edotasmania
using the law to protect the natural and built environment

**131 Macquarie Street**
**Hobart TAS 7000**

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

20 July 2011

Claire Reeves
Biosecurity and Product Integrity Division
Department of Primary Industries, Parks, Water and Environment
GPO Box 44
Hobart TAS 7001

***By email***: claire.reeves@dpipwe.tas.gov.au

Dear Ms Reeves

## DRAFT AGRICULTURAL SPRAYING REGULATIONS 2011

The Environmental Defenders Office (***EDO***) is a non-profit, community based legal service specialising in environmental and planning law. We welcome the opportunity to comment on the draft *Agricultural & Veterinary Chemicals (Control of Use) Regulations 2011* (the ***draft Regulations***).

We commend the Department for the advances made to improve the strength and enforceability of the Regulations, however remain concerned that not enough has been done to ensure the primacy of safeguarding human and environmental health in the management of agricultural chemical use in Tasmania.

Our comments generally follow the order of the draft Regulations and the discussion in the Regulatory Impact Statement (***RIS***). Comments are also provided in respect of several areas where we believe that additional regulation would be appropriate.

**SUMMARY OF KEY RECOMMENDATIONS**

- Include conduct that poses a threat to public or environmental health as a 'prescribed ground' for cancellation of licences and permits.
- Ban all use of TBT and triazines and restrict spraying of 2,4-D in wine-growing areas
- Only issue spraying permits for where other control methods are unavailable
- Aerial spraying should not occur within 300m of occupied premises
- Copies of all spraying records should be sent to the Registrar and maintained in a publicly accessible database. Records should be retained for 6 years.
- Residents within 1km be able to request notification of spraying activities
- Notification should be given at least one week prior to spraying to ensure neighbours have time to raise concerns
- Increase no-residue buffer near water bodies to 10m, and do not allow consent to high residues being present in farm dams, given risk of run-off and leaching
- New enforcement notice to allow Registrar to order spraying activities to cease or be carried out in a particular manner impose conditions, or to require remediation work
- Introduce higher, graduated penalties for offences

## GROUNDS FOR SUSPENDING OR CANCELLING LICENCE

Schedule 5 of the *Agricultural and Veterinary Chemicals (Control of Use) Act 1995* (***the Act***) provides that permits, licences and authorities may be suspended or cancelled on "prescribed grounds". Authorities may also be cancelled or suspended where the holder has been convicted of an offence against the Act.

Prescribed grounds in respect of a certificate of competency and a pilot (chemical rating) licence are set out in rr.7 and 13 of the draft Regulations. The grounds include that the Registrar is satisfied that the holder is not able to competently and safely handle listed chemicals or carry out aerial spraying.

We recommend further prescribed grounds be outlined, to allow suspension or cancellation of any authority, including a commercial operator licence and an agricultural spraying permit, where the Registrar reasonably believes that the holder has engaged in conduct that:

- poses a threat to the health or safety of any individual or the public;
- has caused or is likely to cause environmental harm, within the meaning of the *Environmental Management and Pollution Control Act 1994*.

A similar ground is provided at r.26 of the *Health (Pesticides) Regulations 2011* (WA). We believe that such a ground would provide the Registrar with appropriate powers to sanction inappropriate spraying activities, without the need to wait for the outcome of a prosecution before suspending an operator's licence. The licensee or permit holder would be able to challenge any decision to suspend or cancel their authority by appealing to the Resource Management and Planning Appeal Tribunal.

## CONCERNS REGARDING SPECIFIC CHEMICALS

### *Tributyltin*

Regulation 18 prohibits the use of tributyltin (***TBT***) antifoulants on a vessel with a hull less than 25m, and requires a permit to use TBT on any other vessel. Allowing the application of TBT to larger vessels is consistent with the current ANZECC Code of Practice for Antifouling and Inwater Hull Cleaning and Maintenance. However, the *International Convention on the Control of Harmful Antifouling Systems on Ships*, which took effect on 17 September 2008, bans the application of TBT-based antifoulants to any vessel.

Tasmania was a national leader in responding to international concern regarding environmental impacts associated with the use of TBT, and banned its use on small vessels in the 1990s. Following scientific concerns about the impact of antifoulants on the shellfish industry, the government also restricted the sale of TBT in 2002. DPIPWE should maintain its leadership on this issue and prohibit all use of TBT in Tasmania.

