweet, fruity	➢ Commercial wash water, wastewater.

Field Investigation Example

Discharge of highly alkaline wastewater from a concrete batch plant, Canberra, Australia.

The EPA was contacted after a white substance was noticed in an open stormwater drain. Water samples taken indicated a pH level of 12.4. Officers traced the source to a concrete batch plant within an industrial area.

Turbidity

Causes of High Turbidity

- Soil erosion
- Runoff from a rain event
- Algae blooms
- Bottom sediment disturbances by aquatic life
- Construction or dredging

If highly turbid (cloudy) water is observed, make sure to look upstream and downstream to see if anything around the site has changed since the last field inspection. An illicit discharge may be present if a highly turbid flow exists.

Note: to measure turbidity, collect a water sample and use a turbidity tube.

Sewage, Sheens & Surface Scum

Contaminated flows may contain floatable solids or liquids. Sewage, oil sheen, and suds/foam are examples of floatable indicators. Trash and debris, although more typically known as 'floatables,' are not generally indicators of illicit flow.

Sheens can be naturally produced or synthetic; oil sheens are often mistaken for naturally produced sheen.
Sheen from bacteria forms a sheet like film that breaks if disturbed. (See photos page 54).
Suds should be rated based on their foaminess and staying power.
Suds that travel several feet before breaking up should be considered as possible illicit discharge.
In some cases, foam and suds can give off an odour.
A strong organic or sewage like odour can indicate a sewer leak or overflow.
A fragrant or sweet smelling odour can indicate the presence of laundry water or similar wash waters.

Surface Scum	General Causes
Tan foam	Usually associate with high flow or wave action; wind action plus flow churns water containing organic materials causing harmless foam; produces small patches to very large clumps.
White foam	Sometimes patchy or covering wide area around wastewater outfall, thin and billowy, mostly due to soap.
Yellow, brown, black film	Pine and wattle pollens form film on surface, especially in ponds, backwater areas, or slow moving water in streams.
Rainbow Film	If a swirling pattern, then likely oil or other fuel type. Check for petroleum odour. If sheet like and cracks if disturbed, then it is natural.

Field Investigation Example
Manhole overflow – City of Denton

Staff was notified by a resident of high flows, odour, and colour changes in the water. The problem was traced to a manhole overflowing upstream that was caused by teens filling the manhole with rocks.

Photo courtesy of City of Denton

Examples

Sewage Discharge

Sewage fungus

Bacteria growth in outfall

Natural Sheen vs. Synthetic Sheen

Natural sheen

Synthetic sheen

Foam and Suds

Low severity, naturally occurring suds

High severity suds

Sewage fungus photo courtesy of Wayne County Illicit Discharge Ellimination Program, natural sheen image courtesy of NOAA'S Ocean Service, synthetic sheen photo courtesy of Jane Thomas, IAN Image Library (ian.umces.edu/imagelibrary/), all others courtesy of the Centre for Watershed Protection.