WQPN 47, November 2006

Pest Control Depots

Purpose

Pesticides can be harmful to the environment and human health, even at low concentrations. Many are persistent and mobile, particularly in sandy soils. When water resources are contaminated the pesticides can go undetected for long periods of time and are very costly to remedy. Activities incorporating the transport, storage and handling of bulk pesticides poses a significant risk to the environment, particularly in and adjacent to Public Drinking Water Source Areas and residential areas that draw water from shallow aquifers. This risk primarily involves contamination of water resources either through pesticide residue runoff or infiltration through the soil profile and is significantly increased when dealing with pesticide concentrates. Most contamination incidents are a result of operator carelessness, ineffective environmental management practices or poor maintenance of equipment.

The Department of Water is responsible for managing and protecting the State's water resources. It is also a lead agency for water conservation and reuse. This note offers:

- the Department's current views on the establishment and operation of pest control depots;
- guidance on acceptable practices used to protect the quality of Western Australian water resources; and
- a basis for the development of a multi-agency code or guideline designed to balance the views of industry, government and the community, while sustaining a healthy environment.

This note provides a general guide on issues of environmental concern, and offers potential solutions based on professional judgement and precedent. The recommendations made do not override any statutory obligation or Government policy statement. Alternative practical environmental solutions suited to local conditions may be considered. Regulatory agencies should not use the note's recommendations without a site-specific assessment of any project's environmental risks. Any conditions set should consider the values of the surrounding environment, the safeguards in place, and take a precautionary approach. This note shall not be used as the Department's policy position on a specific matter unless confirmed in writing.

Scope

This note applies to the establishment and operation of all premises serving as a base for the application of commercial quantities of pesticides. More specifically this note addresses depots handling, storing or blending pesticides used in urban, industrial or rural settings. It involves premises where pesticides or pesticide products are unloaded, stored, decanted, blended, diluted or packaged and related equipment is maintained causing a potential for contamination of waters in the event of spillage or discharge. Pesticides include insecticides, herbicides, termiticides, rodenticides, fungicides, miticides and any other chemicals designed to control pests.

This note is not intended to cover the application of pesticides, pesticide application vehicles where blending is conducted away from the depot or pesticides associated with rural farms, but can offer some useful guidance on potential risks to the environment and good practice regarding these matters.

For guidance on the use of pesticides contact the Department of Health's Pesticide Safety Branch (see '*Useful Contacts'* in Appendix D) which regulates the management and use of pesticides in Western Australia through the administration of the *Health (Pesticides) Regulations 1956*. This Department's State-wide Policy No 2 *Pesticide Use in Public Drinking Water Source Areas* and the *Code of Practice for the Use of Agricultural and Veterinary Chemicals in Western Australia*, produced by the Department of Agriculture and Food (WA) also provides key information on the use of pesticides in this State.

Recommendations

Siting

1. Pest control depots should be located and constructed using the following criteria:
    a. In accordance with the Australian Standard 2507-1998 *The Storage and Handling of Agricultural and Veterinary Chemicals,* produced by Standards Australia.
    b. The site should be zoned for industrial or rural use under the appropriate local government planning scheme.
    c. If the site is near a residential area, community consultation should be undertaken prior to the initiation of the development.
    d. Risk mitigation measures, such as vegetation buffer zones near waterways or wetlands and secure secondary containment of chemicals, should be incorporated into the development.
    e. The site should be located high in the landscape to limit the risk of flooding and allow for the effective operation of filter zones and contaminant incident response.
    f. A minimum of two metres vertical separation between the building foundation and the top of the wet season water table is recommended, to maintain free draining soil and avoid waterlogging.
    g. The site should be large enough to manage site activities effectively and allow for the possibility of future expansion without encroaching on established buffers.

