THE THREAT OF PESTICIDE SPRAY DRIFT

A COMMUNITY INFORMATION & ACTION KIT

National Toxics Network Inc

The **National Toxics Network Inc. (NTN)** is a community based network working for pollution reduction, protection of environmental health and environmental justice for all.

YOU CAN HELP US!

NTN is a not-for-profit organisation with very few overheads.
Your donation will immediately make a difference to our campaigns.

Please download a membership/donation form off our website today and join the network of people working globally to secure a ***toxic free future for all.***

www.ntn.org.au

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Notice

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Why we need a Pesticide Spray Drift Kit

It wasn't all that long ago that government agencies and commercial pesticide applicators denied pesticide spray drift even occurred. These days it is hard to refute given how often it occurs and the damage that is done to people, the environment, crops and livestock.

The unfortunate fact is pesticide spray drift problems are getting worse with the increased use of pesticides and the intensification of high-pesticide using industries closer to residential areas and in water catchments.

In the sixty odd years since pesticides have been extensively used in Australia, laws to protect us from exposure to pesticides have not kept pace with the rapid changes in farming, spray equipment and land use practices.

People, wildlife and the environment are all negatively affected by exposure to spray drift. Farmers are also affected if they, their livestock or crops get exposed. Organic farmers are at risk of losing their certification if pesticides drift onto their properties and contaminate their produce.

The **Community Information and Action Kit** provides you essential information about pesticide regulation, the dangers of pesticide spray drift, how it occurs and what you can do about it.

The **Pesticide Spray Drift Reporting Form** *(pull out from the centre of this booklet)* will help you to collect important information should you be exposed to spray drift or you witness a spray drift incident.

What is NTN doing about spray drift?

The **National Toxics Network Inc. (NTN),** along with many other community-based organisations in Australia and around the world, are campaigning to raise awareness about the dangers to our health and the environment from exposure to pesticide spray drift.

While some changes have been made to laws in Australia, by and large they are still inadequate and inconsistent and do not effectively deal with spray drift issues. Some states have not reviewed their legislation for many years and a mishmash of legislation has developed across many departments resulting in a fractured approach to the investigation of spray drift incidents.

All too often the victims of spray drift find themselves confronted with a confusing bureaucratic or legal process that in the end offers them little protection, justice or compensation from the harm caused by exposure to spray drift.

We often hear people say they feel *'as if no one cares when they get exposed to pesticides'*.

Our Goals

- **NTN** aims to ensure regulators put the precautionary principle into action so they provide the best protection for people and the environment, as well as justice if harm is caused by pesticide spray drift.
- **NTN** aims to have the most dangerous and notorious spray drift pesticides banned in Australia. NTN believes some pesticides just can't be used without causing harm no matter how many label instructions are given.
- **NTN** aims to ensure regulators also address the post-application drift of pesticides into the broader environment and our bodies, which results in constant 'second hand exposure to pesticides'.

What to do during a spray drift incident

In the event of a spray drift incident:

- Evacuate the area, warn your neighbours and seek immediate medical attention. If you are sick, leave the area immediately, or call an ambulance, and then try to contact your neighbours by phone. Close all windows and doors and turn off air conditioning systems.
- If you were hit with spray drift (droplets or dust particles) and it contacted your skin, take a COLD shower as soon after exposure as you can. (NB Hot water will open your pores and allow more pesticides to be absorbed)
- If your clothes were directly hit by spray, remove them and place them in a sealed container or bag for testing. If you wash contaminated clothing, make sure it is done separately from other washing.
- Many doctors are not familiar with the symptoms of pesticide poisoning and may think that you have a cold or the flu. Be persistent and tell them that you were exposed to pesticides and these may be symptoms of pesticide poisoning. Demand to have a blood and urine test as soon as possible.
- Notify the relevant authorities of the incident as soon as possible. *(See Resources)*
- Make as many detailed notes about the incident as you can. Use the ***Incident Reporting Form*** in the middle of this booklet to guide your collection of information.
- Request air and residue monitoring from the relevant authorities. Air monitoring must be started as soon as possible to document inhalation exposures. Some pesticides are gases and will leave no residue, so in order to document drift, monitoring must start as soon as possible. Other pesticides leave residues from spray drift that will last for several days, but even residue sampling should be carried out as soon as possible after the incident.
- Record all details of your communication with agencies, including names of people you speak with, dates and times. Keep all correspondence you have with agencies, as well as any photos or videos you may have.

