

Environmental Management Procedures

Section 1 - Purpose and Context

(1) This document contains detailed procedures related to specific aspects of the University's Environmental Management System (EMS), including:

- a. Waste Management Procedures;
- b. Pesticide Management Procedures;
- c. Emergency Preparedness and Response Procedures;
- d. Emergency Spill Response Procedures;
- e. Urban Wildlife Management Procedures; and
- f. Contractor management procedures.

(2) These procedures apply to the conduct of environmental management activities on all University campuses and must be read in conjunction with the University's Environmental Management Policy, Environmental Management Plan and relevant statutes.

Section 2 - Definitions

(3) For the purposes of these procedures:

- a. Air pollution - is "the emission into the air of any air impurity." (Protection of the Environment Operations 1997).
- b. Boiling point - is the temperature at which a liquid changes to a vapour state at a given pressure. Flammable materials with low boiling points generally present special fire hazards.
- c. Emergency - is a sudden unforeseen crisis (usually involving danger) that requires immediate action.
- d. Flashpoint - is the lowest temperature at which a liquid gives off enough vapour to form an ignitable mixture with air and burn when a source of ignition (sparks, open flames, cigarettes, etc.) is present.
- e. Leak - is a slow discharge over time such as a drip at a join which is not tight, worn or under pressure.
- f. Liquid waste - defined as a waste that does not meet the non-liquid waste criteria and is not a gas.
- g. Material harm to the environment - "includes actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial or that results in actual or potential loss or property damage of an amount over \$10,000."(Protection of the Environment Operations 1997).
- h. Non-liquid waste - is defined as any waste that does not contain free flowing liquids (i.e. waste that can be moved with a shovel).
- i. Pest - is "in relation to an animal, plant or thing - any animal, plant or other biological entity that injuriously affects the physical condition, worth or utility of the first-mentioned animal or plant or of that thing".
- j. Pesticide (which includes herbicides, fungicides and poison) - may also be a hazardous chemical, a dangerous good, a scheduled poison and/or a fumigant and is an agricultural or veterinary chemical product that is used as a means of directly or indirectly:
 - i. destroying, stupefying, repelling, inhibiting the feeding of, or preventing infestation by or attacks of, any pest in relation to a plant, a place or a thing;

- ii. destroying a plant;
 - iii. modifying the physiology of a plant or pest so as to alter its natural development, productivity, quality or reproductive capacity;
 - iv. modifying an effect of another agricultural chemical product; or
 - v. attracting a pest for the purpose of destroying it.
- k. Protective action zone - is "the area in which people are at risk of harmful exposure." (The US Emergency Response Guide, 2000). Random changes in wind direction are factored into this zone and are assumed to confine the vapour plume to an area within 30 degrees on either side of the predominant wind direction. This results in a crosswind protective action distance equal to the downwind protective action distance.
- l. Native wildlife - is wild fauna living in a natural, undomesticated state that is indigenous to or originating from Australia.
- m. Non-native wildlife - is wild fauna living in a natural, undomesticated state that has been introduced from a country other than Australia.
- n. Protected fauna - in NSW refers to all native wildlife including threatened species, endangered populations and endangered ecological communities
- o. Spill - is a large discharge in a small time such as a hydraulic hose splitting or a drum which overturns. Several factors determine whether a spill is minor or major, such as the nature of the material, the volume of the spill and risk to the environmental and human health. As a rule of thumb and excluding quantities spilled in laboratories, minor spills can generally be categorised as spills involving quantities of 200 litres or less, while major spills are greater than 200 litres.
- i. Major spill - is a spill where any of the following applies:
 - the responsible party and/or material spilled is unknown;
 - the material spilled is highly toxic;
 - a large (or undetermined) quantity was spilled;
 - a significant fire hazard may be present;
 - the material has the potential to reach the environment; and
 - advanced personnel protective equipment is required.
 - ii. Minor spill - is a spill where all of the following applies:
 - the responsible party is at the scene;
 - the material spilled is known;
 - the material spilled is not highly toxic;
 - the quantity spilled is small;
 - there is no fire hazard;
 - the material has little or no potential to reach the environment (e.g., via a floor drain);
 - and advanced personnel protective equipment (i.e., more than gloves and a half-face respirator) is not needed.
- p. Unprotected fauna - refers to non-native wildlife. A comprehensive list of unprotected fauna can be found under Schedule 11 of the NSW National Parks and Wildlife Act 1974.
- q. Waste - is defined in the Protection of the Environment Operations Act 1997 as "any discarded, rejected, unwanted surplus or abandoned substance" that could cause an environmental change due to its volume or composition.
- r. Water pollution - is "introducing into or onto, waters (whether through an act or omission) any matter, whether solid, liquid or gaseous, so that the physical, chemical or biological condition of the waters is changed and makes, or is likely to make, the waters unclean, noxious, poisonous or impure, detrimental to the health, safety, welfare or property of persons, undrinkable for farm animals, poisonous or harmful to aquatic life, animals, birds or fish in or around the waters or unsuitable for use in irrigation, or obstructs or interferes with, or is likely to

obstruct or interfere with persons in the exercise or enjoyment of any right in relation to the waters, and likewise polluting any drain, channel or gutter used or designed to receive or pass rainwater, floodwater or any water that is not polluted. "(Protection of the Environment Operations 1997).

Section 3 - Policy Statement

(4) Refer to the University's:

- a. Environmental Management Policy
- b. Animals on Campus Policy
- c. Mobile Telecommunication Devices Policy
- d. Accident, Injury, Incident, Hazard Reporting and Investigation Policy
- e. Dangerous Weapons Policy

Section 4 - Procedures

Part A - Waste Management Procedures

Purpose and Context

(5) The purpose of this procedure is to define the University's processes for the management, handling, treatment and disposal of waste substances and materials generated on site. The procedure identifies the waste streams likely to be generated across University campus sites and the methods of control required to ensure that legislative requirements are not breached.

(6) This procedure provides the generic process that should be used across all University campuses. Campus specific waste streams not covered in this Procedure should be notified to the Environmental Supervisor for document amendment.

(7) This procedure applies to all campuses and sites where waste is generated. This procedure addresses the management of liquid, solid and hazardous wastes.

(8) This procedure has been developed with reference to the following Statutes and Regulations (and associated amendments) and University Policies, Procedures and Guidelines:

- a. Protection of the Environment Operations Act 1997;
- b. Protection of the Environment Operations (Waste) Regulation 2005;
- c. Protection of the Environment Operations Amendment (Illegal Waste Disposal) Act 2013;
- d. Waste Avoidance And Resource Recovery Act 2001;
- e. Dangerous Goods (Road and Rail Transport) Act 2008;
- f. Environmentally Hazardous Chemicals Act 1985;
- g. Work Health and Safety Act 2011;
- h. Waste Classification Guidelines;
- i. National Waste Policy
- j. University Mobile Telecommunication Devices Policy
- k. University Laboratory Safety Guidelines
- l. University Information Technology and Digital Services

Waste Management Hierarchy

(9) The objective of waste management is to minimise the impact of wastes on the environment, University staff, students, contractors and the public.

(10) The University has adopted the following hierarchy of waste management options and requires all staff and students to subscribe to it:

- a. Reduce and avoid waste generation (the most effective environmental solution may often be to avoid the generation of waste i.e. reduction)
- b. Reuse and recycle (where further reduction is not practicable, products and materials can sometimes be used again, either for the same or a different purpose (i.e. reuse). If reusing material is not possible, then the next option is through recycling, composting or energy recovery from waste) and
- c. Treat and dispose (disposal is only the appropriate option if none of the above offers an appropriate solution).

Specific Waste Management Procedures

(11) The following procedures relate to each of the key waste streams generated by the University:

- a. General waste (office and kitchen waste that is solid and inert in nature including food waste);
- b. Recyclable waste including:
 - i. Paper, and cardboard
 - ii. Cans, plastic containers and glass bottles
 - iii. Imaging consumables
 - iv. Mobile phones
 - v. Electronic waste (E-waste)
 - vi. Furniture and
 - vii. Green waste
- c. Grease trap waste (waste collected in a plumbing device designed to trap solids in wastewater such as oils and grease);
- d. Hazardous waste (any waste of a chemical nature that is potentially hazardous including clinical waste and radioactive waste);
- e. Maintenance and building waste; and
- f. Asbestos, synthetic mineral fibre (SMF) and polychlorinated biphenyl (PCB) waste.