2. Pest control depots should **not** be located:
    a. Within Public Drinking Water Source Areas (PDWSA). For information on sensitive water resource areas and appropriate land uses see Appendix C and this Department's Water Quality Protection Note *Land use compatibility in Public Drinking Water Source Areas.* For information on the location of PDWSA please use this Department's Geographic Data Atlas, available at www.water.wa.gov.au (select *Tools, System and Data > Geographic Data Atlas > Environment > Public Drinking Water Source Areas),* or refer to the Water Quality Protection Note *Gazetted Public Drinking Water Source Areas*.
    b. Within 200 metres to waterways or wetlands with social or conservation values. For more information on wetland protection and management objectives see the Department of Environment and Conservation's Position Statement: *Wetlands* (Water and Rivers Commission 2001) and the Environmental Protection Authority's draft Guidance Statement No. 33 *Environmental Guidance for Planning and Development* (2005).

c. On floodplains or within areas prone to seasonal flooding.

d. In residential zones (unless it is a single operator business approved by local Government).

3. If the premises are already established near a sensitive water resource, clearly visible signage should be erected and maintained at all pesticide storage and handling sites stating:

> **THIS SITE IS LOCATED NEAR SENSITIVE WATERS.**
> **CHEMICAL LOSS COULD HARM PEOPLE, WATER SUPPLIES OR ECOSYSTEMS.**
> **< Pesticide description or pictograph > ARE STORED/ HANDLED ON-SITE.**
> **PLEASE REPORT CHEMICAL SPILLS TO THE DEPARTMENT OF ENVIRONMENT AND CONSERVATION, PHONE: 1300 784 782 (ALL HOURS)**

Pesticide transport

Transport of chemicals is controlled via the *Dangerous Goods (Transport) Act 1998, Dangerous Goods (Transport) (General) Regulations 1999* and the *Dangerous Goods (Transport) (Road and Rail) Regulations 1999*, administered by the Department of Consumer and Employment Protection; and the *Environmental Protection (Controlled Waste) Regulations 2004* administered by the Department of Environment and Conservation.

4. Transport of packaged pesticides (that are listed in the dangerous goods schedules) on public roads in any quantity must have shipping documentation displayed in a prominent position in the cab of the vehicle. This documentation describes the dangerous goods manifest on board.

5. All vehicles transporting pesticides should be well ventilated (ie *'Ute it don't boot it'*) and should contain clean up materials in case of a spill.

6. All vehicle operators should be trained in pesticide handling and effective spill response.

7. Pesticides being transported by pest management firms should be secured in a locked metal box fixed to the tray of the vehicle. Large quantities should also be secured, including containers on pallets. For more information please contact the Environmental Health Branch within the Department of Health.

8. If transporting large quantities (ie 1000 kilograms or 1000 litres for Packing Group II or III) other safeguards are required such as placarding of the vehicle, personal protective clothing and public liability insurance. For more information, see Parts 7 and 12 of the *Dangerous Goods (Transport) (Road and Rail) Regulations 1999*.

9. There should be safe access for any vehicles entering the depot including a fully contained area for the unloading of containers and/or pallets.

10. Transport within Public Drinking Water Source Areas should be avoided where practical.

Pesticide storage

11. Pesticide storage facilities should be constructed to prevent the escape of pesticides into the environment under all circumstances. The storage area should be within a fully contained compound to ensure any spills can be collected. For further information, see this Department's Water Quality Protection Note *Toxic and Hazardous Substances – Storage and Use* and the Australian Standard 2507-1998 *The Storage and Handling of Agricultural and Veterinary Chemicals*, produced by Standards Australia.