Use the ***Pesticide Spray Drift Reporting Form*** in the centre of this spray drift information kit to guide your collection of information.

What is a pesticide?

The word **pesticide** is a catchall for a wide range of products that kill 'pests' including: insecticides (kills insects), herbicides (kills plants), fungicides (kills fungi), rodenticides (kills mice and rats) etc.

The laws in your state or territory will define what a pesticide is. Some laws refer to pesticides while others refer to **agricultural chemical products**. Essentially these are the same thing, but check the definition in your legislation, as there may be subtle variations.

The Commonwealth legislation defines **agricultural chemical products** under the Agricultural and Veterinary Chemicals Code (the Agvet Code), scheduled to the *Agricultural and Veterinary Chemicals Act 1994*, and the *Agricultural and Veterinary Chemicals Code Regulations 1995*.

Definition

An **agricultural chemical product** includes any substance or organism used to:

- *destroy, stupefy, repel, inhibit the feeding of, or prevent pests on plants or other things;*
- *destroy a plant or to modify its physiology;*
- *modify the effect of another agricultural chemical product; or*
- *attract a pest for the purpose of destroying it.*

Who is responsible?

In Australia there is a division of responsibilities for regulating pesticides between the Commonwealth and the state and territory governments.

The **Australian Pesticides and Veterinary Medicines Authority (APVMA)** is the federal regulator of pesticides and exists within the portfolio of the Minister for Agriculture, Fisheries and Forestry.

The APVMA is responsible for the assessment and registration of pesticide products and for the provision of label instructions for the 'safe' use of those products. The APVMA is responsible for a pesticide product up to the **point of sale**.

Once a pesticide product has been purchased, the **control of use** of that product becomes the responsibility of the state or territory government agency that regulates them *(See Resources).*

While a user of a pesticide product must always follow label instructions, they may also need to comply with specific state or territory laws, or even local laws. For instance, there may be specific requirements for training, record keeping or notification of intended pesticide use in sensitive areas such as schools.

Industry bodies may also have guidelines for the use of pesticides or equipment, which are generally voluntary and internally monitored by the industry itself.

Is an insecticide a pesticide or is a herbicide a pesticide? The answer is YES in both cases.

What is pesticide spray drift?

There is no one definition for **pesticide spray drift**. Each state and territory has its own **control of use** laws that may or may not include a definition for spray drift. It is very important to get familiar with the laws in your state or territory, as they will be used to investigate any pesticide spray drift incident.

Spray drift is chemical trespass

The South Australian government has a very broad concept of **spray drift** that embraces the idea of **chemical trespass**. SA is, however, the only state that refers to spray drift in these terms.

According to SA policy, **chemical trespass** (spray drift) occurs where agricultural and veterinary chemicals are used or disposed of in a manner that causes:

- *Actual or potential contamination of land, animals or plants outside the target area*
- *Actual or potential harm to human health and safety (within or outside the target area)*
- *Actual or potential environmental harm (within or outside the target area)*

Examples of common **chemical trespass** incidents include:

- *Spray drift or contaminated run-off causing contamination or damage to crops and pastures*
- *Spray drift causing livestock contamination*
- *Spray drift, contaminated run-off or unacceptable disposal of unused or waste chemical causing environmental contamination*
- *Spray drift impacting on human health, eg: nausea, headache, respiratory irritation, skin irritation, eye irritation.*

APVMA definition of spray drift

The Australian Pesticides and Veterinary Medicines Authority (APVMA) has issued ***'Operating Principles in Relation to Spray Drift Risks'*** (July 2008) in which they define what they mean by spray drift.

The APVMA intends the term **spray drift** to mean the following:

- *Spray drift is the physical movement of spray droplets (and their dried remnants) through the air from the nozzle to any non- or off-target site at the time of application or soon thereafter.*
- *Spray drift shall not include secondary movement of agricultural chemicals to non- or off-target sites caused by volatility, erosion, surface or groundwater transport or windblown soil particles that occurs after application.*

Post application drift

The APVMA definition specifically excludes the **post application drift** of pesticides which can occur hours or even days after application.

The APVMA definition of spray drift only encompasses *"…the uninterrupted flight of a droplet from the nozzle to impact and capture by a physical object such as soil or plant surfaces. The words 'soon thereafter' typically refer to a time period of less than an hour"*.

Volatilisation drift is a significant problem and occurs when pesticides applied as liquids or oils evaporate or 'volatilise' into a gas after they are applied.

