

Environmental Defenders Office (Tas.) Inc.

131 Macquarie Street
Hobart TAS 7000

tel: (03) 6223 2770
fax: (03) 6223 2074
email: edotas@edo.org.au

27 May 2005

Ms Maria Hawksley
Biosecurity and Product Integrity Division
Department of Primary Industries, Water and Environment
PO Box 46
Kings Meadow TAS 7249

By email: maria.hawksley@dpiwe.tas.gov.au

Dear Ms Hawksley

Review of Code of Practice for Aerial Spraying

Thank you for the opportunity to comment on the review of the Code of Practice for Aerial Spraying in Tasmania (the *Code*).

The Environmental Defenders Office (*EDO*) is a non-profit, community legal centre specialising in environmental and planning law. Our submission addresses legal aspects of the regulation of aerial spraying and uses the experience of EDO clients Howard and Michelle Carpenter to illustrate some of the weaknesses in the current Code.

1. Summary of recommendations

- The Spray Information & Referral Unit (*Spray Unit*) should continue to assist with mediation and negotiation, but be committed to pursuing enforcement action where negotiation is inappropriate or unsuccessful.
- The Code should **not** be a regulatory document. All obligations and offence provisions should be included in legislation. The Code should provide a comprehensive overview of legal obligations and best practice guidance.
- New enforcement tools should be considered, including infringement notices and enforcement notices (similar to Environment Protection Notices).
- It should be an offence to create residue above a prescribed level in an exclusion zone, or to carry out spraying in a manner likely to create residue above a prescribed level in an exclusion zone.
- The exclusion zones in the Forest Practices Code should be adopted in the Code for both forestry and agricultural spraying.
- Notification should be required prior to each spraying event. A copy of the notice should be provided to the Spray Coordinator.

- Notice should include details of the chemical to be used, a detailed map of the spray area, dates of spraying and contact details for the property owner, spray operator and Spray Unit.
- Notice should be given to all occupants within 200m of the property to be sprayed. Reasonable requests for notice by other owners within 1 km of the property should be complied with.
- Detailed records should be kept for 3 years and provided to the Spray Unit following the completion of the spray program.

These recommendations are discussed in greater detail below.

CASE STUDY: HOWARD AND MICHELLE CARPENTER

Howard and Michelle Carpenter have lived on a rural residential property in Wyena since December 2002. The property adjoins a large hardwood plantation.

On 10 August 2004, the Carpenters received notice that aerial spraying of Atrazine and Verdict would take place on the plantation “in the coming weeks.” A rough map accompanied the notice, however it was difficult to ascertain the area to be sprayed from the map.

The Carpenters did not receive any further notice regarding the spraying. On 18 August 2004, they were collecting wood from their perimeter fence when a helicopter commenced spraying on the adjacent plantation. The spray crossed the boundary and both Howard and Michelle were exposed to the spray drift.

Immediately following the spraying, Howard and Michelle experienced weeping eyes, runny noses and nausea. Howard, who had been most exposed to the spray, continued to show signs of poor health. His doctor believed his symptoms were consistent with the effects of exposure to chemicals and wrote to the forestry company censuring them for their aerial spraying practices.

The Carpenters notified the Spray Coordinator of the incident and he took water samples from the property on 20 August 2004. Test results identified Atrazine in a creek flowing through their property.

Subsequent samples taken on 9 September 2004 revealed Atrazine in the Carpenters’ water tank, which is filled from a spring-fed bore. After receiving advice from DPIWE that there was evidence of Atrazine in their water supply, the Carpenters contacted the forestry company. The company offered to install a new water tank on the Carpenters’ property (to be filled with town water) and agreed to provide bottled water to the Carpenters as necessary.

DPIWE continued to test water samples from the property on a regular basis. Frequently, the tests showed positive results for Atrazine. The results were below the guideline health values in the Australian Drinking Water Guidelines, however the Guidelines also note that Atrazine should not be detected in drinking water. Understandably, these results continued to concern the Carpenters.

The forestry company also took samples from the Carpenters’ property and conducted tests. The results of these tests were not made available to the Carpenters.

The Spray Information & Referral Unit prepared a brief for the Director of Public Prosecutions regarding the overspraying incident on 18 August 2004. Despite the persistence of Atrazine in the Carpenters’ water supply and ongoing health concerns noted by their doctor, the DPP found that there was insufficient evidence to sustain a prosecution against the property owner or spraying operator.

2. Administration of the Code

2.1. Should the role of administering the Code include negotiation and mediation or should it be restricted to the provision of information and strict enforcement of the provisions of the Code?