12. The storage compound should not be occupied for any purpose other than pesticide storage and/or mixing. All personal facilities such as lockers, lunchrooms or hand basins should be located away from the storage area or building. All personal protective equipment should also be stored away from the pesticide storage area or building.
13. The building should be structurally sound, insulated, weather proof (ie consistently cool and dry) and well ventilated with all internal surfaces impervious and chemically resistant.
14. The pesticide containers used should be in good condition, chemically resistant and have an approved label.
15. To deter vandalism and pesticide misuse, all windows and doors should be secured and/or security barriers should surround the site. The site could also have an intruder alarm system, unless in a remote rural area.
16. Floors should be constructed out of sealed reinforced concrete. They should be graded to an impervious containment sump or have perimeter bund walls.
17. Prominent signage should be displayed at the entrance stating what type of pesticides are stored/handled on-site, a Class 6.1(a) label for poisonous substances, a Class 3.1 or 3.2 subsidiary risk label for flammable liquids (if applicable) and *NO SMOKING* signs. The contact details of the Department of Environment and Conservation should be displayed for reporting any pollution incidents (see '*Useful Contacts'* in Appendix D).
18. The storage capacity of spill containment compounds should be at least 110 per cent of the volume of the largest storage container, plus 25 per cent of the volume of all other pesticide containers within the compound.
19. If any chemicals are reactive or incompatible with one another, they should be stored in separate containment compounds.
20. Access to running water and first aid (including an onsite shower and eyewash) should be readily available.
21. Adequate fire-fighting equipment, including relevant extinguishers, fire detectors and sprinklers where legally required, should be installed in all buildings.
22. If liquid pesticide storage is for more than 250 litres, floor mounted bulk storage tanks should be used. For more information see this Department's Water Quality Protection Note *Tanks for ground level chemical storage*.
23. The storage of some pesticides, such as Sprayseed (herbicide), may require a licence from the Department of Consumer and Employment Protection. Licensing is dependant on the nature and volume of chemicals stored. For further details see the Internet site www.docep.wa.gov.au, and follow the links for *Resources Safety* then *Dangerous goods*.
24. Under Part 5 of the *Occupational Safety and Health Regulations 1996* all hazardous substances within the workplace must be identified, labelled correctly, assessed and listed in a register. This register must also contain copies of each material safety data sheet and be readily available for any person who might be exposed to a hazardous substance. Decanted substances should also be labelled correctly, unless they are all used immediately after being decanted.

Blending and handling

25. All pesticide formulation, mixing, processing and decanting should occur within the weather proof buildings or approved containment facilities on an impervious base.
26. During blending of pesticides, all workers should wear chemically resistant boots, waterproof overalls with the trouser legs outside the boots, elbow length chemical resistant gloves, eye protection such as a visor or safety glasses, respirator (if recommended on the label) and a washable hat.
27. All equipment should be tested and maintained regularly using a maintenance plan. Checks for container and product label deterioration should also be conducted regularly.
28. All operations involving the receival, storage, handling and disposal of pesticides should be detailed in an easily accessible operations manual, which is reviewed regularly.
29. A material safety data sheet should be provided for each hazardous substance stored and handled within the workplace (Regulation 5.11 of the *Occupational Safety and Health Regulations 1996*). This is used to identify the potential hazards of each hazardous substance, provide essential information for the required risk assessment (Regulation 5.15 of the *Occupational Safety and Health Regulations 1996*) and ensure it is handled in a safe way. For more information, see the internet site www.worksafe.wa.gov.au.
30. Any person likely to be exposed to a hazardous substance should receive adequate training and information in relation to the substances health risks, toxic effects, control measures to minimise exposure, correct care and use of personal protective equipment and any need for health surveillance, prior to commencing work.
31. During the transfer of pesticides from a tanker or other bulk container into a smaller container, isolation valves, fail-safe and automatic control systems should be used to avoid leakage, over-filling or spillage.
32. Workers should not attempt to decant pesticides over shoulder height, as spillage may occur.
33. Bulk containers used to decant pesticides should be fitted with chemical resistant drip trays.
34. Transfer from bulk containers to storage should occur within a containment area to ensure full recovery of any spills.
35. Containers, once empty, should be left to drain into another container (for later use) or spray tank for at least 30 seconds. The empty container should then be rinsed three times with an amount of liquid (water or solvent) that is approximately ten per cent of the container capacity and the rinse should be drained into another labelled container or spray tank. All containers should be held within the containment area unless they have been triple rinsed pending disposal or reuse.
36. Recyclable or reusable containers should be used wherever practical. Importantly they should be labelled '*Reusable pesticide container'* and include a description of the contents.

Spillage

37. All pesticide spills should receive immediate attention. Spill kits should be located in high-risk areas. They should be easily identifiable and accessible. Contents should include stocks of absorbent material, such as pillows, soil or sawdust, protective clothing and secure skips for cleanup material once contaminated.

38. An emergency response plan should be prepared and maintained including topics such as the nature and quantities of chemicals on-site, a description of the required actions during potential emergencies, assessment of risks to the local environment, availability of back up resources (eg protective clothing), notification of authorities and evacuation procedures. Staff with first aid qualifications should also be identified.

