



**UHWA**

## **Pollution Incident Response Management Plan**

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# Version History

Version Number	Date	Description of Amendments	Authorisation
2013/1	03/01/2013	Development of PIRMP	Doug Campbell
2014/1	15/07/2014	Review	Doug Campbell
2015/1	13/08/2015	Review	Doug Campbell
2016/1	01/07/2016	Review	Doug Campbell
2017/1	01/07/2017	Review	Doug Campbell
2018/1	18/06/2018	Review	Doug Campbell

## Distribution

A hard copy of this plan will be retained by the Works Coordinator and additional copies will be located on each of the weed spray vehicles and in the chemical storage sheds.

## Terms and Definitions

<b>Area of Operation</b>	Local Government Areas of Muswellbrook, Singleton and Upper Hunter
<b>Authority</b>	Upper Hunter County Council T/as Upper Hunter Weeds Authority
<b>Constituent Councils</b>	Muswellbrook, Singleton and Upper Hunter Councils
<b>Council</b>	Upper Hunter County Council
<b>EPA</b>	Environment Protection Authority
<b>EPL</b>	Environment Protection Licence
<b>Immediately</b>	Promptly and without delay
<b>Notifiable Incident</b>	A pollution incident causing or threatening material harm (actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or results in actual or potential loss or property damage of an amount, exceeding \$10,000).
<b>PIRMP</b>	Pollution Incident Response Management Plan
<b>POEO ACT</b>	Protection of the Environment Operations Act 1997
<b>Pollution Incident</b>	Pollution incident means an incident or set of circumstances during or as a consequence of which there is or is likely to be a leak, spill or other escape or deposit of a substance, as a result of which pollution has occurred, is occurring or is likely to occur.
<b>Relevant Authority</b>	Environment Protection Authority, NSW Health (Public Health Unit), WorkCover and Fire and Rescue NSW
<b>SDS</b>	Safety Data Sheet

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# 1. Introduction

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Under the *Noxious Weeds Act 1993* **Upper Hunter County Council** (Council) is responsible for the management and control of weeds on all land that is under its Constituent Council's care and control. In order to meet this requirement, Council implements an integrated weed management approach for the removal and control of weeds.

One of the primary techniques utilised is the application of Herbicides. Although in most cases, the negative impacts of herbicide can be prevented by exercising due care and carrying out the control programs in an environmentally responsible manner, in some circumstances Council may be required to apply herbicides directly to aquatic weeds which has the potential to result in pollution of waters and impact on non-target species.

As a result Council currently holds an Environment Protection Licence under the *Protection of the Environment Operations Act 1997* (POEO Act) for the application of herbicides to the waterways of its area of operation. The licence contains conditions which aim to minimise the environmental impacts of herbicide application, prevent water pollution and ensure the implementation of best practice weed management.

Under Part 5.7A of the POEO Act, licensees are required to prepare *Pollution Incident Response Management Plans*. These plans are designed to ensure that pollution incidents are minimised through the identification of risks and the development of planned actions to minimise and manage those risks, and to ensure that emergency response procedures are developed and implemented in the event that an incident occurs.

This plan has been prepared in accordance with the requirements contained in section 153C of the *Protection of the Environment Operations Act 1997 No 156* and the details prescribed by Part 3A of *Protection of the Environment Operations (General) Regulation 2009*.

## 2. Objectives

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The objectives of this plan are to ensure:

- That a comprehensive and timely response to any reportable pollution incidents which has occurred due to the Authority's application of herbicides to waterways in the Authority's area of operation.
- Compliance with all legislative requirements

## 3. Scope

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This plan applies to all waterways within the County Council's area of operation, where the application of herbicides occurs.

Council's Annual Operation Plan identifies the types of weeds and the waterways which will be targeted each financial year.

# 4. Roles and Responsibilities

Works Coordinator is responsible for ensuring that:

- Adequate resources are provided for the implementation of this plan,
- Staff are trained and competent in undertaking their roles,
- Authorising this plan including all subsequent amendments,
- Initiating this plan (as the 24 hour contact),
- Ensuring that staff carry out activities in accordance with the procedures outlined in this plan,
- Notifying the Relevant Authorities in the event of a pollution incident,
- Completion of the Annual Return and renewal of the EPL.

District Noxious Plant Inspectors are responsible for:

- Carrying out activities in accordance with the procedures outlined in this plan,
- Undertaking the site assessment to determine the methodology and herbicide required,
- Participating in the testing and review of this plan,
- Participating in training as required.

# 5. Risk Management

## 5.1 Hazard Identification

Table 1 below provides a description of the hazards which are associated with pesticide applications in relation to the Authority's Environmental Protection Licence.

