

WHS-PRO-009 Biosafety Procedure

Appendix 5: Biohazardous and Clinical Waste

Clinical waste as listed in the EPA document ESR/2015/1571 Version 1.01 26 March 2015, Guideline Clinical and Related Waste		
Type	Includes	Does Not Include
Animal Waste	<ul style="list-style-type: none"> Animal waste means any discarded materials, including carcasses, body parts, blood or bedding, originating from animals contaminated with an agent infectious to humans or from animals inoculated during research, production of biological or pharmaceutical testing with infectious agents; Biological refers to preparations that are made from living organisms and their products, which are used in diagnosing, immunising or treating humans or animals. This includes but is not limited to serums, vaccines, antigens and antivenins. 	<ul style="list-style-type: none"> Teeth, hair/fur, claws/hooves or bone fragments are not considered to be animal body parts for the purpose of managing clinical and related waste under the Regulation; Dead animals at the side of the road or animals put down due to old age or injury do not have to be disposed of as clinical waste. They can be disposed of through local government collection services (if pick-ups are provided) or given to the owner if requested; General waste such as tongue depressors, cotton wool balls, tissues, bandages, band aids, protective bibs, gloves, overalls, disposable sheets, and shoe protectors with no free flowing blood, are not classed as clinical waste and can go into the general waste stream. Provided the material is first placed within a primary container (eg garbage bag).
Discarded Sharps	<p>A sharp is an object or device having with sharp points, protuberances or cutting edges that are capable of causing a penetrating injury to humans. This waste includes used hypodermic, intravenous or other medical needles, pasteur pipettes, disposable dental picks and drill bits, scalpel blades, lancets, scissors, glass slides and broken laboratory glass. In order for an item to be defined as a sharp, it does not have to have been in contact with human blood, body fluids or an infectious agent. However, the area of sharps generation can influence how the waste is managed for disposal. For instance, a hypodermic needle that has been used to give a patient a tetanus injection would be disposed of in a yellow coloured sharps container for clinical waste. However, a sharp generated from an oncology ward which had been used to inject cytotoxic drugs would be disposed of as cytotoxic waste and a sharp which had contained radioactive material would be disposed of as radioactive waste.</p>	<ul style="list-style-type: none"> Plastic pipette tips if not contaminated. Using container other than normal sharps container.

WHS-PRO-009 Biosafety Procedure

Appendix 5: Biohazardous and Clinical Waste

Clinical waste as listed in the EPA document ESR/2015/1571 Version 1.01 26 March 2015, Guideline Clinical and Related Waste		
Type	Includes	Does Not Include
Human Tissue Waste	<ul style="list-style-type: none"> • Tissue, blood, blood products and other body fluids that are removed from a person during surgery, an autopsy or another medical procedure; • Tissue, blood, blood products and other body fluids that are removed from a person during post-operative care or treatment; • Specimens of tissue, blood, blood products and other body fluids and containers in which the specimens are kept; • Discarded material saturated with, or containing, free-flowing blood and other body fluids; • Human tissue waste includes discarded waste human blood or its components (serum and plasma), containers of free-flowing blood or blood components, or material heavily contaminated with blood or blood components (whether free-flowing or dried); • Waste human blood and its components, including expired stocks from blood banks, is considered to be clinical waste and must be managed according to the legislative requirements for clinical waste. Human body fluids such as saliva, mucus, pleural fluid, cerebrospinal fluid, pericardial fluid and any other fluid that is visibly contaminated with blood, and all body fluids generated from circumstances where there is potential for the presence of infectious agents, are included in this category. 	<ul style="list-style-type: none"> • Tissue does not include human body parts, teeth, hair, nail, gums and bone; • Urine, faeces and vomitus are not generally included as clinical waste, unless they originate from a person with a known infectious disease or are visibly contaminated with blood; • Waste items that may be slightly contaminated with dried blood should not be considered to be clinical waste by generating premises. This may include a light blood smear on a disposable gown or a spot of blood on cotton wool from a blood test. Blocks of tissue that have been fixed for cytological and/or histological examination in paraffin or a similar embedding material that prevents material leaching into the environment may be discarded as general waste. The chemical fixatives used are likely to destroy any potential pathogens in the tissue block; • Sanitary hygiene waste, managed appropriately should not be considered to be clinical waste, unless it has been generated in an isolation area or by a person known to have an infectious disease. Further information on managing sanitary hygiene waste is provided in section 7 of the EPA document Guideline Clinical and Related Waste. Individual premises can, however, still develop their own infection control policies for this waste; • General waste such as tongue depressors, cotton wool balls, tissues, bandages, band aids, protective bibs, gloves, overalls, disposable sheets, and shoe protectors with no free flowing blood, are not classed as clinical waste and can go into the general waste stream. Provided the material is placed in a primary container (example garbage bag) before disposal.