39. Staff should be aware of the emergency response plan, be trained to deal with the containment of spills and understand the impact of pesticide contamination on the environment. Such training could be given through approved courses such as those held by the Transport and Storage Industry Training Council, Australian Centre for Work Safety or the Agsafe Guardian Program (Agsafe accreditation). For more details contact the training providers directly, see *Useful contacts* in Appendix D.

40. If a spill has the potential to contaminate surface water or groundwater, the Department of Environment and Conservation should be notified as soon as practical and at least within 48 hours of the event.

41. It is the occupier of the premises who is defined as liable for the clean up costs under Section 73 of the *Environmental Protection Act 1986*. The *Contaminated Sites Act 2003* and the *Contaminated Sites Regulations 2006*, expected to commence in December 2006, will introduce many new responsibilities relating to managing environmental contamination in Western Australia. For further information about this new legislation or the management of contaminated sites in general, contact the Land and Water Quality Branch within the Department of Environment and Conservation or visit www.dec.wa.gov.au, select *Department of Environment* and follow the links for *Contaminated Sites.*

Disposal of waste

Any waste should be managed and disposed of in accordance with the *Environmental Protection (Controlled Waste) Regulations 2004* (including organochlorine pesticides), *Health (Pesticides) Regulations 1956* (focusing on environmental health) and *Environmental (Unauthorised Discharges) Regulations 2004*. It is unacceptable to discharge waste pesticides into soakage, sewer or drains. If detected, offenders may be prosecuted under provisions of *the Environmental Protection Act 1986* and are liable for severe penalties. For more detail on the relevant statutes, see Appendix B.

42. Rinsate from any pesticide container, protective clothing or any equipment (including vehicles) that has been used in the mixing or application of pesticides should be recovered, where practical, and used as part of the make up water for the next pesticide formulation. Notably each pesticide should have a separate container to store the rinse until it can be re-used. Alternatively it should be disposed of in accordance with the requirements for contaminated waste.

43. The disposal of registered pesticides should conform to the approved label on the container. Alternatively, subject to approval from the Executive Director, Public Health, they may be chemically destroyed, incinerated at a high temperature (normally 1100-1300 degrees Celsius) or deposited at a Class IV or V landfill site. For further information on controlled waste disposal sites, see the *Guideline for Controlled Waste Treatment or Disposal Sites* produced by the Department of Environment and Conservation.

44. Empty containers should be held in a weather proof skip pending transfer off-site.

45. Washed empty pesticide containers, if greater than five litre capacity, may be returned to the manufacturer for recycling, deposited where approved at a local landfill or collected by a waste collection contractor. Importantly concerned persons, such as the collection contractor, must be informed of the type of pesticide previously stored within the containers prior to disposal.
46. For persistent and dangerous pesticides, a licence is required in order to dispose of them. The carrier, driver and vehicle disposing of the waste must have a special licence (issued by the Department of Environment and Conservation), waste tracking number and ensure a receipt is given to the waste generator after collection. The occupier of a waste disposal site is required to give the carrier/driver a receipt to confirm the waste was disposed of appropriately. For a full list of the chemicals requiring this documentation, see Schedule 1 of the *Environmental Protection (Controlled Waste) Regulations 2004*.
47. Non-returnable metal and plastic pesticide containers over one litre or one kilogram content, which display the appropriate sticker, can be disposed of through the national DrumMuster scheme administered by AgSafe Ltd (a plant science industry group). This scheme is free of charge. For more information visit www.agsafe.com.au.

Stormwater

48. On-site drainage for uncontaminated stormwater should be diverted around potentially contaminated areas.
49. Any contaminated stormwater should be captured and then treated in the same manner as chemical spillage.

More Information

We welcome your views on this note. Feedback provided on this topic is held on file No: **WT116**.

This note will be updated periodically as new information is received or industry/activity standards change. Updates are placed on the Department's internet site www.water.wa.gov.au select *Drinking water> Publications> Water Quality Protection Notes.* To comment on this note or for more information, contact our Water Source Protection Branch in Perth, phone (08) 6364 7600, fax (08) 6364 6525 or use *Contact us* at the Department's internet site, citing the note topic and version.