People affected by aerial spraying want the following outcomes:

- Assurance that their property / health is not adversely affected;
- Clean up of any contamination; and
- Confidence that a similar situation will not arise in future.

In general, people only want offenders to be punished to the extent that it will deter future breaches of the Code. It is clearly preferable that satisfactory outcomes are achieved through negotiation and mediation, rather than legal action.

The Discussion Paper notes that a significant number of disputes reported to Spray Unit are successfully resolved through negotiation and mediation. Given the expertise and experience of the Spray Unit, it is appropriate that they continue to assist in the resolution of disputes between affected parties by acting as an independent mediator / arbitrator.

The Carpenters received little assistance from the Spray Unit in negotiations with the property owner. They had to contact the company directly to arrange the alternative water supply and to discuss testing – they found this direct contact daunting and stressful. As part of its mediation role, it is important for the Spray Unit to recognise the difficulties individuals may experience in mediating with larger companies.

It is also critical that a cooperative approach is not allowed to compromise the enforcement role of the Spray Unit. Affected parties need to have confidence that, where negotiations are inappropriate or fail to secure an acceptable outcome, the Spray Unit will pursue enforcement action. Further, without a genuine commitment to enforcement, there is little incentive for property owners and spray operators to participate in mediation or negotiation.

It may be appropriate to establish a dedicated enforcement officer within the Spray Unit or to refer all enforcement activities to the Compliance Unit within the Environment Division. This would allow officers to participate in negotiations without compromising their independence in the event that enforcement action was subsequently taken.

2.2. Does the Code in its present form successfully merge regulatory and education/awareness functions, or fail to do either?

As discussed below, we do not believe that the Code should have a regulatory function.

There are obvious advantages to having one document that sets out legal obligations and best practice guidance for aerial spraying. However, the Code should *identify* legal obligations, rather than impose them. One good example of such a document is the *Code of Practice for the Use of Agricultural and Veterinary Chemicals in Western Australia* (3rd edition, 2005). This Code

provides detailed guidance for users and clearly highlights obligations that are enforceable under relevant state and federal laws.

Both the WA Code and the *Code of Practice for Farm Chemical Spray Application* (1999, Department of Natural Resources and Environment, Victoria) provide excellent examples of comprehensive, easy-to-read guidance on best practice in the storage, use and application of agricultural chemicals.

3. Compliance and Enforcement

3.1. Should the Code be a regulatory document or an advisory document that provides guidance on best practice?

In our view, the Code should not be a regulatory document but should instead focus on providing practical guidance for best practice aerial spraying. Any provisions specifically regulating aerial spraying should be included within the *Agricultural and Veterinary Chemicals (Control of Use) Act 1995* or its regulations.

However, understanding legal obligations imposed on landowners and spray operators is an important aspect of best practice. Therefore, we recommend that the Code provide a clear overview of these obligations as well as clear and comprehensive guidance on best practice. The WA Code is a good model for this approach.

3.2. Is there a place for infringement notices in enforcing the provisions of the Code?

Effective enforcement is vital to maintaining public confidence in regulation of aerial spraying. However, as the Discussion Paper notes, the time and resources required to prosecute an offence have meant that no prosecutions have been undertaken to date.

The 2005/2006 budget provides for implementation of the Chemical Usage Action Plan, including increasing the capacity of the Spray Unit to investigate complaints. Improved investigation capacity will also improve enforcement capacity.

It is also important that a range of enforcement options is available to address various contraventions. We therefore support the introduction of infringement notices for lesser offences, including:

- Failing to notify neighbours;
- Failing to maintain records;
- Failing to produce records on request.

However, infringement notices can only address minor infringements and cannot impose any obligation to take remedial action. In many situations, affected neighbours will be more interested in rehabilitation of their property than in obtaining a prosecution. In the Carpenters' situation, the forestry company *voluntarily* agreed to provide an alternative water supply until the situation was resolved. There is currently no mechanism to compel a property manager / spray operator to take these kinds of actions

We would therefore support the introduction of an enforcement tool to allow the Registrar to order an offender to take particular actions, such as implementing a monitoring plan, rehabilitating an affected area or providing an alternative water supply while testing is carried out. For example, an enforcement tool could be introduced as follows:

- Affected property owners can make a complaint to the Spray Unit within 14 days of the spraying incident. The Spray Coordinator must investigate all genuine complaints (including taking samples, where appropriate).
- Following this investigation, if the Spray Coordinator is satisfied that a breach of the Code / Regulations may have occurred (e.g. if test results show chemical residues within a exclusion zone), he may issue a *show cause notice* outlining the reasons that he thinks an offence has been committed.
- The property manager or spray operator is able to make comments about why an *enforcement notice* should not be issued (e.g. by demonstrating that aerial spray was not discharged in the exclusion zone and that wind conditions were appropriate on the day of the incident).
- If the Spray Coordinator still considers that a breach occurred, the Registrar can issue an *enforcement notice* requiring the offender to take certain actions, such as carrying out testing, implementing new work practice guidelines, conducting remedial work in the affected exclusion zone or providing an alternative water supply. This notice would be similar to an Environment Protection Notice under the *Environmental Management and Pollution Control Act 1994*.

The notice may also prevent further aerial spraying on the property until the notice is complied with.

- As for other decisions under section 57 of the *Agricultural and Veterinary Chemicals (Control of Use) Act 1995*, the decision to issue an enforcement notice could be reviewed by the Resource Management and Planning Appeal Tribunal.

The Registrar should also be able to utilise the option of suspending or cancelling a pilot (chemical rating) licence where, in his opinion, a provision of the Code / Regulations has been breached.

4. Specific Requirements

4.1. Exclusion Zones

Should the exclusion zones in the Code be prescribed in terms of prohibiting discharge of chemical product or prohibiting spray drift into the zones?

As demonstrated by the Carpenters' situation, neighbours are primarily concerned by the presence of chemical residues in sensitive areas / exclusion zones. We acknowledge that it is difficult to protect against spray drift through the regulation of discharges.

In our view, it would be appropriate to create the following offences:

- Causing an agricultural chemical to be deposited within an exclusion zone;

- Carrying out, or causing to be carried out, aerial spraying in a manner that might reasonably be expected to create a residue above the prescribed level on any premises within an exclusion zone.

Another option to overcome some evidentiary difficulties may be to reverse the onus of proof in situations where residue above a prescribed level is found within an exclusion zone. In such situations, the spray operator would have to demonstrate that they had **not** discharged chemicals within the exclusion zone or carried out spraying in a way that created residue in an exclusion zone (e.g. by discharging during inappropriate wind conditions).

How appropriate is the current performance-based approach to regulating off-target spray drift?

Given the range of circumstances that will affect a spraying operation, it is appropriate to rely on a performance-based approach to regulating spray drift.

However, a performance-based approach should be supported by amendments to the Code to provide comprehensive guidance to pilots and operators regarding best practice. For example, the Code should provide guidance on safe release heights and distances, adjusting for weather conditions and identifying sensitive areas (see comments below about sensitive areas).

Should the exclusion zones prescribed in the Forest Practices Code be incorporated into the Code of Practice for Aerial Spraying and if so, should they apply to aerial spraying in agriculture as well as forestry?

The exclusion zones prescribed in the Forest Practices Code should be adopted in the Code for all aerial spraying activities. This will ensure a consistent approach to the protection of waterways.

4.2. Pre-Spray Notification

Are the notification requirements of the Code appropriate?

The experience of the Carpenters highlights two principal deficiencies in the current notification requirements that need to be addressed:

- Notification needs to be given for specific spraying incidents.
- Notification needs to include a detailed map of the area to be sprayed.

The extent of the notification area is another issue of concern.

Time of notification

Currently, the Code requires property managers to advise occupiers of premises within 100m of the spray target “*before commencing a spraying program*”. However, a general notification that spraying will occur “*in the coming weeks*” is not sufficient to allow residents to protect themselves and their property from the risks associated with spray drift. If the Carpenters had received more immediate notice of the spraying, it is very unlikely that they would have been directly exposed to the chemical spray drift.

It is also important for notice to be given with sufficient time for an affected party to raise concerns with the property owner / spraying operator. For

example, the Discussion Paper notes that making spraying operators aware of particular sensitivities of people will reduce disputes. However, this is only possible where the parties have been advised of the proposed spraying in time to make the spray operator aware of their sensitivity.

Similarly, the map provided to the spraying operator may be outdated and omit relevant sensitive areas, such as waterways, dwellings etc. Notice of proposed spraying, including a map of the spray area, must be given sufficiently in advance of spraying to allow neighbours to notify the property owner of any inaccuracies in the map and identify additional sensitive areas. This will allow the spray operator to prepare an appropriate spray plan.

Therefore, we recommend that a notice of intention to spray be given two weeks prior to the intended date of spraying, providing a map of the spray area and contact details for the property manager. It may be difficult to specify a date for spraying at that time, as weather conditions will need to be taken into account. Therefore, further notice of the actual date of spraying activities should be given to affected parties 24 hours before the spraying program commences.