WHS-PRO-009 Biosafety Procedure

Appendix 5: Biohazardous and Clinical Waste

Clinical waste as listed in the EPA document ESR/2015/1571 Version 1.01 26 March 2015, Guideline Clinical and Related Waste		
Type	Includes	Does Not Include
Laboratory Waste PC1 and PC2	<ul style="list-style-type: none"> Laboratory waste means a specimen or culture discarded in the course of dental, medical or veterinary practice or research. This includes wastes contaminated by genetically manipulated material or imported biological material. Laboratory waste also includes cultures and stocks of infectious agents; This waste includes cultures and stocks of infectious agents (as outlined above), and associated biologicals, cultures and stocks from medical, research or pathological laboratories, wastes from the production of biologicals, discarded live or attenuated vaccines or culture dishes, and devices used to transfer, inoculate or mix cultures. <p>Cultures and stocks refer to systems that are used to grow and maintain infectious agents in vitro. This includes, but is not limited to:</p> <ul style="list-style-type: none"> nutrient agars, gels and broths; human and primate cell lines; impure animal cell lines. <p>Culture dishes and devices used to transfer, inoculate or mix cultures refers to items that have come into contact with high concentrations of infectious agents and may include:</p> <ul style="list-style-type: none"> plastic or glass plates, flasks, vials, beakers, jars and tubes; inoculation wires and loops; stirring devices; stoppers and plugs; filtering devices; materials used to clean and disinfect items. 	<ul style="list-style-type: none"> Waste from laboratories that do not conduct testing of blood, body fluids or tissue from humans or animals is not clinical waste; Non-contaminated waste paper, plastics, and paper products shall be collected as a separate waste stream (AS Standard).

WHS-PRO-009 Biosafety Procedure

Appendix 5: Biohazardous and Clinical Waste

Requirements Independent of the Clinical Waste Disposal		
Source	Requirement for treatment	Source document
OGTR	<ul style="list-style-type: none"> • Non-infectious GM animal is deactivated once dead. • Any wastes containing GMOs must be decontaminated prior to disposal if the method of disposal is not also the method of decontamination. • Decontamination may be effected by autoclaving using a combination of temperature and time that has been validated as effective for the decontamination of the GMOs. • PC3 and PC4, prior to disposal, the GMOs to which Part 3.2 applies must be decontaminated inside a relevant facility certified by the Regulator, unless otherwise permitted, in writing, by the Regulator. 	OGTR document: Guidelines for the Transport, Storage and Disposal of GMOs
Animal waste in the Microbiological Australian Standard	<ul style="list-style-type: none"> • Waste shall be segregated, decontaminated where necessary and disposed of according to applicable regulations. • Animal containment facilities should have access to decontamination facilities within their own areas. Waste from low level (PC1 and PC2) animal containment facilities can be decontaminated outside the facility. However, waste shall be contained to prevent dissemination of any infectious microorganisms. Waste from higher level animal containment facilities shall either be pressure steam sterilized in the facility or decontaminated in a closed system to ensure that all infectious microorganisms are destroyed. <p>As a general principle, the biological and physical containment recommended for working with infectious agents in vivo and in vitro are comparable. Infected animals should only be handled by trained staff using procedures designed to protect staff and the environment from exposure to the microorganisms. When housing animals in which microorganisms are to be used, the physical containment levels for work with microorganisms shall follow the containment levels appropriate for the microorganism.</p> <p>Requirements for Animal PC1, Animal PC2, Animal PC3 and Animal PC4 facilities are set out in Clauses 6.4, 6.5, 6.6 and 6.7 of the standard.</p>	AS/NZS 2243.3:2010 Safety in laboratories - Microbiological safety and containment

WHS-PRO-009 Biosafety Procedure

Appendix 5: Biohazardous and Clinical Waste

Requirements Independent of the Clinical Waste Disposal		
Source	Requirement for treatment	Source document
Animal waste in the Microbiological Australian Standard	<ul style="list-style-type: none"> • Infectious bedding, cage wastes and cages from small animals shall be decontaminated prior to disposal or reuse as described in Section 12. • Infected carcasses shall be decontaminated prior to disposal. This may be achieved by methods such as alkali digestion, autoclaving, incineration or rendering. • All instruments and containers that have been used in procedures with infectious microorganisms should be decontaminated before cleaning. Any special precautions that are needed, such as decay of radioisotopes, should be taken. 	AS/NZS 2243.3:2010 Safety in laboratories - Microbiological safety and containment
PC3 and PC4 Laboratory waste in the Microbiological Australian Standard	PC3 and PC4 waste to be decontaminated inside the facility before being removed.	AS/NZS 2243.3:2010 Safety in laboratories - Microbiological safety and containment
General waste paper in PC1 and PC2 laboratories in the Microbiological Australian Standard	Non-contaminated waste paper, plastics, and paper products shall be collected as a waste stream.	AS/NZS 2243.3:2010 Safety in laboratories - Microbiological safety and containment