Where a conflict arises between the Department of Water's recommendations and any proposed activity that may affect a sensitive water resource, this note may be used to assist negotiations with stakeholders. The negotiated outcome should not result in a greater risk to water quality than if the Department's recommended protection measures were used.

The State Government in October 2005 announced the formation of the Department of Water. From January 2006, the Department of Water has assumed primary responsibility for managing the State's water resources. Once the Department of Water is legally established, it will replace many of the present functions of the present Water and Rivers Commission and operate in parallel (with separate powers) to the Department of Environment and Conservation.

www.water.wa.gov.au
Telephone: (08) 6364 7600
Facsimile: (08) 6364 7601
Floor 4, The Atrium
168 St Georges Terrace Perth
Western Australia 6000

Appendices

Appendix A - References and further reading

1. Department of Agriculture and Food (WA)

   Code of Practice: For the Use of Agricultural and Veterinary Chemicals in Western Australia, 3rd Edition February 2005.

   For further information visit www.agric.wa.gov.au or phone the Department of Agriculture and Food on (08) 9368 3333.

2. Department of Environment and Conservation (WA)

   a. Appleyard, S., Manning, P. and Thorpe, P. '*Pest Control Depots as Sources of Groundwater Contamination in Perth, Western Australia'* in *Land Contamination and Reclamation*; 5(4); 1997

   b. *Guideline for Controlled Waste Treatment or Disposal Sites* – No.3 of the Controlled Waste Guidelines Series

   c. *Position Statement: Wetlands 2001*

   For further information visit www.dec.wa.gov.au, select *Department of Environment> Water> Wetlands.*

3. Department of Health (WA)

   Review of pesticide legislation and policies in Western Australia – Discussion Paper, September 2005.

   For further information visit www.health.wa.gov.au and type '*pesticide*' into the search box or phone the Department on (08) 9222 4222

4. Department of Water (WA)

   a. State-wide Policy No 2 *Pesticide Use in Public Drinking Water Source Areas*

   b. Water Quality Protection Notes

      - *Tanks for ground level chemical storage*
      - *Chemical spills – emergency response*
      - *Chemical blending*
      - *Gazetted Public Drinking Water Source Areas*
      - *Light industry near sensitive waters*
      - *Land use compatibility in Public Drinking Water Source Areas*
      - *Toxic and hazardous substances – storage and use*

   For further information, visit web page http://drinkingwater.water.wa.gov.au or phone the Department's Water Source Protection Branch on (08) 6364 7600

5. Environmental Protection Authority (WA)

   Draft Guidance Statement No. 33: *Environmental Guidance for Planning and Development* (June 2005).

   For further information visit www.epa.wa.gov.au.

6. Government of South Australia

   Fact Sheet No.21 *Stormwater Guidelines for Pest Controllers* produced by WaterCare.

   For further information visit www.watercare.sa.gov.au.

7. National Transport Commission

   Australian Dangerous Goods Code 6th Edition (ADG6).

   For further information visit www.ntc.gov.au.

8. Standards Australia

   Australian Standard 2507-1998 *The storage and handling of agricultural and veterinary Chemicals*

   For further information visit www.standards.org.au, or phone 1300 654 646

9. Swan River Trust (WA)

   Environmental Management and Cleaner Production Directory for Small and Medium Businesses – A guide to pollution prevention, produced by the Swan River Trust, April 2005

   For further information visit www.swanrivertrust.wa.gov.au or phone (08) 9278 0900

Appendix B – Legislation relating to the transport, storage, blending and disposal of pesticides within Western Australia

The following statutes can be acquired by either contacting the State Law Publisher on (08) 9321 7688 or visiting the Internet site www.slp.wa.gov.au.