Clearly, this approach to notification will involve additional costs. However, we submit that appropriate notification procedures will significantly reduce complaints and allow neighbours to protect themselves and their property against the potential impacts of spray drift.

Information to be provided in notice

Currently, property owners are required to advise the principal of a school within 1km of the chemical products to be used. They are also required to advise neighbours within 100m of “*the intended spray program and safety precautions being taken to avoid spray drift*”.

To be consistent, all notification of a spray program should include the following information:

- A map of the spray area
- Details of the chemical to be sprayed, including any information about its use, toxicity rating and potential impacts
- Details of precautions taken to reduce spray drift
- Details of the property owner and the spray operator
- The date/s on which spraying is to be carried out
- Contact details for the property owner and the Spray Unit

A standard *Notice of Intent to Carry Out A Spray Program* form should be produced by the Spray Unit to ensure consistency in notification.

Extent of notification

Given the potential extent and impact of spray drift, we recommend that the notification zone be extended to include premises within 200m of the property to be sprayed.

Further, some property owners outside the notification zone may also wish to be notified. For example, apiarists, aquaculture operators, owners of sensitive

places (such as hospitals, nurseries) and people with a particular sensitivity to chemicals may have legitimate concerns about spray drift. The Code should provide that all reasonable requests for notification from property owners within 1km of the premises to be sprayed should be complied with.

Section 31 of the *Agricultural and Veterinary Chemicals (Control of Use) Act 1995* should be amended to allow property owners to apply to be notified of spray programs involving Schedule 5 chemicals.

Pre-notification to government

Recent concerns raised by oyster farmers in Georges Bay and health professionals in the St Helens area clearly demonstrate the benefits of collecting and collating data about aerial spraying activities throughout Tasmania. Such information would improve knowledge and management of chemical levels in soil, surface water and groundwater.

In general, it is appropriate that this information is collected through post-spray notification, requiring records kept under the Code (see below) to be provided to the Spray Unit within two weeks of the completion of the spraying operation. It is appropriate that these post-spray notification requirements extend to ground spraying activities.

Pre-spray notification would also allow the Spray Unit to be aware of proposed spraying activities. This information will improve complaints handling and compliance auditing. However, in our view it would be sufficient to require a copy of a *Notice of Intent to Carry Out A Spray Program* to be sent to the Spray Coordinator when notice is given to neighbours. More detailed information can be provided following the spray program.

Implementing a compulsory system of notification will involve additional expense. However, we note that the 2005/2006 budget allows for the implementation of the Chemical Usage Action Plan, which includes funding for “better coordination and access to monitoring information” and “a system to better predict patterns of chemical use in Tasmania.”

4.3. Are the record keeping requirements of the Code appropriate?

In our view, the current record keeping requirements are insufficient. Records kept by property managers and spray operators should include the following information:

- Name and quantity of chemical product;
- Batch number and expiry date of chemical product;
- Specific written precautions received with the chemical product (other than those on the label);
- Withholding period;
- Location and dimensions of spray area;
- Type of vegetation in the spray area;
- Name of pest or disease to be controlled or eradicated by the spraying;

- Weather conditions at time of spraying - temperature, wind direction and speed, humidity;
- Date and time of application;
- Rate and method of application;
- Name and address of the property manager and spray operator.

As discussed above, these records should be provided to the Spray Unit as a matter of course following the conclusion of spraying activities.

Currently, the Code requires records to be retained for two years. This is consistent with the requirement in the Act that prosecutions be commenced within 18 months of the offence. However, it is also possible for action to be taken under the *Environmental Management and Pollution Control Act 1994* where a breach of the Code / Regulations causes environmental harm. Civil enforcement actions under EMPCA may be commenced at any time within 3 years after the date of the incident. Therefore, we recommend that records be retained for **3 years**.

4.4. What criteria should be used to set pesticide residue levels that represent an adverse effect in relation to groundwater, soil and premises?

It is critical to sustain a prosecution for contamination of groundwater, soil and premises under section 30 of the Act that chemical residues above a prescribed level can be identified. It would therefore be appropriate to determine specific levels and prescribe these in the legislation to ensure that section 30 is effective. However, we are not in a position to comment about what these levels should be.

Please do not hesitate to contact us if you wish to discuss any of the comments made in this submission.

Yours sincerely,
Environmental Defenders Office (Tas) Inc
Per:

Jessica Feehely
Principal Lawyer