01/12/2016 07/2024

#### **Waste Stream Management**

**WORK INSTRUCTION** 

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NON-HAZARDOUS GENERAL WASTE AND RECYCLABLES				
WASTE STREAM	DISPOSAL ROUTE	ARRANGEMENTS	INSTRUCTIONS	
Non-Hazardous General Waste	Off-site segregation and recycling where possible	<ul> <li>Material that cannot be re-used or recycled, and that is not hazardous, should be deposited into general waste bins and disposed of into black bags which are collected on a daily basis by cleaning staff</li> <li>The black bags are taken and disposed of into external blue bins. The University's appointed waste management contractor empties these bins</li> <li>On the main site, bagged waste is also collected internally and taken to the Waste Management Centre at Rugby Road and compacted, prior to disposal</li> </ul>	To request a skip for non-hazardous general waste, the School/ Directorate's Building Liaison Officer should complete an online works request	
Books	Books in good condition can be donated for reuse to a social enterprise		<ul> <li>Contact the Assistant Environmental Manager for information on books that are accepted by the social enterprise</li> <li>Contact your School/ Directorate's Building Liaison Officer (BLO) to place an online works request to receive boxes to pack the books</li> <li>Once the boxes are packed with books, uplift of boxes can be arranged via an online works request through your School/ Directorate's Building Liaison Officer (BLO). Please detail the location and the number of boxes requiring uplifting on the request</li> </ul>	
Cans	Metal cans (both steel and aluminium) should be segregated from the main general waste stream and recycled in designated bins for recycling.	<ul> <li>This material should be deposited in clear tied bags to allow handlers to see any contamination.</li> <li>The bags of cans are then taken to the dedicated external storage bins by the cleaning staff.</li> <li>The contents of the external bins (generally red) are then collected by Estates and taken to a dedicated skip at the University's Waste Management Centre at Rugby Road for recycling.</li> <li>When the skip is full it is collected by the University's appointed waste contractor and sent for recycling</li> </ul>	<ul> <li>Rinse cans out if they contain any food residues.</li> <li>Where facilities do not exist, waste cans are to be disposed of through the general waste bins Additional metal can recycling bins can be ordered via an online works request through your School/ Directorate Building Liaison Officer (BLO).</li> </ul>	

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#### **Waste Stream Management**

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#### NON-HAZARDOUS GENERAL WASTE AND RECYCLABLES

NON-HAZARDOUS GENERAL \			
WASTE STREAM	DISPOSAL ROUTE	ARRANGEMENTS	INSTRUCTIONS
Cardboard	All cardboard waste generated should be segregated from the main general waste stream and recycled.	<ul> <li>Small quantities of flat packed cardboard will be collected by the cleaning staff and recycled.</li> <li>For non-office areas; flat pack the cardboard boxes and place them in the designated external green or white external bins which are clearly labelled for cardboard disposal.</li> <li>For large quantities of cardboard (e.g. from deliveries), a request to collect the cardboard for recycling should be arranged via an online works request through your School/ Directorate Building Liaison Officer (BLO).</li> <li>Waste cardboard in the green external bins is collected by Estates and taken to the Waste Management Centre at Rugby Road for baling.</li> <li>The baled cardboard is then uplifted (usually when there are 4 bales generated) by the University's appointed waste contractor and sent for recycling.</li> <li>Waste cardboard in the white external bins is collected by the University's appointed waste contractor and sent for recycling</li> </ul>	Ensure all cardboard boxes are empty of their original contents.
CDs, DVDs, Videos			<ul> <li>If this material contains confidential information and requires data destruction dispose of with Waste Electrical and Electronic Equipment (see below)</li> <li>Non confidential media can be disposed of in the general waste bins</li> </ul>
Redundant furniture includes desks, chairs, filing cabinets, bookcases etc.	All bulky items which are in good condition and suitable for re-use within the university should be uploaded onto WARPit www.warp- it.co.uk/qub	The Estates Directorate collects redundant furniture. Where practical to do so, good quality furniture is stored for reuse within the University or donated to a local charity	<ul> <li>When there is time restrictions, personnel should contact your School/ Directorate Building Liaison Officer (BLO) with details of the items for removal / disposal.</li> <li>The BLO then places an online works request for internal collection of the redundant furniture.</li> </ul>
Garden waste	Composting	Garden waste originating from the University premises is centrally collected at the University's Waste Management Centre and collected by the University's appointed waste contractor for composting	
Glass	Recycling	<ul> <li>Glass bottles and jars can be recycled in the glass recycling containers at the following locations on Campus:</li> <li>PFC Café</li> <li>Whitla Hall</li> <li>MBC Whitla Medical</li> <li>Mixed glass i.e. clear and coloured, are accepted together</li> </ul>	<ul> <li>Remove any lids and rinse if there are food residues.</li> <li>Laboratory and Pyrex glass and other non-container glass (e.g. window glass) and crockery are unable to be recycled this way and should not be placed in the glass recycling containers</li> </ul>