Key issues covered	Legislation	Administrator
• Regulation of agricultural and veterinary chemicals • Created to apply recommended practices held within the Federal *Agricultural and Veterinary Chemicals Code Act 1994 (AgVet Code)* to Western Australia	*Agricultural and Veterinary Chemicals Act 1995;* and *Agricultural and Veterinary Chemicals Regulations 1995*	Australian Pesticides and Veterinary Medicines Authority (APVMA)
• Largely based on the 6th edition of the *Australian Dangerous Goods Code* (ADG 6), produced by the National Transport Commission • Controls the transport of some pesticide chemicals (as listed as Appendix 2 of the ADG 6) by road or rail • Requirement of shipping documentation and, in some cases, placarding of the vehicle, protective clothing and public liability insurance • This legislation will be updated by the *Dangerous Goods Safety Act 2004* (WA) when the Regulations are released in 2006	*Dangerous Goods (Transport) Act 1998,* *Dangerous Goods (Transport) (General) Regulations 1999;* and *Dangerous Goods (Transport) (Road and Rail) Regulations 1999*	Department of Consumer and Employment Protection
• Discharges of waste and the creation of pollution • Environmental Impact Assessment of development proposals (Part IV) • Enforcement and penalties for environmental damage (Part VI) • Some problems inherent to this Act will be solved with the introduction of the *Contaminated Sites Act 2003* and *Contaminated Sites Regulations* in December 2006	*Environmental Protection Act 1986*	Department of Environment and Conservation
• All controlled waste listed in Schedule 1 of the controlled waste regulations • Licensing, waste tracking number, disposal of controlled waste	*Environmental Protection (Controlled Waste) Regulations 2004* ; and *Environmental Protection (Unauthorised Discharges) Regulations 2004*	

Key issues covered	Legislation	Administrator
• Packing, labelling and storage of dangerous goods (as listed in Appendix 2 of the ADG 6) • Also deals with pipelines carrying dangerous goods	*Explosives and Dangerous Goods Act 1961* (mainly Part IV); and *Explosives and Dangerous Goods Regulations 1992*	Department of Consumer and Employment Protection (Resources Safety)
• The use and disposal of agricultural chemicals • Licensing for Pest Control Operators and Fumigators • Illegal to use an unregistered pesticide or a registered pesticide at a higher than label rate • More concerned with public health than the environment • Pesticides Advisory Committee (PeAC) established under section 246 of the Act	*Health Act 1911* (Part VII division 8); and *Health (Pesticides) Regulations 1956* (particularly Regulation 76)	Department of Health
• Identification of hazardous substances (including pesticides) within the workplace (Regulation 3.1 and Part 5 of the Regulations) • Material Safety Data Sheets (Regulation 5.11 and 5.13) and risk assessment for each hazardous substance stored, handled or transported (Regulation 5.15) • Information and training required for all staff (Regulation 5.21)	*Occupational Safety and Health Act 1984;* and *Occupational Safety and Health Regulations 1996* (Part 5)	Department of Consumer and Employment Protection (WorkSafe)

Appendix C - Sensitive water resources

Clean water resources used for drinking, sustaining aquatic and terrestrial ecology, industry and aesthetic values, along with breathable air, rank as the most fundamental and important needs for viable communities. These water resources should remain within specific quality limits, and therefore require stringent and conservative protection measures. Guidance on water quality parameters necessary to maintain water values are published in the Australian Government's *National Water Quality Management Strategy Guidelines* (see web page www.deh.gov.au/water/quality/nwqms/index.html).

The Department of Water strives to improve community awareness of catchment protection measures for both surface water and groundwater aquifers as part of a multi-barrier protection approach to maintain the quality of water resources and their values.

To be considered sensitive, water resources must support one or more of the environmental values described below. Human activity or land use poses a risk to water quality if contaminants could be washed or leached into sensitive water resources in discernible quantities. These water resources include shallow groundwater accessed by water supply wells, waterways, wetlands or estuaries. Community support for these values, setting of practical management objectives and implementation of a sustainable protection strategy are seen as key elements in protecting and restoring the values of these water resources.