**Table 1 – Description and Likelihood of Hazards**

Hazard	Cause	Impact	Likelihood (with controls in place)	Controls
Chemical spill or leak	<ul style="list-style-type: none"> <li>• Rupture of spray tank</li> <li>• Hose or equipment failure</li> <li>• Rupture of herbicide concentrate container or spill</li> </ul>	Contamination of water	Rare: May happen in exceptional circumstances	<ul style="list-style-type: none"> <li>• Inspection of equipment before use on waterways</li> <li>• Carry only the amount of concentrate required for the daily application</li> </ul>
		Harm to non-target species	Unlikely: Not likely to occur	
Incorrect application (herbicide type, quantity or method)	<ul style="list-style-type: none"> <li>• Miscalculation of required concentrate for spray volume</li> <li>• Incorrect herbicide selection</li> </ul>	Contamination of water	Rare: May happen in exceptional circumstances	<ul style="list-style-type: none"> <li>• Staff maintain qualifications regarding herbicide application</li> </ul>
		Harm to non-target species	Rare: May happen in exceptional circumstances	

	<ul style="list-style-type: none"> <li>Direction on herbicide label not followed.</li> </ul>			
Exposure to persons through contact with skin, inhalation or swallowing	<ul style="list-style-type: none"> <li>Incorrect herbicide use</li> <li>Failure to follow PPE instructions</li> </ul>	Death	Rare: may happen in exceptional circumstances	<ul style="list-style-type: none"> <li>Staff maintain qualifications regarding herbicide application</li> </ul>
		Injury	Unlikely: Not likely to occur	
		Illness	Possible: Might occur at sometime	

## 5.2 Hierarchy of Controls

When determining how to control risks in the workplace the following hierarchy of control must be applied:

1. **Eliminate** the hazard altogether.
2. **Substitute** the hazard with a safer alternative.
3. **Isolate** the hazard from anyone who could be harmed.
4. Use **engineering** controls to reduce the risk.
5. Use **administrative** controls to reduce the risk.
6. Use **personal protective equipment (PPE)**.



## 6. Training

### 6.1 Herbicide Mixing, Application, Transport and Storage

- All staff who mix or apply herbicides or calibrate equipment used to apply herbicides must hold Australian Qualifications Framework Level 3 (AQF 3) or above. AQF 3 requires the following units of competency to be attained:
  - *AHCCHM303A (Prepare and Apply Chemicals), and*
  - *AHCCHM304A (Transport, Handle and Store Chemicals).*
- A refresher course must be completed every 5 years to ensure competency.

### 6.2 Induction Training

- All staff are required to participate in a formal Induction Training Program relating to the role of a Council employee and responsibilities regarding Environmental Management and Work Health and Safety.
- Site induction training is undertaken by the Works Coordinator. Training involves the detailed review and acceptance of documented procedures relevant to the each staff member to ensure that staffs are aware of their roles and responsibilities and any site specific safety procedures.
- All staff that apply or mix herbicides in or around waterways will be required to undertake training in relation to the procedures outlined in this plan, to ensure that staff are aware of their roles and responsibilities. The objectives of providing training and updates will be to:

- Create awareness of the potential hazards associated with the activity which may cause for harm to staff the community and the environment, and the controls implemented to minimise the risk,
- Ensure staff understand the procedures which must be implemented in the event of a pollution incident, and
- Ensure staff understands the internal and external reporting requirements.

## 7. Procedure

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### Step 1 – Undertake a site assessment

In most instances a site assessment is required prior to implementing weed management techniques in order to determine the methodology and herbicide to be utilised. The following aspects should be considered:

- Identify the type of weed/s.
- Establish the exact location and extent of the weed/s.
- Identify any hazards/risk associated with the site.

### Step 2 – Determine the methodology

Using the information obtained from the site assessment, the appropriate method of weed control must be determined. An integrated weed management approach management is the most effective method used to control weeds. It involves a sustainable approach to long-term management of weeds using a combination of the following techniques:

- Weed prevention
- Mechanical control
- Chemical control
- Biological control

Where the use of chemicals is considered the hierarchy of control must be implemented in-line with as outlined below:

- 1. Elimination:** Where possible alternative weed control methods should be utilised.
- 2. Substitution:** Where possible replace the chemical with a less toxic chemical.
- 3. Minimisation:** Minimise the amount of chemical used (e.g. by increasing efficiency, dilution, or recycling of the chemical).
- 4. Engineering controls:** Reduce the risk of chemicals or their by-products entering the environment or affecting the health and safety of staff and the community (e.g. through PPE, staff training, safe work procedures).

### Step 3 - Selection of herbicide

- Only herbicides registered by the Australian Pesticides and Veterinary Medicines Authority (APVMA) for use in aquatic environments will be used in to control weeds in and around waterways. Herbicides are applied as per their label or as per any Off label permit which has been issued by the APVMA.