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### **Waste Stream Management**

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#### NON-HAZARDOUS GENERAL WASTE AND RECYCLABLES

NON-HAZARDOUS GENERAL WASTE AND RECYCLABLES				
WASTE STREAM	DISPOSAL ROUTE	ARRANGEMENTS	INSTRUCTIONS	
Metal	Recycling	The scrap metal is collected by the Estates Directorate and taken for recycling.	<ul> <li>All scrap metal to be disposed of must be fully decontaminated prior to disposal.</li> <li>Contact your School/Directorate Building Liaison Officer (BLO) with details of the items for disposal.</li> <li>The BLO then places an online works request for internal collection of the scrap metal.</li> </ul>	
Packaging	Packaging such as plastics (excluding bottles) and polystyrene currently cannot be recycled	All such packaging should be taken to the respective bin areas and disposed of in the blue general waste bins provided	<ul> <li>Where the packaging is too large to be placed neatly in the bin, it should be broken down accordingly.</li> <li>If it cannot be broken down, contact your School/ Directorate Building Liaison Officer (BLO) with details and they will place an online works request for internal collection by the Estates Directorate.</li> <li>Packaging must not be left on the ground beside the bins.</li> </ul>	
Paper	Recycling	<ul> <li>Office waste paper should be segregated from the main general waste stream and recycled through the confidential waste paper stream. Office paper recycling stations have white/blue coloured sacks for the disposal of waste paper. All paper disposed of in these sacks is securely destructed (shredded) and recycled. The types of waste paper which can be recycled in these sacks include:         <ul> <li>General office paper i.e. print outs, photocopies etc.</li> <li>Envelopes (including those with windows)</li> <li>Post it notes</li> <li>Newspapers</li> <li>Magazines/ Journals (any hard backing should be removed)</li> <li>Paper already shredded</li> </ul> </li> </ul>	<ul> <li>Waste paper recycling sacks can be obtained by contacting the Porters' Office.</li> <li>Sacks should only be filled to a level where those using them can comfortably lift them. If they are too heavy, the Waste Contractor will not remove them during the collection day.</li> <li>Sacks should not be filled above the 'Fill line' depicted on all bags (taking the above point into consideration).</li> <li>Sacks should be secured using the cable ties provided. If these are not used, the Waste Contractor will not remove them during the collection day.</li> <li>Where a School/Department have sacks ready for collection, the School/Directorate Building Liaison Officer (BLO) should contact the Porter's Office before lunch time on a Tuesday afternoon to be added to the collection schedule. Where Schools/ Departments will have sacks for collection every week they can be permanently added to the schedule without having to ring up each week.</li> <li>The bagged waste paper is collected from School/ Directorate areas on a weekly basis (typically on a Wednesday morning) by the University's approved waste management contractor for confidential shredding and reprocessing</li> </ul>	
Non-Confidential Waste Paper	Recycling	<ul> <li>Facilities for the recycling of non-confidential waste paper are mostly available in corridor areas and Student Computing Centres. All waste paper not deemed as confidential can be disposed of in these facilities. The bags are replaced and the full ones taken to the dedicated storage area by the cleaning staff. The contents of the external bins are then collected and taken for recycling</li> </ul>	This material should be deposited in clear tied bags to allow handlers to see any contamination.	