Unlike droplet spray drift or drift of dust particles, **volatilisation drift** is invisible, making it difficult to detect without monitoring equipment.

The APVMA says **volatility risk** is highly dependent on each chemical's properties (such as its inherent vapour pressure and Henry's constant), and since the chemical is moving as a gas rather than in liquid droplets, it must be assessed with different mathematical models and managed with different methods.

Drift of **pesticide-coated soil particles** occurs when high winds in agricultural areas create clouds of dust from pesticide treated fields which move and end up in gardens, inside homes and cars and the broader environment. Movement can also happen when it rains on treated fields.

APVMA re-assessing products

With the release of the *Operating Principles In Relation To Spray Drift Risks* the APVMA has formally acknowledged that spray drift occurs and that it is a significant problem.

The APVMA has announced it will carry out further risk assessment of some 2,800 agricultural chemical products (sprays and dusts) for spray drift risks. This implies that many products currently in use have not been properly assessed for spray drift risks and adequate controls may not be in place to ensure their 'safe' use.

The APVMA risk assessment process will look at various application methods including aerial application, application with ground hydraulic boom sprayers, air blast, handheld and back-pack equipment.

Application environments they will consider include agricultural crops, forest areas, pastures and rangelands, rights-of-way, recreational areas and turf.

If the APVMA risk assessment concludes that further controls are necessary to mitigate spray drift, they will include more label instructions on those pesticide products.

The model the APVMA is using to re-assess products for spray drift risks has limitations. For example, the model can only confidently predict what will happen in the case of ground-based applications of pesticides up to a distance of 300 metres downwind. For aerial application of pesticides the model confidently predicts up to 800 metres downwind.

You can download a copy of the ***APVMA Operating Principles in Relation to Spray Drift Risks*** (July 2008) from the APVMA **www.apvma.gov.au**

How does spray drift happen?

Spray drift can potentially occur with any application of pesticides regardless of whether it is carried out from the air or with equipment on the ground.

Spray drift can happen in both urban and rural areas including at work, home, school and when driving.

Because spray drift can also occur hours or even days after application, applying pesticides according to label instructions is not a guarantee that spray drift won't occur.

There are many factors which interact to determine whether a pesticide will drift or not, and the extent of that drift.

Factors influencing pesticide spray drift

- wind speed and direction
- pesticide formulation type
- calibration and maintenance of application equipment
- spray droplet size
- temperature and humidity
- atmospheric stability
- temperature inversions
- accuracy of weather forecasting
- crop height and type
- farm management (ie buffer zones)
- local geography
- skill of the pesticide applicator

Pesticides involved in spray drift

Organophosphates

Organophosphates (OPs) affect the nervous system by suppressing the enzyme that regulates acetylcholine, a neurotransmitter. The suppression leads to spasms and convulsions and finally to paralysis.

The action is the same in insects and humans. They are readily absorbed through the skin and have high acute toxicity.

Carbamates

Carbamates affect the nervous system in the same way as OPs. There are several subgroups within the carbamates as they can be used as insecticides, herbicides and fungicides.

Organochlorines

Many organochlorines (OCs) have been banned due to their health and environmental effects (e.g. DDT and chlordane). Many are endocrine (hormone) disruptors. A commonly used OC in Australia, but banned in over 60 countries, is endosulfan.

Pyrethroids

Pyrethroids are a synthetic version of the naturally occurring pyrethrin. Some synthetic pyrethroids are toxic to the nervous system and some are suspected endocrine disruptors.

Herbicides:

Herbicides are 'selective' or 'non-selective' eg phenoxyacetic acid herbicides (2,4-D, MCPA), triazoles (amitrole), triazines (atrazine), benzoics (dicamba), bipyridiums (diquat, paraquat) and others such as glyphosate.

Aerial operators and pilots must adhere to controls administered by the Civil Aviation Safety Authority. Air navigation requirements specify that aircrafts should not be flown below 107 metres within 100 metre horizontally of an occupied building except with the agreement of the occupier. **www.casa.gov.au**

Spray drift is dangerous to your health

There is still so much we do not know about health problems that result from pesticide exposures. Most pesticides have never been tested on humans to ensure their safety (nor would we want them to be).

The APVMA's testing guidelines do not require data for several key endpoints such as developmental neurotoxicity or endocrine (hormone) disruption.

Exposures to multiple pesticides are also not evaluated by the APVMA. The non-pesticidal ingredients in pesticides such as solvents and surfactants (sometimes called 'inert' or 'other' ingredients) can also be harmful, but are not always assessed or identified on the label.