General Waste Procedure

(12) This procedure applies to all University staff, students and contractors and covers all general waste streams (including office and kitchen waste that is solid and inert in nature) generated at all University sites and includes office, kitchen and teaching areas.

(13) Dedicated red labelled general waste bins are provided in external areas across all campuses, kitchens, common rooms and eateries. All items not suitable for recycling should be placed in these receptacles, including:

- a. Food scraps and waste;
- b. Soiled or wet napkins;
- c. Soiled paper towel;
- d. Pencil sharpening;
- e. Metal binders and fasteners;

- f. Photocopy paper packaging;
- g. Plastic cling wrap;
- h. Sandwich and plastic bags;
- i. Broken crockery;
- j. take away coffee cups and
- k. lolly/chip packets

(14) Office staff will be provided with a 'mini' desk bin for general waste. It is the responsibility of staff to empty these bins each day into the larger general waste collection bins provided in kitchens and common rooms.

(15) Contract cleaning staff empty general waste collection bins and either transfer the waste to a compactus unit or waste skip bin.

Recycling Procedures

Office Paper and Cardboard Procedure

(16) This procedure applies to all University staff and students.

(17) Dedicated paper recycling bins are provided at all desks and in photocopier rooms. All paper suitable for recycling is to be placed in these paper recycling bins. This includes:

- a. Photocopy paper;
- b. Printing paper;
- c. Note and writing paper;
- d. Manila folders;
- e. Envelopes;
- f. Newspapers and magazines;
- g. Glossy brochures; and
- h. Text books.

(18) The following waste is not to be placed in paper recycling bins:

- a. Cardboard boxes
- b. Photocopy paper packaging
- c. Food scraps
- d. Food wrappers
- e. Plastics
- f. Glass
- g. Polystyrene
- h. Paper towels
- i. Carbon paper
- j. Metal fasteners/binders

(19) Confidential or sensitive material is to be shredded, or alternatively placed in a security bin, and then recycled.

(20) Contract cleaning staff empty desk, office and photocopier room paper recycling bins into dedicated blue recycling bins located within and outside of buildings.

(21) Cardboard recycling bins are provided at centrally located areas at each University site.

(22) Cardboard boxes are to be flattened and left next to recycling collection bins for removal by contract cleaning staff.

(23) Polystyrene and plastic wrapping is to be removed from cardboard boxes prior to flattening. These should be bagged and left next to general waste collection bins.

Co-mingled Recycling of Aluminium, Plastic and Glass

(24) This procedure applies to all University staff, students and contractors and covers co-mingled recycling generated at all University sites and includes desk, kitchen and eateries

(25) Dedicated yellow labelled recycling bins are provided in external areas across all campuses, kitchens, common rooms and all eateries. All suitable items should be separated from general waste and placed in these receptacles, including:

- a. Glass bottles and jars;
- b. Aluminium cans;
- c. Steel tins;
- d. Milk cartons and bottles;
- e. Juice boxes;
- f. Paper packaging and bags;
- g. Clean paper towel;
- h. Plastic yoghurt containers;
- i. Plastic bottles; and
- j. Recyclable plastic (labelled 1 to 7).

(26) Contract cleaning staff will ensure all recycling is kept separated from general waste.

(27) Collected recycling will either be placed in a dedicated recycling skip bin or in a compactus for sorting at a MRF processing plant.

Imaging Consumables Recycling Procedure

(28) Recycling of imaging consumables is done via "Close the Loop" Cartridge Collection Program.

(29) Close the Loop Limited is a leading global recycler of inkjet cartridges, laser toner cartridges, drum units, copier bottles and more. All cartridges in this program are recycled with zero waste to landfill.

(30) Close the Loop Collection Starter Kits contain 1 x box with lid, 16 x black plastic bin liners, 8 zip ties and an information pack. Boxes should be situated near printing equipment and facilities and lined with 2 plastic bin liners.

(31) Only imaging consumables from any laser printer, inkjet printer, fax machines and photocopiers are to be placed in "Close the Loop" boxes. When the bag is full remove the liners (2 x black bags) and tie off with provided zip tie. Insert new liners for subsequent collection and disposal. Take the bag to a nominated courier collection point.

(32) "Close the Loop" pickup can be arranged by phoning 03 9 465 4855 or via the internet. Further box liners can be obtained by ordering a Consumables Pack from Close the Loop.

Mobile Phone Recycling Procedure

(33) This procedure applies to all University staff issued with a University mobile work phone.

(34) All mobile handsets, including batteries and accessories, are recyclable through the Mobile Phone Industry

Recycling Program.

(35) Any broken/damaged or old University phones that are not repairable should be returned to the IT Accounts Unit. Make sure that the sim card has been removed and the phone is marked dead or working (if partially working).

(36) All mobile phones, batteries and accessories collected through Mobile Muster are recycled for material recovery to minimise the impact of mobile phones on the environment (there is no profit made from this and they are not refurbished).

(37) Mobile Muster collection points are located in the general computer labs at all campuses

(38) For all University staff requiring further information please refer to the University's Mobile Telecommunication Devices Policy and other related documentation available via the Information Technology and Digital Services web site.

Electronic Waste or E-waste

(39) This procedure applies to the disposal of University owned electronic assets only (i.e. non leased items).

(40) IT Procurement should be notified of all University obsolete electronic goods (procedures for notification are available via Information Technology and Digital Services).

(41) IT Procurement will organise, as appropriate, the collection of E-waste by an appropriate external E-waste disposal contractor.

Furniture

(42) This procedure covers the reuse/recycling of furniture considered to be surplus to the University's need.

(43) The Office of Estate and Commercial (OEC) will be responsible for determining the type, location and disposal of used furniture across the University.

(44) Furniture of reasonable quality that cannot be utilised on any University campus will be donated to either a charitable organisation or a tertiary institution in a developing nation.

(45) Furniture that is unable to be donated will be sent to an appropriate external recycling facility.

Green Waste Recycling Procedure

(46) This procedure covers all green waste produced at University campuses. Green waste refers to urban landscape waste generally consisting of leaves, grass clippings, weeds, yard trimmings, wood waste, branches and stumps and other miscellaneous organic materials.

(47) Green wastes at the University originate from the activities associated with grounds maintenance and landscaping, sports facilities maintenance and horticulture. This procedure applies to all University grounds and landscape contractors and farm staff and contractors.

(48) All mowers clippings will be left on lawns as mulched grass.

(49) Green waste resulting from tree lopping, pruning and removal to be placed in a dedicated green waste bin for collection by a recycling contractor. Green waste will be taken to a green waste processing centre.

(50) Green waste produced on the Hawkesbury campus will be mulched and used on the farmland.

Grease Trap Waste Procedure

(51) This procedure covers the collection and removal of waste collected in grease traps across University campuses. Grease trap waste refers to grease and solids intercepted before they enter the sewerage system, e.g. cooking oils.

(52) Waste from grease traps will be collected by a suitably accredited contractor.

(53) The contractor will convey the waste to an approved treatment plant where the waste is processed and reused as compost and feedstock.

Hazardous Waste Operating Procedure

(54) This procedure applies to all hazardous wastes. Hazardous wastes are both solid and liquid wastes that have either the short or long term potential to harm human health and/or the environment. This procedure is in addition to promulgated Work Health, Safety and Wellbeing's Hazardous Waste Policies and Procedures.

(55) Waste streams that are identified as hazardous include:

- a. Any waste that meets the criteria for assessment as a dangerous good (refer to Safe Work Australia)
- b. Pharmaceuticals and poisons;
- c. Declared chemical waste;
- d. Biological waste;
- e. Cytotoxic waste;
- f. Clinical waste;
- g. Sharps waste; and
- h. Liquid and non-liquid radioactive waste.