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NON-HAZARDOUS GENERAL V	WASTE AND RECYCLABLES		
WASTE STREAM	DISPOSAL ROUTE	ARRANGEMENTS	INSTRUCTIONS
Plastic Bottles	Recycling	<ul> <li>Plastic bottles (including plastic milk cartons) should be segregated from the main general waste stream and recycled in designated bins for recycling.</li> <li>The bags of plastic bottles are then taken to the dedicated external storage bins by the cleaning staff.</li> <li>The contents of the external bins (generally red) are then collected by Estates and taken to a dedicated skip at the University's Waste Management Centre at Rugby Road for recycling.</li> <li>When the skip is full it is collected by the University's appointed waste contractor and sent for recycling</li> </ul>	<ul> <li>Rinse bottles out if they contain any food residues.</li> <li>This material should be deposited in clear tied bags to allow handlers to see any contamination.</li> <li>Where facilities do not exist, plastic bottles should be disposed of through the general waste bins</li> <li>A plastic bottle recycling bin can be ordered via an online works request through your School/Directorate Building Liaison Officer (BLO).</li> </ul>
Wood (including wooden pallets)	Recycling	<ul> <li>Garden waste originating from the University premises is centrally collected at the University's Waste Management Centre and collected by the University's appointed waste contractor for composting.</li> </ul>	To request a collection of wood, the School/Directorate's Building Liaison Officer should complete an online works request.

WASTE ELECTRICAL AND ELEC	WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT REMOVAL AND RECYCLING			
WASTE STREAM	DISPOSAL ROUTE	ARRANGEMENTS	INSTRUCTIONS	
Electrical and Electronic Equipment	Off-site treatment and recycling, and where not possible, disposal as hazardous waste	<ul> <li>The disposal of electrical and electronic equipment such as; IT equipment (computers, faxes, printers etc.), small and large lab equipment and domestic goods (kettles, toasters etc.) is covered by the WEEE (Waste Electrical and Electronic Equipment) Regulations, as amended.</li> <li>It is a legal requirement that WEEE is collected separately from other waste and must not be disposed of via the mixed general waste stream</li> </ul>	<ul> <li>Contact your School/Directorate Building Liaison Officer (BLO) with details of the items.</li> <li>The BLO then places an online works request for internal collection of the obsolete electrical goods.</li> <li>Environmental Services coordinates request for the disposal of electrical and electronic equipment for all University Departments ensuring that the service is legally compliant and in majority of cases free of charge to Schools and Departments.</li> <li>Hard disks will be data wiped and/or physically disabled by the University's appointed contractor to prevent access to any remaining data.</li> <li>Older items of equipment may contain hazardous materials e.g. older laboratory oven/ incinerator units may contain asbestos. Please ensure that such items are specifically detailed in the online works request.</li> <li>Electrical equipment must not be left in external areas.</li> </ul>	

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#### WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT REMOVAL AND RECYCLING

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WASTE STREAM	DISPOSAL ROUTE	ARRANGEMENTS	INSTRUCTIONS
Refrigerators	Off-site treatment and recycling, and where not possible, disposal as hazardous waste	Redundant fridges and freezers are classified as Hazardous Waste and require collection by the University's appointed waste management contractor	<ul> <li>All redundant fridges should be emptied and cleaned. If this is not undertaken, they will not be removed.</li> <li>Any chemical contamination should be wiped down and the contamination removed.</li> <li>Microbiological contamination should be sterilised by appropriate chemical disinfectants such as Virkon or other methods as appropriate which will be highlighted through the risk assessment process prior to commencing experiments.</li> <li>Contact your School/Directorate Building Liaison Officer (BLO) with details of the items.</li> <li>The BLO then places an online works request for internal collection of the obsolete white goods. The white goods are then collected by the Estates Directorate and disposed of.</li> <li>Refrigerating equipment must not be left in external areas</li> </ul>