Human exposure to pesticides can occur as a result of **inhalation, skin absorption** and **ingestion** of pesticides. Pesticide exposure can cause serious short-term (acute) health effects as well as long-term (chronic) health problems.

Acute health effects

Acute short-term health symptoms can occur a few minutes to a few days after being exposed to pesticides. It is important to report poisonings to your doctor so you can be properly treated and the incident can be reported.

Symptons include:

- Eye, nose or throat irritation, difficulty breathing
- Skin irritation, rash
- Headaches
- Stomach aches, diarrhoea
- Nausea, vomiting
- Dizziness, tremors, muscle weakness
- Blurred vision, eye irritation

Chronic health effects

Chronic long-term health problems can result from both a single high-dose exposure to pesticides and from exposures over a long period of time, even when exposure levels are low. Even though people may not know they have been exposed, health problems can emerge years after a serious poisoning incident or from low-level, long-term exposure.

Symptons include:

- Brain cancer and other cancers
- Birth defects
- Parkinson's disease and dementias
- Leukaemia and Non-Hodgkin's lymphoma
- Obesity
- Miscarriage
- Infertility and sterility
- Auto-immune diseases eg. rheumatoid arthritis, lupus, scleroderma, diabetes
- Asthma
- Allergies eg hayfever, food allergies, eczema
- Neuro-behavioural disorders eg. ADDH, autism
- Chemical injury linked to sensitivities

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Babies and children at greatest risk

Developing foetuses, babies and children are far more vulnerable to the impacts of pesticide exposure than adults for a variety of reasons. Babies and children are still rapidly growing and developing, and they are less able to detoxify many harmful chemicals effectively.

Babies and children tend to play on the grass or floor and put their hands and objects into their mouths, both of which may be coated with pesticide-contaminated dust and dirt. Because children breathe more air, eat more food and drink more water per kilogram of body weight than adults, they are exposed to relatively greater quantities of pesticide in the environment.

Developing foetuses are at risk of exposure to pesticides in the mother's blood, which can be passed via the placenta. Babies are also at risk from exposure if the breast milk is contaminated with pesticide residues.

Spray drift is dangerous to our environment

Pesticides can often drift off target and cause harm to the environment as well as crops and livestock.

Spray drift can occur as the pesticides are being applied or post-application as a result of volatility, erosion, surface or groundwater transport or windblown soil particles.

There are numerous examples of how pesticides move around in the environment and cause unintended and unanticipated effects.

Residues contaminate rivers

Residue monitoring in NSW inland rivers in peak pesticide usage times, has shown that pesticide levels sometimes exceed environmental guidelines for the protection of aquatic ecosystems with concentrations at highest levels downstream.

In Tasmania, water-testing authorities have detected pesticide residues in rivers during routine monitoring despite sampling being unrelated to pesticide application. Pesticides detected include simazine, atrazine, cyazinine, metsulfuronmethyl, hexazinone, terbacil, MCPA, 2,4-D, pirimicarb and diazinon.

Residues contaminate drinking water

If you live in an area where pesticides are used and you collect your drinking water, the water is likely to contain pesticide residues.

Rainwater tank tests carried out in the mid 1990s by the then NSW New England Health Unit found that pesticide residues were detected in rainwater tanks up to 3.6 kms from known likely sources.

Endosulfan, an organochlorine insecticide still widely used on many crops in Australia today, but now banned in over 60 countries, was the most commonly detected residue in over 60% of rainwater tanks surveyed.

If you collect rainwater for drinking water ensure you have a first flush system to minimise pesticide residues entering your tank. You should also filter the water to further remove pesticide residues and other contaminants.

Spray drift is dangerous to our environment

SA warns against simazine

Many countries are now moving to ban pesticides that are detected in groundwater such as simazine and atrazine.

It makes sense to protect every drop of water from pesticide contamination, especially as we may need to rely more heavily on groundwater and stormwater for use in Australia as a result of climate change.

Due to severe water shortages in South Australia and the need to harvest stormwater for irrigation purposes, the SA government is discouraging people from using simazine, a commonly used herbicide closely related to atrazine.

The SA government has warned that simazine is a *"long lasting and a very undesirable contaminant to put into our groundwater resources"*. (see www.amlrnrm.sa.gov.au)

Bitou bush spraying has unintended effects

Native vegetation and wildlife is also impacted by exposure to pesticide spray drift. We simply don't know the extent of the damage because so little research is carried out to measure the impacts of pesticides on native plants and animals.