(56) From an environmental perspective, these types of waste will contaminate soil and waterways if sent to landfill and are governed by both WHS and environmental legislation and best practice guidelines.

Hazardous Liquid Waste

(57) The NSW Environment and Protection Agency (EPA) has issued Environmental Guidelines in order to promote compliance with the Protection of the Environment Operations (Waste) Regulation 2005, made under the Protection of the Environment Operations Act 1997.

(58) According to these guidelines and legislation liquid waste should be classified according to the following types and labelled and stored appropriately. Please refer to the Work Health and Safety Laboratory Safety Guidelines and Hazardous Substances and Dangerous Goods Procedures.

(59) Wastes (liquid) that are classified as hazardous include:

- a. Group A - Non-aqueous liquid and controlled aqueous liquid waste;
- b. Group B - Liquid food waste and liquid grease-trap waste resulting from the preparation or manufacturing of food;
- c. Group C - Liquid waste from human waste storage facilities or waste treatment devices; and
- d. Non-controlled aqueous liquid.

Maintenance Waste Operating Procedure

(60) This procedure applies to all the Office of Estate and Commercial Project Managers and Building Contractors and covers all building rubble resulting from demolition, building and refurbishment on all University campuses. Building

rubble or building and demolition waste refers to all material (such as bricks, concrete, paper, plastics, polystyrene, glass, metal and timber) resulting from the demolition, erection, construction, refurbishment or alteration of buildings and/or infrastructure-type development.

(61) This operating procedure does not apply to asbestos waste.

(62) Building Contractors, under the direction of the Office of Estate and Commercial, must recycle and divert from landfill surplus rock, soil and other excavation or demolition materials wherever this is practical.

(63) Brick, concrete, timber, metals, plasterboard, paper and packaging, glass, plastics and soil waste from building and demolition works are to be sorted on site by the Building Contractor and sent to dedicated recycling facilities where practical.

(64) All Contractors must ensure all waste removed from University sites is conveyed to and disposed in a place lawfully designated as a waste facility. There are harsh penalties enforced for illegal dumping under the Protection of the Environment Operations Amendment (Illegal Waste Disposal) Act 2013.

Asbestos, Synthetic Mineral Fibres (SMF) and Polychlorinated Biphenyl (PCB) Material Waste Operating Procedure

(65) This procedure is to be read in conjunction with the University Work Health and Safety Policies and Procedures and Work Health and Safety Act 2011 and the codes of practice relating to that Act.

(66) This procedure applies to all Office of Estate and Commercial Project Managers and Building Contractors.

(67) This procedure covers all asbestos and asbestos related materials, all SMF material and all PCB material waste.

(68) Asbestos waste means any waste that contains asbestos - the common name for a variety of silicate minerals within either the amphibole or the serpentine groups that are fibrous in structure and more or less resistant to acid and fire. Asbestos is classed both as a hazardous substance and a class 9 miscellaneous dangerous good - inhaling the fibres may cause asbestosis or lung cancer.

(69) SMF waste means any waste that contains SMFs - a general term used to describe man-made amorphous (non-crystalline) silicate fibres which are manufactured from minerals such as glass, rock, alumina and silica. SMFs are classified as a hazardous substance and a non-dangerous good. Short-term exposure to SMFs may result in skin, eye and upper respiratory tract irritation and long-term exposure is possibly carcinogenic.

(70) PCB waste means any waste that contains PCBs - a group of toxic organo-chlorine compounds. While they vary in form, PCBs usually occur as non-flammable oils in electrical equipment such as transformers and capacitors. PCBs are classified as a hazardous chemical and a class 9 miscellaneous dangerous good. Exposure to leaking PCBs can result in a range of health problems from nausea and eye irritations to bronchitis, liver complications and chloracne. From an environmental perspective, PCBs are non-degradable and can therefore bio-accumulate in the food chain.

(71) Details of existing asbestos, SMF and PCB material locations in University buildings are kept in the Office of Estate and Commercial HAZMAT Register.

(72) Generally the majority of asbestos, SMF and PCB containing materials on University campuses have been assessed by an independent consultant to be in a stable condition with no remedial action required and does not present a significant health risk.

(73) Prior to undertaking any major or minor Capital Works, the Project Manager responsible for the project must check the Office of Estate and Commercial HAZMAT Register for the presence of asbestos, SMF and PCB containing materials. If any of these materials are present and require removal, the Project Manager is responsible for factoring into the administration of the tender process the procurement of an appropriately licensed contractor to safely remove

and dispose of the material.

(74) The Project Manager is to manage the awarded contract and to ensure that the contractor is fulfilling the terms of the contract by conducting spot audits.

(75) The Project Manager is responsible for collating and filing in all the necessary documentation including proof of correct disposal of asbestos, SMFs and PCB containing materials and is to notify the relevant Associate Director, Campus and Maintenance Delivery once the job is completed of what substances have been removed in order to update the HAZMAT register.

(76) The Office of Estate and Commercial is to maintain and update as required the HAZMAT register.

(77) All contractors must be licensed hazardous material removalists (if appropriate)* and must comply with all state and national environmental and work health and safety legislation and codes of practice.

(78) In situations where these materials need to be removed from University buildings no disturbance of these substances is to occur and discovery is to be reported immediately to the relevant Project Manager and Associate Director, Campus and Maintenance Delivery in Office of Estate and Commercial.

(79) The collection, handling and disposal of asbestos and asbestos waste by the contractor must strictly adhere to the requirements as stipulated in NSW Environmental Protection Authority's Protection of the Environment Operations (Waste) Regulation 2014. The contractor must forward the appropriate documentation from a licensed landfill site to the Project Manager.

(80) The collection, handling and disposal of SMF's by the contractor must strictly adhere to the requirements as stipulated in The National Standard for Synthetic Mineral Fibres [NOHSC:1004 (1990)] and National Code of Practice for the safe use of Synthetic Mineral Fibres [NOHSC:2006 (1990)].

(81) In NSW, SMF waste is accepted at nominated landfills and usually must be booked a day in advance. The building contractor who is responsible for the correct collection and disposal of SMF containing material must forward the appropriate documentation from a licensed landfill site to the Project Manager.

(82) Scheduled PCB material and waste must be transported in accordance with the Australian Dangerous Goods Code and any other legislative requirements. The contractor who is responsible for the correct collection and disposal of PCBs must forward the appropriate documentation from a licensed landfill site to the Project Manager.

(83) All workers involved in the transport of PCB wastes should be fully informed of the hazards of PCBs and trained in the correct procedures required for the safe transport of these hazardous materials. PCB waste is classified according to the level of concentration present in the PCB containing material.

Training

(84) Waste management information is available on the Office of Sustainability web page for staff and students. Waste management responsibilities for contractors are covered in the compulsory University Online Induction course.

Paper and Cardboard Recycling Timetables

(85) Contract cleaning staff transport blue paper recycling and red security bins to designated kerbside collection points and move them back to their original location. These bins are collected weekly (for collection schedule refer to the Office of Estate and Commercial web page).

(86) Cardboard collection occurs from each campus twice a week (for collection schedule refer to the Office of Estate and Commercial web page).

Part B - Pesticide Management Procedures

Purpose and Context

(87) While pesticides (including herbicides and fungicides) can have economic, social, public health and environmental benefits there are significant risks associated with pesticide use. Many pesticides, due to their levels of toxicity, flammability or combustibility are classified as dangerous goods and/or hazardous chemicals.

(88) The purpose of this procedure is to define the University's processes for the management of pesticides employed as a consequence of building maintenance, farming, horticultural and grounds maintenance activities conducted by the university. This procedure identifies the standard operating procedures for the safe handling, management, use and disposal of pesticides to ensure that legislative requirements are not breached.