### *Triazines*

There is significant scientific support for the banning of the triazine group of chemicals in Tasmania, including the endochrine-disrupting atrazine, and simazine. Studies have demonstrated that these chemicals can interfere with immunity, fertility and development in aquatic species

Due to our cooler temperatures and general climatic conditions, triazines persist in the Tasmanian environment considerably longer than in other places and can be detected in soils up to a year after application[1]. We acknowledge the provision made in the draft Regulations regarding recurrent exceedances of triazines. However, in recognition of the potential risks to Tasmania's expansive drinking water catchments, we recommend that a precautionary approach be adopted and the use of these chemicals be entirely prohibited.

[1] Kookana, R & Ors. 2010. "Impact of climatic and soil conditions on environmental fate of atrazine used under plantation forestry in Australia". *Journal of Environmental Management* 91(12), pp 2649-56.

### *2,4-D*

The DPIPWE guidelines recognise that 2,4-D is quite volatile and poses a significant risk to susceptible non-target crops. A permit is currently required to use 2,4-D between 15 September and 15 April (the growing season for many susceptible species), and will only be issued after consideration of factors including the availability of alternative control methods. The guidelines recognise that spray drift can occur outside the designated permit period.

In Western Australia, the *Agriculture and Related Resources Protection Act 1976* regulates the risk to crops by prohibiting the spraying of acids such as 2,4-D within 5km of areas where tomatoes and grapevines are grown commercially. A similar restriction (whether generally or in designated wine-growing precincts) would be beneficial in Tasmania.

### *Substitution for less toxic chemicals*

As noted above, permits for 2,4-D will only be issued where the Registrar is satisfied that no alternative herbicides or weed control methods are available or that such other methods are impractical. This is a similar approach to that adopted by DPIPWE in assessing applications for permits to shoot browsing animals.

We strongly recommend that spraying permits be required in respect of volatile or highly toxic chemicals (including those listed in Schedule 4 of the draft Regulations), and be subject to a requirement to demonstrate that the use of non-chemical or less toxic control methods is not practical. Such an approach is consistent with clause 44.1 of the *State Policy on Water Quality Management 1997*, which provides:

> Any person proposing to use chemicals to control pests (including weeds) in streams or along stream banks should first investigate, and, wherever practical, use nonchemical means of control unless it can be demonstrated that chemical control poses a lesser net environmental risk than other practical options.

## NO-SPRAYING ZONE FOR AERIAL SPRAYING

In our view, the restrictions on aerial spraying near occupied premises in r.31 are inadequate to protect against such premises being subjected to spray drift.

Where spraying activities actually result in residues being present on those premises, it would be possible to take enforcement action against the spray operator. However, the risk of prosecution may not be sufficient to encourage best practice spray planning and chemical application (see below re inadequacy of penalties). Instead, it is preferable to minimise the risk of spray drift occurring by requiring wider no-spray protection buffers.

The APVMA guidance on Protective No-Spraying Zones[2] notes that spray drift may be deposited up to 800m from the target in some circumstances. Anecdotally, many people have contacted the EDO to complain about the impacts of spray drift as much as 1km from the target site. We recommend that r.31 be amended to prohibit aerial spraying within 300m of occupied premises.

As outlined below, we also recommend that the Registrar be given power to issue a spraying notice which may impose more stringent conditions where warranted (e.g due to the particular sensitivity of the adjoining properties, geographic conditions or the toxicity of the chemical).

## INSTRUCTIONS TO SPRAY OPERATORS

The draft Regulations place the onus on landowners or employers to carry out notification and give detailed instructions to contractors in respect of proposed spraying (rr. 32 & 33). This is appropriate, however we note the concern recently raised by the Product Safety and Integrity Committee that inaccurate advice can often be given to contractors regarding the

[2] http://www.apvma.gov.au/use_safely/spray_drift/zones.php

use of chemicals.[3] While the PSIC concern was raised in respect of advice regarding off-label applications, it is an issue that can also arise in respect of instructions given by a landowner.

The draft Regulations require the contractor to ensure that they have been given all the necessary instructions, however it is not clear what obligation they have to implement those instructions.

We recommend that the draft Regulations make it clear that compliance with instructions does not obviate the need for caution and will not provide a defence to any offence under rr.38-42. It should also be an offence for an employer to give instructions which pose a threat to public or environmental health (in addition to the employer responsibility provisions in s.62 of the Act).

## RECORD KEEPING

We strongly support the level of information required of records kept under r.34(3), but recommend that the records also include the type of equipment used to conduct the spraying activity. We also support the requirement to record the information within 24 hours of the spraying activities occurring.