Ongoing monitoring in the **Dirawong Reserve in Northern NSW** by the Dirawong bush regeneration team has found there can be serious impacts to native flora and fauna after repeated broad scale aerial application of herbicides to control Bitou bush.

Pesticides drifted off-target and onto sensitive plant communities, including wetlands and lagoons.

Grasslands on sea cliffs and coastal headlands were damaged which went on to cause soil slump on coastal cliffs and severe erosion to the clay headlands.

Banksia woodlands repeatedly exposed to pesticides did not recover and two species of orchids, once abundant, completely disappeared.

Although the research has not been done in Australia, observations in this area also indicate there may be serious effects on soil microorganisms and to canopy invertebrates as well as larger fauna.

What you can do about pesticide spray drift

Know your rights

The right to a clean and healthy environment is an emerging human right in international law. While this human right is not recognised in Australian law at present, various state and territory laws protect the integrity of drinking water catchments, guarantee minimum standards for town drinking water, and control emissions of air pollutants including vehicle exhausts and wood smoke.

None of these laws explicitly recognise the rights of citizens or consumers to be protected from pesticide spray drift. Some laws do establish ways for members of the public to be protected from or to be informed about pesticide spraying, but only in limited circumstances.

There are also limited rights for members of the public to remedy suspected breaches of these laws by people or companies spraying nearby.

Your right-to-know

International law relating to toxic chemicals recognises that nations have a right of **prior informed consent** when it comes to deciding whether certain chemicals should be allowed on their land or in their waters.

This legal right does not yet exist in relation to individuals who may be affected by spray drift. However, the international community including national governments, UN agencies, industry and civil society has committed to eliminating significant adverse affects of chemicals by 2020 and recognises the right of all stakeholders to have information on chemicals throughout their life-cycle, which is available, accessible, user friendly, adequate and appropriate to their needs.

National law reform is often prompted by community action, so you should insist on your right to be informed about activities that could have a detrimental effect on you or your family's health or wellbeing or the enjoyment of your property rights.

If you are notified or informed of proposed spraying operations you can at least decide whether, or under what circumstances, to expose yourself to the risks associated with spray drift. For instance, notification may give you time to bring in the washing, cover a child's sand pit, or to go out for the day, thereby reducing your possible exposure to spray drift.

If you are asserting your rights in any administrative action or legal challenge, it can be helpful to look up the relevant pesticides legislation to see if the protection of human health or biodiversity are among the listed objectives of the Act or Regulation. If they are, this may help you in making out your case.

Assert your right-to-know

Find out:

- Which pesticide products and formulation types will be used and request a copy of the Material Safety Data Sheets for each product. (NB you can search the APVMA PUBCRIS database for pesticides and download labels for pesticide products).
- What application method/s will be used?
- When will the application/s take place including specific times?
- The exact area to be treated
- A contact person and emergency phone number for the manager of the operation

NSW LEADS THE WAY

Under the *NSW Pesticides Act 1999* and its associated regulations it is compulsory for people who use pesticides as part of their business to undergo training. Pesticide users must do a short refresher course every five years. It is compulsory to keep records of pesticide use for people who use pesticides as part of their business.

Since February 2007, public authorities such as councils, are required to develop notification plans, and property managers and pest management technicians must give notice of pesticide applications to common areas of flats and other multiple occupancy dwellings. Further notification requirements for sensitive places are expected to come into force before the end of 2009.

See www.environment.nsw.gov.au

Use common law

You can also use the common law to assert your rights. Above all, landowners and tenants have a right to the *'quiet enjoyment'* of their property. Where spray drift can be shown to have interfered with this right, those responsible may be held liable for **private nuisance**.

Alternatively, where the sprayer is suspected of conduct that falls short of what a reasonable person would do to protect another from foreseeable risks of harm (eg by not spraying in accordance with the instructions on the label) they may be sued for **negligence**.

To prove such a case, it must be shown that the defendant had a duty of care to the plaintiff, that they breached that duty, that the act in question was the cause of the damage suffered, and that the plaintiff suffered a loss as a result.

Finally, the law of **trespass** may be applicable to persistent and deliberate instances of spray drift onto your property, especially where you have asked the sprayer (preferably in writing or in the presence of other witnesses) to stop and not repeat the activity.

The remedies available include **abatement orders** requiring the offender to cease and not repeat the activity, or the payment of **compensation** for the damage caused.