(89) This procedure has been developed with reference to the following Statutes and Regulations (and associated amendments) and University Policies, Procedures and Guidelines:

- a. Pesticides Act 1999;
- b. Pesticides Regulation 2009;
- c. Pesticides Amendment (User Training) Regulation 2003;
- d. Protection of the Environment Operations Act 1997;
- e. Work Health and Safety Act 2011;
- f. WorkCover NSW Code of Practice for Management of Risks of Hazardous Chemicals in the Work Place;
- g. WorkCover NSW Code of Practice for Safe Use and Storage of Chemicals (Including Pesticides and Herbicides) in Agriculture;
- h. University Hazardous Substances and Dangerous Goods Procedures

(90) The principles embodied in this document are generic and are to be applied to the management of pesticides, herbicides and fungicides by University staff and external contractors at all University sites. This procedure addresses the management of all types of liquid and solid pesticides and herbicides.

(91) While this procedure is primarily concerned with minimising the negative environmental impacts that the use of pesticides entails, it has also been written to ensure consistency with Work Health and Safety Regulations where relevant.

Legislative Responsibilities

(92) The Australian Pesticides and Veterinary Medicines Authority (APVMA) currently require that all pesticides sold in Australia be approved and registered.

(93) In NSW, the Pesticides Act 1999 permits only the use of approved registered pesticides (unless specific authorisation is granted for the use of an unregistered pesticide). The Act also requires all users to adhere to the approved label or permit directions. The Pesticides Act also sets out current record keeping and training requirements. The Environmental Protection Authority (EPA) is the state agency that currently enforces the proper use of pesticides in NSW.

(94) This Act controls and regulates the use of pesticides in New South Wales. The focus of this legislation is to protect human health, the environment, property and trade while safeguarding responsible pesticide use.

(95) It is an offence under the Act: to:

- a. Use a pesticide in a manner that:

- i. Injures or is likely to injure another person;
 - ii. Damages or is likely to damage any property of another person or harms any non-target animal or plant; and/or
 - iii. Harms any animal or plant if there is no approved label or permit for the pesticide;
- b. Wilfully or negligently use a pesticide in a manner that causes material harm to threatened species or protected animals;
 - c. Possess or use an unregistered pesticide without a permit;
 - d. Fail to read an approved label or permit before using a registered pesticide;
 - e. Use a registered pesticide contrary to the approved label;
 - f. Keep registered pesticides in a container without an approved label; and/or
 - g. Possess or use a restricted pesticide without being authorised by a certificate of competency or a pesticide control order.

(96) The Pesticides Regulation 2009 requires users of pesticides for commercial and occupational purposes, or in connection with agricultural, farming or forestry operations to complete competency based training in pesticide use, transport, handling and storage and to make and keep records of pesticide use.

Pesticide Application Requirements

(97) Prior to undertaking pesticide spraying University staff and contractors should take a precautionary approach in recognition of the limited knowledge of environmental consequences resulting from the widespread use, transport, persistence and degradation impacts of pesticide application.

(98) Persons engaged in pesticide transport, handling, storage, preparation and application on University property are required to:

- a. Be qualified in accordance with requirements of the Pesticides Regulation 2009;
- b. Ensure that a Register of Hazardous Chemicals is available and up to date;
- c. Ensure that Safety Data Sheets (SDS) are available, current and not more than five years old. These need to be made available for viewing upon request;
- d. Have access to an approved Spill Kit and equipment required to clean up any spill;
- e. Ascertain that climatic conditions are conducive to applying the pesticide, taking into account wind drift, run off and rain;
- f. Ensure that the required and approved signage is prominently displayed;
- g. Wear the stipulated PPE as promulgated on the SDS;
- h. Ensure that people, animals, water bodies, vehicles etc will not come into contact with pesticide application operations;
- i. Ensure that the pesticides are used in a manner that does not unreasonably interfere with the quality of life, health or property of other people. Effective communication is a good way to minimise conflict between pesticide users and neighbours;
- j. Ensure that the pesticides used do not move beyond the targeted application area;
- k. Comply with legislative requirements and follow the label instructions to ensure that pesticides are transported, stored, mixed and used effectively and do not have a negative impact upon the environment, health, safety and trade. Always consider the circumstances when applying pesticides;
- l. Ensure that containers and apparatus are thoroughly cleaned after use and residue is collected in an approved container for legislatively compliant disposal;
- m. Enter details of the pesticide application in the Pesticide Application Register; and
- n. Consider an Integrated Pest Management Approach as a means of controlling pests without relying totally on

chemical insecticides.

(99) From an environmental perspective inappropriate use of pesticides, particularly those classified as dangerous, hazardous or poisonous, can lead to environmental harm. Different levels of harm (ranging from nuisance to serious) can arise from the incorrect use of pesticides. University staff and contractors engaged in pesticide use are to ensure that pesticides do not:

- a. Enter stormwater systems, inland waters, ground water, wetlands, estuarine or marine waters;
- b. Pollute soils outside the target area;
- c. Impact on non-target organisms, including plants or animals or damage ecosystem functions;
- d. Harm turf, gardens or crops of neighbours due to spray drift;
- e. Cause excessive noise during pesticide application or subjecting neighbours to spray drift that causes discomfort, illness or nuisance due to odour, irritation or toxicity;
- f. Contribute to the development of resistance in pests; and
- g. Contaminated agricultural produce.

Recordkeeping

Pesticide Registers

(100) A register is a listing of all hazardous substances in the workplace. This includes a list of the chemicals kept in a central store or a pest control vehicle. WorkCover NSW recommends that the minimum information which must be included in a register is a list of all hazardous chemicals used or produced in the workplace, and the relevant SDS.

(101) The University utilises Chemwatch for listing all hazardous chemicals stored and used on its campuses. Contractors maintain their own register with copies made available to the University.

Pesticide Usage Records

(102) The Pesticides Regulation 2009 requires that the use of pesticides must be correctly recorded with the following information:

- a. The full product name of the pesticide applied;
- b. A description of the crop in respect of which the pesticide was applied or other situation in which it was used;
- c. The rate of application of the pesticide and the quantity applied;
- d. A description of the equipment used to apply the pesticide;
- e. The address of the property and the delineation of the area in which the pesticide was released and the order in which areas (such as paddocks or sheds) were treated;
- f. The date and time of the application of the pesticide (including the start and finish time);
- g. The name, address and contact details of the person who applied the pesticide or, if the pesticide was applied by a person employed to apply the pesticide, the name of the employee and the name, address and contact details of the employer;
- h. The name, address and contact details of the owner or occupier of the land in respect of which the pesticide was applied (if the information is not the same as the information required by paragraph (g));
- i. The name of each person who used the pesticide under the supervision or direction of the supervisor;
- j. If the pesticide is applied outdoors by means of any spray equipment;
- k. The estimated wind speed and direction at the start of the application and whenever there is any significant change during the application; and
- l. If other weather conditions (such as temperature, humidity or rainfall conditions) are specified on the pesticide label as being relevant for the proper use of the pesticide - a description of those conditions at the start of the

application and whenever there is any significant change during the application.

(103) The record must be made within 24 hours of use and kept for three years. Environment Protection Authority officers may check these records at any reasonable time and penalties may apply if the records have not been kept in accordance with the new law.

Training

(104) The Pesticides Regulation 2009 makes training compulsory for commercial users of pesticides. A person who is 'trained' has a qualification that shows that they have achieved a specific level of competency in pesticide use. Holders of Farmcare, ChemCert or SMARTtrain qualifications are considered already qualified under the Act. The qualification remains valid for five years from the date it was completed. People who are qualified have to be re-assessed every five years.

Safety Data Sheets (SDS)

(105) An SDS provides information on the properties of hazardous chemicals, how they affect health and safety in the workplace and on how to manage the hazardous chemicals in the workplace (reference Safe Work Australia).

(106) An SDS for a chemical provides information on:

- a. Identification;
- b. Health and physicochemical hazards;
- c. Precautions for use at application strength, including the exposure standard;
- d. Safe storage and handling information;
- e. The stability and reactivity of the hazardous chemical;
- f. Where a chemical may release another hazardous substance during normal use such as when reacting with other common materials or when heated;
- g. Emergency procedures (to assist planning); and
- h. Disposal considerations.

(107) Use the SDS for guidance on the safe use and storage of chemicals. Other persons working in the area where the chemical is being used may also need to see the SDS.

(108) All SDS will be located in an easily accessible location for easy reference. Alternatively SDS are accessible through ChemWatch via the library website.