### *Public access to records*

There is considerable public interest (and concern) regarding the management of agricultural chemicals in Tasmania, particularly in respect of impacts on drinking water. Providing public access to information regarding pesticide use is an important way of facilitating public involvement in catchment management and improving confidence in the regulatory system. Facilitating public access to information regarding pesticide use is consistent with the objectives of the Resource Management and Planning System.

We recommend that a copy of all spraying records should be sent to the Chemical Management Branch within a reasonable time of the spray event. Ideally, such records should be maintained in an easily accessible database, along with the results of the pesticide monitoring programme. This would enable the public to access information regarding chemical use in their area, and plan their activities accordingly (e.g. a purchaser could assess the viability of a potential organic farming operation by checking the level of chemical usage in the catchment).

At the very least, requiring a copy of the record to be sent to the Registrar would allow access to the record under the *Right to Information Act 2009*.

### *Retention of records*

The draft Regulations require spraying records to be retained for two years, consistent with the requirement in the Act that prosecutions be commenced within 18 months of any spraying offence.

However, spraying activities may also give rise to offences under the *Environmental Management and Pollution Control Act 1994* or actions for damages in common law. Civil enforcement actions under EMPCA may be commenced at any time within 3 years after the date of the incident[4], while common law actions can be commenced within 6 years.[5]

To ensure potential civil claims for harm resulting from spraying activities are not compromised, we recommend that r. 34(3) be amended to require records to be kept for **6 years**.

---

[3] *Consultation Regulation Impact Statement - National Scheme for Assessment, Registration and Control of Use of Agricultural and Veterinary Chemical*, 2011, pp 58-59

[4] Section 48 of the *Environmental Management and Pollution Control Act 1994*

[5] Section 4(1) of the *Limitation of Actions Act 1974*

## NOTIFICATION

We strongly support the level of detail required to be provided to neighbours. However, we believe that the notification requirements should be strengthened to provide greater protection to people who will potentially be affected by spraying activities.

### *Who should be notified?*

Many problems in respect of adverse impacts (or the perception of adverse impacts) associated with spraying can be addressed through notification. Given the potential extent and impact of spray drift, we recommend:

- notification of aerial spraying be given to all premises within 200m of the property to be sprayed;
- notification of ground spraying activities be given to all premises within 50m, rather than requiring a request to have been made by the owner or occupier. As most spraying occurs in rural areas, or is undertaken by Councils, it is unlikely that notification of residents within such a small radius would be a significant burden.

The proposed amendments to the Act will remove s.31, which allows long term residents within a prescribed distance to request notification of prescribed spraying events. We do not support the removal of this provision.

Some property owners outside the notification zone may also have a legitimate desire to receive notification in respect of spraying events, including apiarists, aquaculture operators, organic farmers and people with a particular sensitivity to chemicals. The draft Regulations should include a provision requiring notification to be given to any owner or occupier within 1km of the property to be sprayed who has made a written request for notification.

### *Time of notification*

The draft Regulations require notification to be given at least 2 days, but not more than 28 days, before the spraying event. While we acknowledge the difficulty in providing detailed advice far in advance (given that spraying events depend on weather conditions), it is important for notice to be given with sufficient time for an affected party to raise concerns with the landowner / spraying operator.

Allowing adequate time for a response from potentially affected parties will reduce disputes, and may reduce health and environmental impacts. For example, the map provided to the spraying operator may be outdated and omit relevant sensitive areas, such as waterways, dwellings etc. With adequate notice, neighbours can alert the spray operator to these inaccuracies and allow a more appropriate spraying plan to be implemented.

Significantly, the draft Regulations provide a defence for operators who cause a residue to be deposited on an organic farm where the operator was not aware the property was an organic farm / seeking organic certification. Given that any chemical residue could have significant economic consequences for the organic farmer, it is essential that they be given sufficient notice to allow them to advise the owner / operator about their organic status.

We recommend that a notice of intention to spray be given at least one week prior to the intended date of spraying, with further notice of the actual date of spraying to be given 24 - 48 hours before the spraying program commences. We acknowledge that this is an additional cost for operators, but believe that broader notification obligations are appropriate, and can benefit all parties by improving spraying plans, reducing complaints and allowing neighbours to protect themselves and their property against the potential impacts of spray drift.