Access to information

While there is no constitutional right to information access in Australia, **freedom of information (FoI)** legislation establishes mechanisms (in some cases strong, in others weak) that enable members of the public to find out what information is held by public authorities.

However, governments often use excuses such as 'commercial in confidence' or privacy legislation to avoid full disclosure. They usually also charge fees, and have a variety of means to delay the release of sensitive information.

Every government has its own process for lodging FoI requests. It is critical to be as specific as possible in requesting documents. Where you have not been able to obtain the information you believe you are legally entitled, you can usually appeal to the relevant Ombudsman or an administrative Tribunal. FoI legislation does not apply to companies or other private organisations.

What you can do about pesticide spray drift

Cases in Australia

Because the relevant legislation in Australia is weak, and the legal hurdles for a successful prosecution are high, there have been few successful prosecutions relating to pesticide spray drift in Australian courts.

There have been at least three successful cases involving prosecution for negligence. One was in the Federal Court in 1997. The Court found the manufacturer ICI liable for damages relating to spray drift involving the contamination of cattle by chlorfluazuron.

Another case was in the NSW Supreme Court in 1999 and involved severe damage to adjoining vineyards from the aerial spraying of a herbicide. A 1989 case taken in the Perth Local Court involved neighbours being made sick by the spray of an organophosphate insecticide on a windy day without regard to the instructions.

If you are considering running such a case, it is important to obtain as much documentary and other evidence (photos, water tests, plant material tests, blood tests, doctors' reports, etc.) as possible, to assist in making the link between the spray drift and the damage suffered.

Planning law

In some circumstances, planning controls can be used to prevent or limit the risks of being harmed by pesticide drift.

Residents should try to be aware of proposed changes to local and state planning instruments, since they may create the opportunity to zone land to avoid land use conflicts.

In most cases local councils are required to give neighbours written notification of development applications, and they may have rights to make submissions and, in some cases, appeal the local council's decision on the application.

Depending on the planning instrument, many agricultural activities that involve spraying may not require approval from the local council. Where activities do require approval, there may be the opportunity, if not to have the activity refused, then to introduce conditions on the approval such as buffer zones and landscaping.

Another case in the Environment Resources and Development Court of South Australia in 2008 led to a development approval being amended to require the owner of a vineyard to plant and maintain a landscape buffer to prevent 'the emission of dust, odour and sprays' to neighbouring land.

Write to Members of Parliament

Write to members of Parliament, including both your state and federal members, to let them know about your concerns and ask for assistance with your case. They can also raise your concerns with the relevant departments and ministers and help you understand the legal process in your state or territory.

Use the media

If your concerns are being ignored, you can use the media to get your message across. The industry and decision-makers monitor television, the internet, radio and the newspapers and you can communicate your message to many people this way.

Make sure you get some advice before speaking to the media to ensure you don't get yourself into any legal trouble, (for example, by defaming someone) as well as ensuring you effectively communicate message.

Georgina wins against the UK Government in the High Court

Award-winning environmental campaigner, Georgina Downs has scored another victory in her ongoing David v Goliath legal battle against the U.K. Government over pesticides.

For the last 8 years, Ms. Downs, who runs the **UK Pesticides Campaign**, has been campaigning to highlight the Government's inherent fundamental failure to protect rural residents and communities from exposure to toxic pesticides sprayed near homes, schools, children playgrounds and other premises.

In November last year Ms. Downs won a historic and landmark High Court victory against the Government over its fundamental failure to protect people in the countryside from pesticides.

Since the High Court Judgment was issued in November 2008, the Government has sought 3 times for a "stay" of the Judgment and subsequent Order citing various reasons for preserving the status quo all notably related to alleged financial and economic impacts on pesticide manufacturers, farmers and distributors, or the impact on agricultural productivity, if there are any changes to the current policy and approach for pesticides and the related approvals system.

In refusing the Government's 3rd application for a "stay", Lord Justice Sullivan said it was clear that the Government had not initiated any action thus far as a result of the High Court Judgment and Order.

Ms. Downs concluded:

"In a legal framework such as this, a balancing of interests is not permitted, for example, 'balancing' harm (or the risk of harm) to human health with the supposed benefits of pesticides, such as cost or economic benefits for farmers and the chemical industry, and public health protection must be paramount. I am very pleased that the legal system in this country continues to rule against the Government's position on this issue, a position which has already seen many decades of inaction over pesticides, and acute and chronic adverse impacts on the health and lives of many rural residents as a result."