Part C - Emergency Preparedness and Response Procedures

Purpose and Context

(109) To effectively manage the University's activities, potential generic emergency situations that have a negative environmental impact have been identified and appropriate responses documented. This procedure addresses reasonably foreseeable environmental emergency situations that could arise through these activities. However, it must be borne in mind that potential emergencies and responses are specifically related to site conditions and therefore generic response procedures need to be adapted to each project.

(110) Responsibility for identification of potential emergencies, adaptation of generic response procedures and implementation of response procedures is at a number of levels.

(111) The procedures in this document have been developed with reference to the following Statutes and Regulations (and associated amendments) and University Policies, Procedures and Guidelines:

- a. Protection of the Environment Operations Act 1997;
- b. Environmentally Hazardous Chemicals Act 1985;
- c. Work Health and Safety Act 2011;
- d. Ozone Protection Act 1989 (NSW);
- e. University Accident, Injury, Incident, Hazard Reporting and Investigation Policy;
- f. University Health Safety and Wellbeing Policy; and
- g. University Dangerous Weapons Policy

(112) This procedure has been developed for use across all University campuses.

(113) This procedure will review and identify all foreseeable emergency situations for environmental releases and detail generic emergency responses to these situations. Emergency preparedness and responses will outline:

- a. University Emergency Contact Numbers and Equipment;
- b. University Emergency Procedures;
- c. Fire - protected areas and farmlands;
- d. Hazardous spills and/or leaks; and
- e. Explosions - gas leaks etc.

(114) The Work Health, Safety and Wellbeing has a comprehensive Emergency Preparedness Program that outlines a framework to enable line managers, in consultation with other stakeholders, to establish effective emergency management plans that are appropriate for their respective areas of responsibility. These procedures have been developed with this framework in mind. In addition, this website has a number of generic emergency management instructions that the reader is referred to.

Legislative Responsibilities

(115) The Protection of the Environment Operations Act 1997 is the key piece of environment protection legislation administered by the NSW Environmental Protection Agency (EPA). Under this legislation an organisation has a duty of care to notify the EPA where "a pollution incident occurs in the course of an activity so that material harm to the environment is caused or threatened." The Ozone Protection Act 1989 (NSW) and Ozone Protection Regulation 1997 was implemented to enable the state to meet its obligations under the Montreal Protocol to phase out production and consumption of ozone depleting substances including CFCs. It is a Tier 1 offence under section 117 of the NSW Protection of the Environment Operations Act 1997 to wilfully or negligently cause certain ozone-depleting substances to be emitted into the atmosphere contrary to the Regulation in a manner that harms or is likely to harm the environment.

Emergency Contact Numbers/Equipment

(116) This following section is as per Campus Safety and Security web page.

(117) Emergency telephone numbers are:

(118) From internal phones dial 2300.

(119) 24 hour security hotline 0414 240 458

(120) 000 for fire, ambulance and police

(118) 'The University has installed Emergency Contact Points' across all campuses to provide a 24-hour direct link to a Campus Security Officer in the event of an emergency. The contact point is activated by pressing the button located on the panel and speaking into the inbuilt microphone.

(119) '2300' will be connected directly to Campus Safety and Security staff on the campus on which the caller is located.

(120) When using an internal telephone to phone the emergency services ('000') the caller must first dial '0' in order to obtain an outside line.

(121) There will be a slight delay when dialling the '000' emergency number before the phone begins ringing.

(122) The University's emergency vehicles contain equipment which can be used in an emergency. Campus Safety and Security staff are responsible for ensuring that the equipment is carried in the vehicle at all times and is maintained in a serviceable condition.

University Emergency Procedures

(123) Key University Emergency Procedures addressing fire, evacuation, bomb threats, chemical and gas spills, medical emergencies and loss of essential services have been documented by Campus Safety and Security.

(124) The University's Emergency Management Program contains key duties and responsibilities for staff undertaking first response type roles in relation to emergencies on and around any University campus.

Fire and Explosions

(125) This procedure applies to all University assets including buildings, external areas, bushland and farm land.

(126) In case of emergencies which typically may include fire, explosion, leakage of noxious gases/liquids etc: CALL '000', then:

- a. Remain calm;
- b. Quickly assess the extent of the emergency;
- c. Notify personnel in the immediate area;
- d. Do not attempt any action that would jeopardise your safety or the safety of any other person;
- e. Contact the Campus Safety and Security personnel 0414 240 458 and provide the following information:
 - i. Who is calling and your present location;
 - ii. The specific nature and location of the emergency;
 - iii. The number you are calling from; and
 - iv. If known, the nature and extent of any injuries to persons;
- f. If it is safe to do so, and your assistance is not required at the emergency site, remain at the phone you are calling from until assistance arrives;
- g. when instructed to evacuate the area, proceed in a calm, orderly manner to the designated safe areas;
 - i. Do not assemble near any building or other structure;
 - ii. Take your personal belongings e.g. coat, handbag, briefcase with you;
 - iii. Don't lock doors as you leave;
 - iv. Under no circumstances re-enter the area until authorised to do so by the Emergency Controller or their representative; and
- h. Please remain calm as assistance will be sent to your location

Hazardous Spills and Leaks

(127) There are a number of areas that have the potential to make a negative environmental impact in terms of spills and leaks:

- a. Petrol spills;
- b. PCB leaks;
- c. Chlorine spills;
- d. Diesel spills; and
- e. Oil spills including hydraulic oil, engine oil and brake fluids.

(128) See WHS Emergency Procedures.

Part D - Emergency Spill Response Procedures

Purpose and Context

(129) While accidental spills and leaks can occur the University recognises that their impacts need be minimised and that the appropriate procedures are in place to protect both human health and the environment.

(130) The purpose of this procedure is to define the University's processes for the emergency management of hazardous spills and leaks as a consequence of general business activities conducted across all spheres of the university. This procedure applies to all University staff, students, contractors and lessees and has been developed for use across all University campuses.

(131) The procedure identifies the standard operating procedures for the safe containment and disposal of hazardous spills and leaks to ensure that the University's environmental responsibility and legislative requirements are met.

(132) The procedures in this document have been developed with reference to the following:

(133) Protection of the Environment Operations Act 1997

(134) Protection of the Environment Operations (General) Regulation 2009

(135) Environmentally Hazardous Chemicals Act 1985;

(136) Ozone Protection Act 1989 (NSW)

(137) Work Health and Safety Act 2011

(138) Australian Chlorofluorocarbon Management Strategy 2001

(139) Manufacturer's Safety Data Sheets (SDS)

(140) University Laboratory Safety Guidelines

(133) This procedure addresses the emergency management spill response to the major and most likely types of hazardous pollutants on University grounds such as: petroleum; diesel; oil lubricants and products; chlorine; polychlorinated biphenyl (PCBs), chemical spills in laboratories; Chlorofluorocarbons (CFC) leaks and gas leaks.

(134) This procedure applies to both liquid and gaseous substances.

(135) While this procedure is primarily concerned with minimising the negative environmental impacts that an accidental spill or leak may entail, it has also been written to ensure consistency with Work Health and Safety Regulation where relevant.

(136) There are three major ways that a hazardous spill or leak can impact on the environment:

(137) Water pollution - according to the NSW Environmental Protection Authority stormwater pollution is the biggest source of water pollution in urban areas. In Sydney, the cumulative effect of oil spills results in 60,000 litres of oil washed from the road network down the stormwater drain after heavy rain. Avoiding stormwater pollution is thus a major environmental consideration in the development of these procedures. Please note that under the Protection of the Environment Operations Act 1997 it is against the law for a person to pollute any waters.

- b. Air pollution - toxic emissions released to air from any fires that result from major hazardous spills are also of environmental concern because of the possibility of exposure to air-borne contaminants as is the release of ozone depleting substances.
- c. Land contamination - major hazardous spills also run the risk of land contamination.

Legislative Responsibilities

(137) The Protection of the Environment Operations Act 1997 is the key piece of environment protection legislation administered by the NSW Office of Environment and Heritage's Environmental Protection Agency.