## OFFENCES IN RESPECT OF CHEMICAL RESIDUES

We are generally supportive of the strict offences approach taken by the draft Regulations in respect of chemical residues, particularly the prohibition on residues in areas not zoned rural or primary industry and on properties subject to an organic agreement. We also support the maintenance of a 'safety-net' provision at r.42, allowing prosecution where spraying activities have an "adverse effect". However, we have some concerns regarding the particular offence provisions outlined in rr.39-41.

### *Inadequate buffer distance*

In response to a question during Budget Estimates, Minister Bryan Green stated

> *We need to be in a position where we restrict as much as we possibly can any contaminants getting into the waterways in Tasmania.*[6]

To this end, we were supportive of the proposal in the draft regulations 2008 to provide a 10m buffer zone near water bodies to minimise the impacts of spray drift and secondary movement of pesticides through run-off. We do not support the reduction of these buffer areas to 2 metres, as the reduced distance is not adequate to prevent leaching, run-off and drift following volatilisation.

The regulatory priority for the Chemical Management Branch should be maintaining public and environmental health, so it is disappointing that economic arguments against wider buffers have been so influential. As is properly acknowledged in the RIS, the costs to industry need to be balanced against the greater community good resulting from protection of watercourses.

While we acknowledge that it remains an offence for residues to be detected in the water body itself, the weakness of monitoring and the higher rate of dispersal once a chemical is in water make it important to provide stronger mechanisms to avoid deposition into the water body in the first place.

We recommend that r.40 be amended to prohibit detection of residues within 10m of a water body. To the extent that some accommodation is made for industry concerns regarding this issue, we recommend that, at least, a gradation of buffer zones be adopted so that no residues may be detected within 10m of significant waterways. The classifications used in the Forest Practices Code may provide appropriate guidance in this regard.

### *Consent to residues in or near artificial water bodies*

Regulation 39(4) allows chemical residues (including for restricted chemicals) in excess of prescribed levels to be present in artificial water bodies with the consent of the owner. Similarly, r.40(2) allows residues to be present within 2m of an artificial water body with the consent of the owner.

These provisions ignore the interconnectedness of water systems, and potentially allow significant residue to be subsequently dispersed to surface and groundwater. Even water in an off-stream farm dam is likely to move to more sensitive aquatic environments (including groundwater supplies) by overflow, leaching and subsequent transport via sub-surface drainage water.[7]

We recommend that the defence of consent be removed from the draft Regulations.

---

[6] House of Assembly Budget Estimates, Hansard, 27 June 2011

[7] Wightwick, A and Allinson, G. 2007. "Pesticide Residue in Victorian Waterways: A Review" in *Australasian Journal Of Ecotoxicology* Vol I (13), pp. 91-112 at 102

***Exclusions for orchards etc***

While we acknowledge difficulties experienced in maintaining orchards and vineyards in rural residential areas, the potential impacts on neighbours also need to be carefully managed. We recommend that:

- r.41(8)(b) be amended to also provide that agricultural chemical residues are not detected at a level that would be likely to have an adverse impact on the health of domestic pets or domestic vegetation / gardens
- the transition period provided by r.41(9) be reduced to 2 years.

***Offence in relation to storage***

We also recommend an additional offence to ensure that agricultural chemicals are handled appropriately (other than during spraying activities). This could be similar to the offence of depositing a pollutant where environmental harm may be caused (s.51A of EMPCA), and be something along the lines of:

> *A person must not keep, handle, deposit or use an agricultural chemical product, or allow an agricultural chemical product to be kept, handled, deposited or used in a manner that might reasonably be expected to be dangerous or to pose a threat to the health or safety of any individual or to cause material or serious environmental harm.*

**MONITORING AND ENFORCEMENT ISSUES**

We are supportive of the current process investigating the development of nationally consistent regulations, but also recognise the need to take action in Tasmania in advance of these national reforms. However, any reforms at the state level should be broadly consistent with the national reforms agenda.

The APVMA's Discussion Paper, *Proposed reforms: Better Regulation of Agricultural and Veterinary Chemicals Policy* (Nov 2010), notes:

> *Control of use of agvet chemicals encompasses a wide range of monitoring, surveillance, informing and enforcement activities… To be effective in that sense, control of use regulators would need to have a comprehensive set of powers designed to ensure the protection of human health, trade and the environment (including non-target plants and animals on site), the property of neighbours and the public. The set of powers would:*
>
> - *be sufficiently broad to allow effective monitoring, sampling, traceback and enforcement;*
> - *be flexible, allowing graduated action targeted to the most effective solution for each set of circumstances, rather than relying on prosecution as the first or primary regulatory response, and including powers such as the ability to;*
>  - *prevent sales of contaminated produce*
>  - *deny access to chemicals for non compliers;*
>  - *require retraining for non compliers;*
> - *include provision for establishment and enforcement of conditions such as buffer and exclusion zones;*
> - *include notification provisions (including neighbour notification); and*
> - *be restricted only in ways intended to prevent the imposition of unreasonable regulatory burden.*