- The herbicide utilised will be based on the type of weed.
- Council currently uses two chemicals in waterways:
  - *Glyphosate* , and
  - *Metsulfuron Methyl*.

These chemicals are utilised for their non-residual and low toxicity properties. Ongoing investigation and research will be undertaken by Council to identify and trial more environmentally sensitive chemicals or alternative techniques for weed control.

## **Step 4– Quantity of herbicide applied**

Herbicides if mixed incorrectly can have a significant impact on the environment. To minimise the risk of this occurring the following controls must be in place at all times:

- All herbicides must be mixed in accordance with the instructions on the label (unless an Off Label Permit is obtained from the Australian Pesticides and Veterinary Medicines Authority).
- The required amount of herbicide will be calculated and mixed accordingly to minimise waste. If any herbicide is left after the job is complete, where possible the mixed herbicide will be stored on the truck and used as soon as possible.
- If the herbicide is mixed and the weather conditions are not suitable for spraying, mixed herbicide will be stored on the truck and used as soon as possible.

## **Step 6 - Transportation of Herbicides**

- The quantity of herbicide transported will be limited to the amount used each day.

## **Step 7 - Application of Herbicides**

### **Prior to Use**

- Prior to the application of herbicides, undertake a site specific risk assessment, including an assessment of weather conditions to identify any site specific controls (weed spraying will not occur in unsuitable conditions).

### **During Use**

- Herbicides must be applied in accordance with the directions on the label (unless an Off Label Permit is obtained from the Australian Pesticides and Veterinary Medicines Authority).
- Appropriate PPE must be worn at all times when applying herbicides.

## **Step 8 - Records of herbicides applied and stored**

- Treatments are to be recorded on Council's electronic recording systems (*Pest Genie* and *WeedMapPro*) as soon as practicable after treatment has been completed.



- A chemical inventory will be kept on *Pest Genie* which will identify the type and quantity of chemicals used and the inventory of the pesticide being stored at Council four storage sites in its area of operation.

## Step 9 - Wash down of spray equipment

- Spray tanks are to be triple rinsed and cleaned thoroughly using clean water or a registered tank cleaner on a weekly basis or prior to a change in chemical used.
- Apply a neutralising agent in accordance with the relevant SDS, where required.
- All areas within the vehicle that may have been exposed to chemicals (such as handles, vinyl seats, steering wheel, and any knobs) are to be cleaned with a cloudy ammonia solution or ISO wipes once a week.

## Step 10 - Disposal of Herbicides

All empty containers must be triple rinsed as soon as they are empty and recycled by Drummuster®. Containers which cannot be recycled will be damaged to prevent re-used and disposed of at the closest Constituent Council landfill site.

## Step 11 - Storage of Herbicides

- Herbicides must be stored during the application of herbicides to waterways:
  - In the original container.
  - In containers that are labelled correctly in accordance with *Code of Practice: Labelling of Workplace Hazardous Chemicals*.
  - In an area protected from the weather and with adequate ventilation.
  - Separately from non-compatible hazardous chemicals.
- The volume of herbicides present on equipment being used for application (spray truck or marine vehicle) should be kept to a minimum, with the maximum quantities of concentrate:
  - *Glyphosate* <= 5 kg or 20 Ltr
  - *Metsulfuron Methyl* <= 500 gms

## Step 11 - Maintenance of Plant & Equipment

- All plant & equipment will be maintained and serviced
- The Daily Plant Checklist must be completed prior to commencing works including checking hoses and connections prior to use.
- All equipment used to apply herbicides will be calibrated as required.

# 8. Emergency Response

## 8.1 Pollution Complaints

- Complaints can be made by phoning Council on ph: 02 65493802 or 0408683490.
- Records must be kept of all complaints made to Council in relation to pollution arising from any of the activities associated with the Environment Protection Licence. The record must include details of the following:
  - the date and time of the complaint;
  - the method by which the complaint was made;
  - any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;
  - the nature of the complaint;
  - the action taken in relation to the complaint, including any follow-up contact with the complainant; and
  - if no action was taken, the reasons why no action was taken.
- The record of a complaint must be kept for at least 4 years after the complaint was made.
- The record must be produced to any authorised officer of the EPA who asks to see them.

## 8.2 Emergency Response

It is not feasible to provide comprehensive instructions on the precise actions to be taken for every possible pollution incident. Each situation will need to be assessed and responded to in a manner which is appropriate for the circumstances of the incident, using the process steps outlined below.

Councils Works Coordinator is responsible for activating this plan in the event of an incident, and can be contacted via the following means:

Ph: 02 65493802

Mob: 0408683490

In the event that an incident occurs, the first step is to undertake a risk assessment of the site to determine if there is a risk to people, property and/or the environment and implement immediate corrective actions to prevent further harm in accordance with the relevant SDS.