Sensitive water resource values include:

a. Public Drinking Water Source Areas (ie Water Reserves, Catchment Areas or Underground Water Pollution Control Areas) proclaimed or assigned under the *Metropolitan Water Supply, Sewerage and Drainage Act 1909*, the *Country Areas Water Supply Act 1947* or the *Health Act 1911.*

b. Private drinking water supply sources, including the following uses:
   - human or stock consumption;
   - commercial or industrial water supplies (with specific qualities that support the activities eg aquaculture, food processing or crop irrigation); and
   - garden or municipal water supplies (which can affect people's health or well-being).

c. Groundwater aquifers that sustain important ecological functions eg cave ecology.

d. Waterways (excluding engineered drains or constructed features) with ecological and / or social values such as swimming, fishing, boating and aesthetic appeal, including:
   - waterways managed under the *Waterways Conservation Act 1976*, ie the Avon, Peel-Harvey, Leschenault, Wilson Inlet and Albany Waterways Management Areas; and
   - the Swan-Canning Estuary and lands managed under the *Swan River Trust Act 1988*.

e. Wetlands possessing conservation values (except those highly disturbed, unless subject to active management to restore specified environmental values) and including:
   - RAMSAR wetlands (see internet site www.ramsar.org);
   - Policy areas covering water resources defined via Part III of the *Environmental Protection Act 1986* eg *Environmental Protection (Swan Coastal Plain Lakes) Policy 1992;*
   - Wetlands described by Department of the Environment and Heritage (Australia) in A *Directory of important wetlands in Australia,* (see web page www.deh.gov.au/water/wetlands/databases.html, or the Department of Environment and Conservation web page www.naturebase.net/national_parks/wetlands/wa_wetlands.html);
   - Conservation and Resource Enhancement category wetlands identified in the *Geomorphic Wetlands of the Swan Coastal Plain* dataset, all wetlands identified in the *South Coast Significant Wetlands* dataset and high value wetlands identified in the *Geomorphic Wetlands Augusta to Walpole* dataset.

     Note: the Augusta to Walpole wetland dataset to date has not been subject to a detailed evaluation process.

The Department of Conservation and Environment is the custodian of these datasets and is responsible for maintaining and updating the information within them. The datasets ban be viewed or downloaded from the internet site www.dec.wa.gov.au, select *Environment > Tools, systems and data > Geographic Data Atlas > Inland waters > Wetlands.* Guidance on viewing the wetlands is provided on the same website at *Water > Wetlands > Data > Wetland mapping > How to view wetland mapping* or by contacting the Department on 6364 6500.

Appendix D - Useful contacts

AgSafe Limited

Agsafe Guardian Program
Phone: (08) 6230 4799 or visit www.agsafe.com.au

Australian Centre for Work Safety

Phone: (08) 9267 7353 or visit www.worksafe.wa.gov.au/institute and select '*Training Providers'*

Australian Pesticides and Veterinary Medicines Authority

Phone: (02) 6272 5852 or visit www.apvma.gov.au

Australian Environmental Pest Managers Association

Phone: (08) 9248 1377 or visit www.aepma.com.au

Department of Agriculture and Food (WA)

3 Baron-Hay Court
South Perth WA 6151
Phone: (08) 9368 3333 or visit www.agric.wa.gov.au

Department of Consumer and Employment Protection (WA)

Phone: 1300 136 237 or visit www.docep.wa.gov.au

Resources Safety Division
Mineral House
100 Plain Street, East Perth WA 6004
Phone: (08) 9222 3595

WorkSafe
1260 Hay Street
West Perth WA 6872
Phone: (08) 9327 8777 or 1300 307 877

Department of Environment and Conservation (WA)

168 St Georges Terrace
Perth WA 6000
Phone: (08) 6364 6500 or (08) 9222 7000
Fax: (08) 6364 6520

For Emergency Pollution Response
Phone: 1300 784 782 (all hours)
Or visit www.dec.wa.gov.au

Department of Health (WA)

189 Royal Street
East Perth WA 6004
Phone: (08) 9222 4222 or visit www.health.wa.gov.au

Pesticide Safety Branch
Phone: (08) 9383 4244

Environmental Health Branch
Phone: (08) 9388 4999

Department of Water (WA)

168 St Georges Terrace
Perth WA 6000
Phone: (08) 6364 7600 Fax: (08) 6364 7601
Or visit www.water.wa.gov.au

Standards Australia Limited

286 Sussex Street
Sydney NSW 2000
Phone: (02) 8206 6000 or visit www.standards.com.au or www.standards.org.au

Transport and Storage Industry Training Council Inc

17 Lemnos Street
Shenton Park WA 6008
Phone: (08) 9388 8781 or visit www.tsitc.asn.au