***Monitoring***

We agree that regulatory powers should allow for effective monitoring, sampling and traceback activities. In general, monitoring of chemical application in Tasmania occurs largely through self-reporting by chemical users, or by reactive investigations in response to complaints. As noted by the AVPMA Discussion Paper, "*more complete and coordinated monitoring systems would provide more effective risk management*." [8]

[8] See APVMA Discussion Paper, p52

The current pesticide monitoring programme for designated waterways is incredibly valuable, but should be augmented by regular audits and surveillance of spraying activities. We encourage the government to provide adequate resources to allow the Chemical Management Branch to engage in more pro-active monitoring and to make better use of local intelligence (such as Waterwatch records) to guide monitoring efforts.

Sufficient resources must also be dedicated to enabling effective traceback investigations where monitoring identifies off-site residues.

We support the power under r.47 to require testing to be carried out at the owner's expense if the owner has been found guilty of an offence against the Act within the previous year.

We also recommend that a provision similar to s.15 of the *Chemical Usage (Agricultural and Veterinary) Control Act 1988* (Qld) be introduced to require landowners to report any spraying incidents or notify DPIPWE if they are aware of any exceedances in respect of agricultural chemical residues. This is consistent with the approach adopted in ss.32 and 74B of EMPCA.

***Enforcement tools***

Monitoring activities are only useful where any detected non-compliance is acted upon. The APVMA Discussion Paper notes the importance of a "*comprehensive, graduated and contemporary enforcement regime*". In our view, the key components of such a regime must be:

- range of enforcement tools to tailor penalties to the offence;
- penalties that serve as a deterrent; and
- ability to require remedial action.

We recommend giving the Registrar an additional enforcement tool, in the form of a "spraying notice". A spraying notice (similar to an Environment Protection Notice) could be issued where the Registrar is satisfied that spraying activities have resulted in, or are likely to result in, adverse impacts on public or environmental health.[9]

A spraying notice could require the recipient to:

- cease / not start particular spraying activities (e.g. where a neighbour has contacted the Spray Information Unit in response to a notification and raised legitimate concerns);
- carry out spraying activities in a particular manner (e.g. increased buffer distances to reflect the sensitivity of the surrounding environment);
- implement a monitoring plan;
- rehabilitate an affected area; or
- provide an alternative water supply to a neighbouring property while testing is carried out to identify chemical residues in the water.

As for other decisions under section 57 of the Act, the decision to issue a spraying notice could be reviewed by the Resource Management and Planning Appeal Tribunal.

***Appropriate penalties***

We also believe that the maximum penalties outlined in the draft Regulations are inadequate, given the potential seriousness of pesticide contamination and the need to deter inappropriate spraying activities. Currently, the penalties are capped at 200 penalty units, regardless of the extent of residues resulting from the spraying activities, or whether the spraying was carried out recklessly / wilfully.

[9] See also, powers of public health officials to stop pest management activities where "necessary for the purposes of protecting the health and safety of any individual or the public" under rr.104-105 of the *Health (Pesticides) Regulations 2011* (WA).

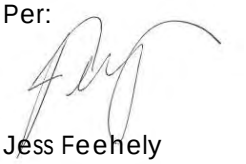
We recommend that the offence provisions include a graduation of penalties, with the maximum fines being consistent with those imposed in respect of environmental harm offences under EMPCA. For example, the potential penalties for a person who causes material environmental harm are:

- where the harm is caused intentionally or recklessly, a fine up to 1,200 penalty units or 2 years imprisonment;
- otherwise, a fine up to 600 penalty units.

The maximum fines are not mandatory and, in any proceedings in relation to an offence, the Magistrates Court can determine whether it is appropriate to impose a fine at the maximum level. However, in order to act as a deterrent, we believe that it is important to provide the court with the capacity to impose a significant fine where appropriate.

The EDO appreciates the opportunity to make these comments. Please do not hesitate to contact us to discuss any issue raised in this submission.

Kind regards,
**Environmental Defenders Office (Tas) Inc**
Per:



Jess Feehely
Principal Lawyer