See UK Pesticides Campaign

www.pesticidescampaign.co.uk

RESOURCES

Australian Bureau Of Meteorology www.bom.gov.au
Beaufort Wind Scale for estimating wind speed

PLEASE NOTE: "Beaufort scale numbers and descriptive terms such as 'near gale', 'strong gale' and 'violent storm' are not normally used in Bureau of Meteorology communications or forecasts".

BEAUFORT SCALE NUMBER	DESCRIPTIVE TERM	UNITS IN KM	UNITS IN KNOTS	DESCRIPTION ON LAND	DESCRIPTION AT SEA
0	Calm	0	0	Smoke rises vertically	Sea like a mirror
1-3	Light winds	19 km/h or less	10 knots or less	Wind felt on face; leaves rustle; ordinary vanes moved by wind.	Small wavelets, ripples formed but do not break: A glassy appearance maintained.
4	Moderate winds	20 - 29 km/h	11-16 knots	Raises dust and loose paper; small branches are moved.	Small waves - becoming longer; fairly frequent white horses.
5	Fresh winds	30 - 39 km/h	17-21 knots	Small trees in leaf begin to sway; crested wavelets form on inland waters	Moderate waves, taking a more pronounced long form; many white horses are formed - a chance of some spray
6	Strong winds	40 - 50 km/h	22-27 knots	Large branches in motion; whistling heard in telephone wires; umbrellas used with difficulty.	Large waves begin to form; the white foam crests are more extensive with probably some spray
7	Near gale	51 - 62 km/h	28-33 knots	Whole trees in motion; inconvenience felt when walking against wind.	Sea heaps up and white foam from breaking waves begins to be blown in streaks along direction of wind.
8	Gale	63 - 75 km/h	34-40 knots	Twigs break off trees; progress generally impeded.	Moderately high waves of greater length; edges of crests begin to break into spindrift; foam is blown in well-marked streaks along the direction of the wind.
9	Strong gale	76 - 87 km/h	41-47 knots	Slight structural damage occurs -roofing dislodged; larger branches break off.	High waves; dense streaks of foam; crests of waves begin to topple, tumble and roll over; spray may affect visibility.
10	Storm	88 - 102 km/h	48-55 knots	Seldom experienced inland; trees uprooted; considerable structural damage.	Very high waves with long overhanging crests; the resulting foam in great patches is blown in dense white streaks; the surface of the sea takes on a white appearance; the tumbling of the sea becomes heavy with visibility affected.
11	Violent storm	103 -117 km/h	56-63 knots	Very rarely experienced - widespread damage	Exceptionally high waves; small and medium sized ships occasionally lost from view behind waves; the sea is completely covered with long white patches of foam; the edges of wave crests are blown into froth.
12+	Cyclone	118 km/h or more	64 knots or more	Very rarely experienced - widespread damage	The air is filled with foam and spray. Sea completely white with driving spray; visibility very seriously affected

AUSTRALIAN PESTICIDES AND VETERINARY MEDICINES AUTHORITY

www.apvma.gov.au

Adverse experiences reporting program (AERP)

P: (02) 6210 4806 F: (02) 6210 4813
E: AERPCoordinator@apvma.gov.au

NEW SOUTH WALES

Department of Environment and Climate Change

www.environment.nsw.gov.au

DECC Information Centre

P: 131 555 E: info@environment.nsw.gov.au

Key legislation: *Pesticides Act 1999 and Pesticides Regulation*

VICTORIA

Department of Primary Industries

www.dpi.vic.gov.au

Chemical Standards Branch

P: 136 186 E: customer.service@dpi.vic.gov.au

Key legislation: *Agricultural and Veterinary Chemicals (Control of Use) Act 1992 and Agricultural and Veterinary Chemicals (Control of Use) Regulations 2007*

SOUTH AUSTRALIA

Department of Primary Industries and Resources

www.pir.sa.gov.au/ruralchem/chemical_trespass_spray_drift

The Chemical Trespass hotline

P: 08 8226 0528
E: PIRSA.ChemicalTrespass@saugov.sa.gov.au

Key legislation: *Agricultural and Veterinary Products (Control of Use) Act 2002*

TASMANIA

Department of Primary Industries and Water

www.dpiw.tas.gov.au

Spray Information Referral Unit

P: 1800 005 244

Key legislation: *Agricultural and Veterinary Chemicals (Control of Use) Act 1995 and Agricultural and Veterinary Chemicals (Control of Use) Regulations 1996*