(138) The Act has a three tier penalty regime for Environmental Offences:

(139) Tier 1 offences are considered the most serious offences which include the wilful or negligent disposal of waste causing or likely to cause harm to the environment (section 115), wilfully or negligently causing a substance to leak, spill or otherwise escape in a manner that harms or is likely to harm the environment (section 116), and the wilful or negligent emission of an ozone-depleting substance in breach of the Ozone Protection Regulations in a manner that harms or is likely to harm the environment (section 117 Protection of the Environment Operations Act 1997). Maximum penalty for a tier 1 offence is \$5 million for a corporation and \$1 million or 7 years imprisonment for an individual (section 118 Protection of the Environment Operations Act 1997).

(140) Tier 2 offences consist of all other offences under the Act and regulations, including water pollution, air pollution, land pollution (eg littering) and noise pollution offences. These offences are generally categorised as 'strict liability' offences i.e. the prosecution is not required to prove intent. The maximum penalties under the Act for Tier 2 offences are up to \$2 million in the case of a corporation and \$500,000 for individuals. Daily penalties apply to continuing offences. Under this tier it is also an offence to:

- i. emit offensive odour from scheduled activities;
- ii. unlawfully transport waste; and
- iii. failure to comply with the duty to notify the EPA or relevant council certain pollution incidents where "material harm" to the environment is threatened or caused. (This duty to notify applies to the person or employee carrying on the activity and the occupier of premises where the incident occurs).

(141) Tier 3 offences are dealt with by penalty notices or 'on-the-spot fines'. These notices impose a fine that can be paid or can be defended in court.

(139) Under this legislation an organisation has a duty of care to notify the EPA where "a pollution incident occurs in the course of an activity so that material harm to the environment is caused or threatened." This regime obviously makes it in any organisation's interests to be vigilant in all areas of environmental management.

Part E - Generic Spill Response Procedures

(140) In the event of a major spill on any University Campus Safety and Security must be immediately notified on 0414 240 458. A Security representative will attend the scene of the spill as soon as possible.

(141) Depending on the circumstances and nature of the spill the NSW Fire and Rescue should also be called (000) by either those responsible for the spill if there is an immediate fire or pollution risk or will be called by Security upon arriving and assessing the situation. When it is safe to do so, the generic procedure to follow is as follows.

Protective Action Zones

(142) In the case of major hazardous spills, protective action zones will need to be established. If the spill occurs in an outside environment note the wind direction and then establish the protective action zone. Specific distances will depend on the material spilled and are detailed in each specific operating procedure.

(143) Steps to take to create a protective action zone are as follows:

- a. Establish the initial isolation distance from the spill and direct all persons to move, in a crosswind direction, away from the spill to the distance specified.
- b. Establish the protective action zone downwind distance relevant to the material spilled. For practical purposes, the protective action zone is a square, whose length and width are the same as the downwind distance.
- c. Initiate protective actions (i.e. steps taken to preserve the health and safety of both the public and responders to the incident) to the extent possible, beginning with those closest to the spill site and working away from the site in the downwind direction.

Part F - Specific Emergency Spill Response Operating Procedures

(144) Specific Emergency Spill Response Operating Procedures are outlined below for the following:

- a. Petrol leaks spills;
- b. PCB leaks and minor spills;
- c. Chlorine spills;
- d. Diesel leaks and spills;
- e. Oil leaks and spills;
- f. Laboratory spills;
- g. CFC leaks; and
- h. Gas leaks.

(145) Please note, unless otherwise specified all responses are as per SDS instructions for each material as found on Chemwatch.

Petrol Leak and Spill Response Operating Procedure

(146) This operating procedure applies to both leaded and unleaded petroleum products (also commonly referred to as motor fuel and/or gasoline) across all University campuses. Both leaded and unleaded petrol are classified as a hazardous chemical and a Class 3 dangerous good according to the criteria of the Australian Dangerous Good code. Unleaded petrol is a lead free motor fuel used for internal combustion engines, 2-stroke and 4-stroke engines. It has a flashpoint of less than or equal to 30 degrees Celsius and a boiling point of greater than 30 degrees Celsius. It is anticipated that the majority of petrol related incidents will relate to spills and leaks from vehicles.

Petrol Leaks

(147) Petrol leaking from vehicles can occur particularly during hot weather when heat expands the petrol in fuel tanks. Leaking petrol is a serious risk and care should be taken with petrol spills to prevent the danger of ignition or explosion (OFM, Griffith University).

(148) These are the protective actions that need to be taken in the event of a petrol leak:

- a. remove all ignition sources;
- b. notify security on 0414 240 458 if any petrol leaks are identified;
- c. security will attempt to contact owner of vehicle; and
- d. as per minor spill procedure.

Minor Petrol Spills (less than 200 litres) - Call '000' and ask for Fire

(149) Contact Campus Safety and Security on 0414 240 458.

(150) These are the protective actions that need to be taken in the event of a minor petrol spill:

- a. Remove all ignition sources;
- b. Avoid breathing vapours and contact with skin and eyes;
- c. Control personal contact by using protective equipment;
- d. Only attempt to contain the spill if you have been trained in the appropriate safe handling procedures for the spill;
- e. Wait for NSW Fire and Rescue to arrive and advise them of location and nature of hazard.

Major Petrol Spills (greater than 200 litres) - Call Fire Brigade '000'

(151) Contact Campus Safety and Security on 0414 240 458 as the spill may be violently or explosively reactive.

(152) Establish an isolation distance of 25 metres and downwind protection distance of 300 metres as indicated in the Protective Action Zone Diagram.

(153) These are the protective actions that need to be taken in the event of a major petrol spill:

- a. Clear area of personnel and move upwind;
- b. No smoking, naked lights or ignition sources;
- c. Only attempt to contain the spill if you have been trained in the appropriate safe handling procedures for the spill;
- d. Wait for NSW Fire and Rescue to arrive and advise them of location and nature of hazard.

PCB Leak and Spill Response Operating Procedure

(154) This operating procedure applies to metal capacitors containing polychlorinated biphenyl (PCB) material that are at Hawkesbury Campus, Parramatta North Campus, Parramatta South Campus, Kingswood Campus and Westmead Campus. All of the capacitors containing PCBs have been assessed by a professional and independent survey as "in a good and stable condition at the time of inspection with no action currently required."

(155) PCBs are classified as a hazardous chemical and a class 9 miscellaneous dangerous good. Exposure to leaking PCBs can result in a range of health problems from nausea and eye irritations to bronchitis, liver complications and chloracne.

(156) From an environmental perspective, PCBs are recognised internationally to be a major environmental pollutant. They are non-degradable and their persistence can cause ecological damage via water pollution and bio-accumulation in the food chain. The loss of these materials to the environment must be avoided at all costs. Given the limited amount of PCBs on University campuses there is not enough PCB material to constitute a "major" spill. As such this procedure relates only to PCB leaks and minor spills.

PCB Leaks and Minor Spills - Call '000' ask for Fire

(157) Contact Campus Safety and Security on 0414 240 458.

(158) These are the protective actions that need to be taken in the event of a PCB leak or minor spill:

- a. Avoid breathing vapours and contact with skin and eyes;
- b. Clear area of personnel and move upwind;
- c. Only attempt to contain the spill if you have been trained in the appropriate safe handling procedures for the spill;
- d. Wait for NSW Fire and Rescue to arrive and advise them of location and nature of hazard.

Chlorine Leak and Spill Response Operating Procedure

(159) This operating procedure applies to the chlorine chemical stores and chlorinated water in University swimming pools at Hawkesbury and Blacktown campuses. Both Hawkesbury and Blacktown campuses have stores of sodium hypochlorite - liquid pool chlorine. Sodium Hypochlorite is used for the purification of water and as a swimming pool disinfectant. It is classified as a hazardous chemical and a Class 8 (corrosive) dangerous good. As an alkaline and a corrosive, sodium hypochlorite will damage living tissue, goods or equipment on contact by chemical action. It is not highly flammable but is considered to be an "ecotoxin" i.e. a toxicant that can adversely affect ecosystems.

Minor Chlorine Spills (less than 200 litres) Call '000' ask for Fire

(160) Contact Campus Safety and Security on 0414 240 458.