In general, the primary control which should be implemented is to eliminate the pollution source through isolation. Once this is completed the spill kit must be utilised to contain the spill and once contained the contaminated material should be disposed of at an approved waste management facility.

## 8.3 Incident Reporting & Investigation

All incidents require some form of notification. The two different types of reporting include External and Internal Reporting. Staff who are involved in or witness the incident are required to immediately assess whether the incident is of a notifiable nature – that is any incident resulting in actual or potential material harm to the health or safety of human beings or the environment that is not trivial, or results in actual or potential loss or property damage exceeding \$10,000.

If unsure as to whether it is a reportable incident, consult with the Works Coordinator **IMMEDIATELY**. If the incident occurs outside of standard operating hours when the Works Coordinator is not available for consultation - **IMMEDIATELY** contact the relevant Authorities identified below.

## External Reporting

Environmental incidents which require external notification are required to be notified **IMMEDIATELY**. Where adequate resources are available to allow for concurrent notification and immediate response to an environmental incident, notification to the relevant Authorities must be given 'immediately'. The decision on whether to notify should not delay immediate actions to ensure the safety of people or contain a pollution incident, however the notification to the relevant Authorities should be made as soon as it is safe to do so.

If the pollution incident presents an immediate threat to human life or property '000' must be called first. If the incident does not present an immediate threat to human life or property or once '000' has been called then the other relevant Authorities listed below must be notified **IMMEDIATELY** in the following order:

	<b>Relevant Authority</b>	<b>Phone Number</b>
1	EPA – Environment line	131 555 (24 hours)
2	Public Health Unit	49246477
3	Work Cover	13 10 50 (24 hours)
4	Council	0408683490 ( 24 hours)
5	Fire and Rescue NSW	000 (24 hours)

When notifying the relevant Authorities, state that you are calling to advise of a pollution incident and provide the following information (if known):

- The time, date, nature, duration and location of the incident,
- The location of the place where pollution is occurring or is likely to occur,
- The nature, the estimated quantity or volume and the concentration of any pollutants involved,
- The circumstances in which the incident occurred (including the cause of the incident, if known),
- The action taken or proposed to be taken to deal with the incident and any resulting pollution or threatened pollution, and
- Other information prescribed by the regulations.

Any required information that is not known when the incident is notified must be notified to the relevant Authorities immediately once it becomes known.

When each of the relevant Authorities are notified, the following must be recorded:

- The time of the call,
- The date of the call,
- Incident/reference numbers given by the relevant Authority,
- The name of the operator,
- Information provided, and
- If further notification is required.

These details must be recorded on the *Pollution Incident Report Form* and forwarded to the Works Coordinator **IMMEDIATELY**.

## Internal Reporting

All incidents and near misses must be reported to the Works Coordinator within 24 hours of the incident occurring.

An investigation will be undertaken with the relevant staff, and Works Coordinator to determine the cause of the incident and identify corrective and preventative actions to ensure that the incident does not re-occur.

All corrective and preventative actions will be reviewed within 3 months of the implementation to determine if the actions were 'effective' or 'ineffective'. Where the action is determined to be 'not effective', additional corrective/preventative actions will be identified and implemented.

### Communication

Communication is an important aspect of managing any response to a pollution incident. The mechanisms used and the information provided to stakeholders will depend on the circumstances of the pollution incident.

The objective of communication is to ensure that those potentially affected by a pollution incident know what has happened, how they may be affected by the incident, what they can do to avoid potential harm, and to explain what Council is doing to rectify the incident.

Following a pollution incident the occupiers of neighbouring premises will be notified via a letterbox drop/door knock. An assessment of who should be notified will be undertaken by the Works Coordinator in consultation with the General Manager as necessary.

In most cases, a pollution incident will be confined to a particular location and notification to stakeholders can be handled by the erection of warning signage. Where the incident is not confined to a particular area and/or may have a significant impact upon the environment the following types of communication mechanisms are to be considered when selecting an appropriate means of providing stakeholder notification;

- Phoning stakeholders,
- Emailing stakeholders,
- Issuing of media releases, and
- Posting of notices on Council's website.

The EPA is also able to issue a direction to notify any other person of the incident that the EPA considers necessary therefore directions given by the EPA must also be complied with.

## 9. Testing & Review

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This plan will be reviewed and tested annually ensure that the plan is accurate and up-to-date, and that the plan is capable of being implemented in a workable and effective manner.

In addition the plan will be reviewed and tested:

- within one month of any pollution incident (or near miss) occurring,
- when legislative requirements are changed, or
- when there is a change in work processes.