NORTHERN TERRITORY

Department of Natural Resources, Environment, The Arts and Sport

www.nt.gov.au

Pollution Hotline

P 1800 064 567

Key legislation: *Agricultural And Veterinary Chemicals (Northern Territory) Act and Agricultural And Veterinary Chemicals (Control Of Use) Act 2004*

AUSTRALIAN CAPITAL TERRITORY

* If the spray drift incident is primarily an environmental issue (ie vegetation, water or wildlife have been exposed) contact:

Environment ACT

Chemistry division

P: (02) 6207 7977

* If the spray drift incident is primarily a health issue (ie people have been exposed) contact:

ACT Health

www.health.act.gov.au

Health Protection Service

P: (02) 6205 1700

Reporting Spray Drift Incidents

WESTERN AUSTRALIA

No one department takes overall responsibility for spray drift issues in WA and there is no central number in the event of pesticide spray drift incident.

A booklet produced by the Environmental Health Directorate of the Department of Health entitled "Management of Pesticides in Western Australia: An Information Resource" (2006) explains which departments to contact, provides numbers and refers to the various pieces of legislation that are involved.

* If the spray drift incident is primarily a health issue (ie people have been exposed) contact:

Department of Health

www.health.wa.gov.au

P: (08) 9388 4997 or Poisons Information Centre 13 11 26 (all areas, all hours)

* If the spray drift incident is primarily an environmental issue (ie waterways or wildlife have been exposed) contact:

Department of Environment and Conservation

www.calm.wa.gov.au

Emergency Pollution Response

P: 1300 784 782

* If the spray drift incident is primarily an agricultural issue (ie crops or livestock have been exposed) contact:

Department of Agriculture and Food

www.agric.wa.gov.au

P: (08) 9368 3333 ask for Chemical Services

QUEENSLAND

No one department takes overall responsibility for spray drift issues in QLD and there is no central number in the event of pesticide spray drift incident. The Department of Primary Industries and Fisheries does have responsibility for the control of use legislation, however legislation in other departments may also be relevant in the event of pesticide spray drift.

* If the spray drift incident is primarily an agricultural issue (ie crops or livestock have been exposed) or your concern is related to licensing and record keeping contact:

Department of Primary Industries and Fisheries

www.dpi.qld.gov.au

Business Information Centre

P: 13 25 23

Key legislation: *Chemical Usage (Agriculture and Veterinary) Control Act 1988 (Chemical Usage Act) and Agricultural Chemicals Distribution Control Act 1966 (ACDC Act)*

* If the spray drift incident is primarily a health issue (ie people have been exposed) contact:

Queensland Health

www.health.qld.gov.au

P: 13 HEALTH (13 43 25 84)

* If the spray drift incident is primarily an environmental issue (ie vegetation, water or wildlife have been exposed) contact:

Environment Protection Agency

www.epa.qld.gov.au

P: 1300 130 372

Natural Resources and Water

www.nrw.qld.gov.au

P: 13 13 04

GUIDELINES & WEBSITES

Australasian Legal Information Institute

www.austlii.edu.au

Australian Drinking Water Guidelines National Health and Medical Research Council

www.nhmrc.gov.au

Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP)

Therapeutic Goods Administration

www.tga.gov.au

Australian Centre For Agricultural Health And Safety

University of Sydney

www.aghealth.org.au

P: (02) 6752 8210

E: network@aghealth.org.au

INDUSTRY

Aerial Agricultural Association of Australia (AAAA)

www.aerialag.com.au

P: (02) 6241 2100

Australian Environmental Pest Managers Association

www.aepma.com.au

P: (02) 9232 8929 or 1800 25 27 72

National Farmers Federation

www.nff.org.au

P: (02) 6273 3855

NON-GOVERNMENT ORGANISATIONS

Australian Network of Environmental Defender's Offices

www.edo.org.au

Public Interest Advocacy Centre

www.piac.asn.au

Pesticide Action Network International

www.pan-international.org

Environmental Working Group

www.ewg.org

CHEMICAL RESOURCES

The Endocrine Disruption Exchange

www.endocrinedisruption.com

TOXNET
Toxicology Data Network

www.toxnet.nlm.nih.gov

INCHEM
Chemical Safety Information from Intergovernmental Organisations

www.inchem.org

National Toxics Network Inc.

PO Box 173 Bangalow NSW 2479

E: info@ntn.org.au W: www.ntn.org.au