(161) These are the protective actions that need to be taken in the event of a minor chlorine spill, N.B. clean up should only be undertaken by trained personnel:

- a. Avoid breathing vapours and contact with skin and eyes;
- b. Clear area of personnel and move upwind;
- c. Only attempt to contain the spill if you have been trained in the appropriate safe handling procedures for the spill;
- d. Wait for NSW Fire and Rescue to arrive and advise them of location and nature of hazard.

Major Chlorine Spills (greater than 200 litres) - Call '000' ask for Fire

(162) Contact Campus Safety and Security on 0414 240 458.

(163) Establish an isolation distance of 25 metres and downwind protection distance of 250 metres as indicated in the Protective Action Zone Diagram.

(164) These are the protective actions that need to be taken in the event of a major chlorine spill:

- a. Avoid breathing vapours and contact with skin and eyes
- b. Clear area of personnel and move upwind;
- c. Only attempt to contain the spill if you have been trained in the appropriate safe handling procedures for the spill;
- d. Wait to Fire Brigade arrive & advise them of location and nature of hazard.

Diesel Leak and Spill Response Operating Procedure

(165) This operating procedure applies to all diesel spills and leaks across all University campuses. Diesel is synonymous with a number of terms including: "automotive diesel fuel oil"; "distillate dieseline"; "diesel oil"; "diesel fuel"; "diesel oil, light" and "summer diesel". Diesel is a distillate fuel suitable for use as a fuel for trucks, ships and other automotive equipment. It is classified as a hazardous chemicals and a non-dangerous good. Diesel is stored in bulk in a number of areas at the University for use in farming equipment. Diesel is also transported onto campuses by semi-trailers.

Diesel Leaks and Minor Spills (less than 200 litres) - Call '000' ask for Fire

(166) Contact Campus Safety and Security on 0414 240 458.

(167) These are the protective actions that need to be taken in the event of a minor diesel spill:

- a. Remove all ignition sources;

- b. Avoid breathing vapours and contact with skin and eyes;
- c. Clear area of personnel and move upwind;
- d. Only attempt to contain the spill if you have been trained in the appropriate safe handling procedures for the spill;
- e. Wait for Fire Brigade to arrive and advise them of location and nature of hazard.

Major Diesel Spills (greater than 200 litres) - Call '000' ask for Fire

(168) Contact Campus Safety and Security on 0414 240 458.

(169) These are the protective actions that need to be taken in the event of a major diesel spill:

- a. Remove all ignition sources;
- b. Avoid breathing vapours and contact with skin and eyes;
- c. Clear area of personnel and move upwind;
- d. Only attempt to contain the spill if you have been trained in the appropriate safe handling procedures for the spill;
- e. Wait for Fire Brigade to arrive and advise them of location and nature of hazard.

Oil Spill/Leak Response Operating Procedure

(170) This operating procedure applies to all oil spills and leaks across all University campuses. "Oil" is used as a generic term and refers to all hydraulic oil, engine oil and brake fluid. All these oils are classified as a non-hazardous substance and a non-dangerous good according to the criteria of National Occupational Health and Safety Code and the Australian Dangerous Goods Code.

Oil Leaks and Minor Spills (less than 200 litres) - Call '000' ask for Fire

(171) Contact Campus Safety and Security on 0414 240 458.

(172) These are the protective actions that need to be taken in the event of a minor oil spill:

- a. Remove all ignition sources.
- b. Avoid breathing vapours and contact with skin and eyes.
- c. Clear area of personnel and move upwind;
- d. Only attempt to contain the spill if you have been trained in the appropriate safe handling procedures for the spill;
- e. Wait for Fire Brigade to arrive and advise them of location and nature of hazard.

Laboratory Spill/Leak Response Operating Procedure

(173) This operating procedure applies to all spills and leaks across all University laboratories.

(174) In laboratories the definition of minor and major spills changes substantially.

(175) Refer to the [University Laboratory Safety Guidelines](#).

Chlorofluorocarbon (CFC) Leak Response Operating Procedure

(176) CFCs are artificial gas compounds that contain carbon, chlorine and fluorine. At room temperature CFCs are easily liquefied by compression - they are also stable and non-toxic. Prior to 1989 CFCs have been widely used as working fluids in refrigerators and air conditioners, propellants in spray cans for paints etc. and foaming agents.

(177) CFCs are also one of the most ozone depleting substances available. Due to their stability they remain in the atmosphere for a significant amount of time after release - it is estimated that one chlorine atom can destroy over 100,000 molecules.

(178) CFCs are still used at the University in the air conditioning systems. CFC leaks can be detected two ways. If an air conditioning system is not functioning the maintenance contractor is called and any leaks can be identified and rectified. The second is via the monthly routine maintenance checks conducted by the contractor.

Gas Spill/Leak Response Operating Procedure

(179) The University has a number of different types of gases in store across its campuses. Gases which have been compressed, liquefied or dissolved under pressure are classified as a Class 2 dangerous good. Under this classification there are three categories of gases:

- a. Class 2.1 - Flammable Gases: e.g. hydrogen, acetylene, liquefied petroleum gas (LP Gas);
- b. Class 2.2 - Non-flammable, non-toxic gases: e.g. oxygen, nitrogen air and argon; and
- c. Class 2.3 - Toxic gases: gases liable to cause death or serious injury to human health if inhaled - e.g. ammonia, chlorine, carbon dioxide.

(180) In the case of a gas spill and /or leak the procedure to follow is as per University Emergency Procedures.

- a. Alert people in immediate vicinity.
- b. Notify security on 0414 240 458 stating exact location and nature of spill/leak.
- c. Only attempt to contain the spill/leak if you are aware of the appropriate safe handling procedures for the spill.
- d. Send someone to nearest road to direct emergency services.
- e. Evacuate danger areas (remain upwind) and proceed to safe assembly area.
- f. Co-operate with emergency wardens and services on their arrival.
- g. Do not re-enter buildings until instructed by emergency controller.
- h. Do not attempt any action that puts your life or anyone else's life in danger.

Part G - Wildlife Information and Procedures

Purpose and Context

(181) As Sydney's most geographically dispersed university, the University has a number of varying urban, peri-urban and agricultural landscapes to manage. Inherent in all these landscapes are both native and non-native wildlife populations.

(182) The purpose of this procedure is to document the University's methods on managing these populations to ensure compliance with conservation and animal welfare objectives while at the same time safeguarding the health and safety of all University students, employees and visitors.

(183) This procedure has been developed for use across all University campuses.

(184) The procedures in this document have been developed with reference to the following:

- a. Environment Protection and Biodiversity Conservation Act 1999 (Cth);
- b. National Parks and Wildlife Act 1974;
- c. Threatened Species Conservation Act 1995;
- d. Local Land Services Act 2013 (NSW);

- e. Native Vegetation Regulation 2013;
- f. Companion Animal Regulation 2008;
- g. Invasive Species Plan;
- h. Bilateral Migratory Bird Agreements;
- i. Office of Environment and Heritage Policy: Management of Native Birds that Show Aggression to People (August 2003);
- j. NSW Wildlife Information and Rescue Service (WIRES)

Legislative Responsibilities

(185) All native mammals, birds, reptiles and amphibians and many species of native plants are protected in NSW by the National Parks and Wildlife Act 1974 and under this act it is an offence to harm any protected fauna. The only exemptions to this Act relate to dingoes and certain native birds in specified parts of New South Wales where they are deemed to be either agricultural or pastoral pests.

(186) Under the NSW, National Parks and Wildlife Act 1974 the Office of Environment and Heritage's Wildlife Licensing Section has the authority to issue a general licence (s120) and an occupiers licence (s121) to authorise the harm of a specified number and species of native wildlife.

(187) When a native species is deemed to pose a danger to either the health or safety of the University's human community, contractors are required to have the appropriate s120 licence. If the University is to carry out the destruction of native wildlife an s121 licence is required.

(188) Any destruction of native wildlife is to be carried out as humanely as possible and only by methods specified by the Office of Environment and Heritage

(189) The objective of this document is to outline the management response for:

(190) Snakes and reptiles;

(191) Kangaroos;

(192) Nesting and seasonally aggressive native birds;

(193) Possums; and

(194) Non-native wildlife.

Snake and Reptile Information

(190) The University recognises that snakes and reptiles are an intrinsic part of the Australian landscape and have a role to play in many different types of ecosystems.

(191) All native Australian snakes and reptiles are protected by law in NSW and it is an offence to harm or kill them.

(192) The most commonly encountered snakes in Western Sydney are the red-bellied black snake and the eastern brown snake. Both are venomous and potentially dangerous to humans. It is best to treat all snakes as if they are venomous and if one is sighted to keep at a safe distance and do not disturb it.

(193) In summer snakes are more active and have been found at all University campuses but are especially prevalent at Blacktown, Campbelltown, Hawkesbury and Penrith. Individuals working and/or walking in bushland areas are advised to wear sturdy boots and long pants and to avoid dense undergrowth where visibility is reduced.

Management Procedures

(194) Snakes are to be managed in accordance with the University's Animals on Campus Policy (Part E), which generally requires individuals to leave snakes alone and contact their local Campus Safety and Security Office for their action.

(195) The provisions of that policy should also be applied to reptiles. Individuals should note that snakes/reptiles are often timid and will not become aggressive unless provoked. Statistics show that over 90% of people who are bitten by snakes are trying to kill or catch them. Accordingly, individuals should maintain a safe distance where a snake/reptile is sighted.

Kangaroo Information

(196) The University has a responsibility to allow safe egress of kangaroos across its campuses.

(197) Eastern Grey Kangaroo populations have been recorded on both the Hawkesbury and Penrith campuses.

(198) University staff and students should be aware that kangaroos are nomadic and will attempt to cross both internal and external roads to access other feeding sites. Caution should be used when driving around kangaroo populated campuses, particularly at dusk.

(199) Injured kangaroos should be reported to Campus Safety and Security, stating the location of the animal. They will contact the local WIRES rescue line (1300 094 737).

(200) University staff and students should not approach or interact with any kangaroo. Kangaroos can be aggressive and have been known to inflict injury on humans. More information about kangaroo behaviour can be found on the NSW Environment and Heritage web site

Nesting and Seasonally Aggressive Native Birds Management Procedure

(201) The University has a responsibility to ensure both the wellbeing of both its bird and human populations.

(202) Across University campuses the following native bird species can exhibit seasonally aggressive behaviour which is usually associated with nesting:

- a. Magpies;
- b. Kookaburras;
- c. Butcherbirds; and
- d. Masked Lapwings (Plovers).

(203) This seasonal behaviour often occurs during spring and can be intimidating. While most birds only swoop and call loudly, a small proportion of birds may actually come into contact with people in an attempt to deter the perceived threat to their nests and young.

(204) Where possible, the University will seek to educate its community about these situations, display temporary signage where appropriate and encourage University staff and students to avoid nesting locations during the season where possible via notification by email.

(205) In exceptional circumstances and in line with the NSW Office of Environment and Heritage Policy the University considers that a bird(s) can be assessed as a risk to public safety and dangerous when it:

(206) Has/have caused actual personal injury or damage.

(207) Attacks the head (striking from the ground upwards and from the front of the person).

- c. Hovers above the head for a prolonged period, attacking the head and face.
- d. Constantly swoops, or attacks in an area frequented by elderly and/or disabled persons and/or young children.
- e. Swoops, or attacks in a location that might endanger the victim through their response (e.g. along a busy road).

(206) If any University students and/or staff consider a bird to be dangerous please contact Campus Safety and Security for an assessment. Alternatively, the Environmental Manager can be contacted at the beginning of the nesting season (August) to discuss any other concerns.

(207) The following species are found nesting around University campus buildings:

- a. Fairy Martins;
- b. Masked Lapwings;
- c. Corellas;
- d. Welcome Swallows; and
- e. Pigeons (non-native please see pest management).

(208) Nesting birds around buildings and eaves pose a number of problems for the human populations that cohabit with them, such as bird lice.

(209) If any University student and/or staff consider a nesting bird to be a threat to their health please contact the Work Health, Safety and Wellbeing or the Office of Estate and Commercial for an assessment.

Possum Management Procedure

(210) The University has resident brush tail possum populations at Hawkesbury, Penrith and Campbelltown campuses. Possums have adapted well to urbanisation and can take up residence in the roof of buildings.

(211) In cases such as these contact the Office of Estate and Commercial.

(212) The University does not recommend feeding possums but encourages them to fend for themselves. If a possum is causing a problem contact the Office of Estate and Commercial to arrange for appropriate management action.

Non-Native Wildlife Pest Management Procedure

(213) The University has the following non-native wildlife populations on campus:

- a. Sparrows
- b. Pigeons
- c. Starlings
- d. Common Miners
- e. Rats and Mice
- f. Dogs and Cats
- g. Rabbits and Foxes
- h. Carp

(214) Under the University's Animals on Campus Policy, there is a general prohibition on bringing animals onto University campuses (unless exempt under Section 3 part B of the Animals on Campus Policy).

(215) Animals not exempt, will be managed in accordance with Section 4 part E of the Animals on Campus Policy

(216) Where non-native wildlife populations are considered to be pests the Office of Estate and Commercial should be

contacted, with respect to contracting the services of a licensed pest controller to deal with specific problems (e.g. infestation).

(217) The University has an obligation under the Land Services Act 2013 part 10 to eradicate or control feral pests such as rabbits and foxes. These works will be undertaken by an appropriately trained and licensed pest control agency. It should be noted that under the Act it is an offense to hinder these agencies in their work.

(218) The University advocates the use of the most humane treatment available as recommended by the various governing agencies and scientific research.

Part H - Contractor Procedures

Purpose and Context

(219) The University has a large contractor workforce that provides each campus with a wide range of contracted services including:

- a. Cleaning;
- b. Building and plant maintenance works;
- c. Emergency repairs and servicing;
- d. Upgrades and new capital works;
- e. Grounds and landscaping works;
- f. Waste removal and recycling services;
- g. Information technology services; and
- h. Kitchen and catering services.

(220) The purpose of this procedure is to outline the University's contractor requirements in order to ensure environmental compliance across all University campuses.

(221) The procedures in this document have been developed with reference to the Protection of the Environmental Operations Act, 1997.

(222) Other relevant and supporting documentation University Contractor Health and Safety Procedure.

Procedures

(223) All contractors must be made aware of their environmental responsibilities and obligations via compulsory completion of the on-line University Contractor Induction Course, run through the Office of Estate and Commercial.

(224) Contractors are required to follow the outlined environmental instructions as per the on-line University Contractor Induction Course.

(225) Environmental Instructions cover:

- a. Waste Management:
 - i. General waste instructions
 - ii. Asbestos waste
 - iii. Chemical wastes
 - iv. Construction and demolition waste
 - v. Electrical wastes
 - vi. Contaminated wastes

- vii. Metal wastes
- viii. PCB material waste
- b. Pollution:
 - i. Water pollution;
 - ii. Air pollution;
 - iii. Noise pollution; and
 - iv. Erosion and sediment controls.
- c. Hazardous Chemicals;
- d. Steps to follow if a chemical spill occurs; and
- e. Protection of Bushland and Landscaped Areas.

(226) For contractors that may only visit the campus once or very infrequently a Short Term Induction Pass is issued. In this case it is the responsibility of the University representative to outline the environmental instructions that the contractor is required to follow.

(227) Furthermore the University requires contractors to have in place their own appropriate environmental, quality assurance and WHS program within their organisation.

Procedure for Reporting Environmental Incidents

(228) A contractor is required to immediately report any accident, incident or occurrence which has or has the potential to cause environmental harm to University property or adjoining properties.

(229) Notification is to be to their University contact and/or Campus Safety and Security. Incidents such as a chemical spill, leak or inappropriate disposal of waste should be contained pending clean-up or containment action.

(230) The University Induction Card contains details of emergency contact numbers on the back. Likewise the Short term Induction Pass is issued with University Emergency Procedures on the back of the ticket.

Status and Details

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