HAZARDOUS WASTE			
WASTE STREAM	DISPOSAL ROUTE	ARRANGEMENTS	INSTRUCTIONS
Oil	Recycling	Waste engine and machinery oil, or waste fuel oil, produced by the University is hazardous waste. In addition, the University arranges the collection of waste vegetable oil by a specialist contractor	<ul> <li>Contact your School/Directorate Building Liaison Officer (BLO) with details of the waste oil that requires disposal.</li> <li>The BLO then places an online works request for internal collection of the waste oil.</li> <li>The waste oil is collected by the Estates Directorate and disposed of by the University's appointed contractor</li> </ul>
Paints	Off-site treatment and recycling, and where not possible, disposal as hazardous waste	<ul> <li>Some paints are hazardous and should therefore not be disposed of in the non-hazardous general waste bins. The University has an appointed contractor that is legally authorised to take our hazardous items</li> </ul>	A collection can be arranged via an online works request through your School/ Directorate Building Liaison Officer (BLO)
Toner Cartridges	Off-site treatment and recycling, and where not possible, disposal as hazardous waste	<ul> <li>There are various different types of laser, inkjet and photocopier cartridges and some contain hazardous materials. These should be sent for recycling and should not be disposed of via the general waste stream</li> </ul>	<ul> <li>Small quantities should be placed in the internal post and will be collected by the Porters for recycling.</li> <li>For larger numbers of cartridges a collection can be arranged via an online works request through your School/Directorate Building Liaison Officer</li> </ul>

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HAZARDOUS WASTE				
WASTE STREAM	DISPOSAL ROUTE	ARRANGEMENTS	INSTRUCTIONS	
Batteries	Off-site treatment and recycling, and where not possible, disposal as hazardous waste	<ul> <li>There are various different types of batteries and some contain hazardous materials. They should therefore not be disposed of in the non-hazardous general waste bins, as the University has an appointed contractor that is legally authorised to take our hazardous items.</li> <li>Smaller 'household'/consumer batteries such as non-chargeable (general purpose and button cells) and rechargeable (nickel cadmium, lithium ion and smaller lead acid) can be recycled in the battery recycling tubes located in the Porter's Offices or at reception areas in the following buildings:         <ul> <li>Administration Building, Level 2</li> <li>Ashby Building</li> <li>Institute of Clinical Science Block A, Royal Victoria Hospital</li> <li>David Keir Building (Malone Road &amp; Stranmillis Road entrances)</li> <li>Elms Village</li> <li>Geography</li> <li>Health Sciences Building</li> <li>McClay Library</li> <li>McClay Building, School of Pharmacy</li> <li>Medical Biological Centre (MBC)</li> <li>Safety Services at 5A Lennoxvale</li> <li>Students Union</li> <li>Whitla Medical Building</li> </ul> </li> </ul>	Larger industrial type batteries such as lead acid car type batteries and nickel cadmium batteries used in emergency standby systems cannot be disposed of in these tubes. They should be disposed of by contacting your School/ Directorate's Building Liaison Officer (BLO) with details of the batteries for disposal. The BLO then places an online works request for internal collection by the Estates Directorate.	
Fluorescent Tubes and Energy Efficient Light Bulbs	Off-site treatment and recycling, and where not possible, disposal as hazardous waste	<ul> <li>Fluorescent tubes and spent UV, mercury and sodium lamps are classified as Hazardous Waste. They should therefore not be disposed of in the non-hazardous general waste bins. The University has an appointed contractor that is legally authorised to take our fluorescent tubes and energy efficient light bulbs for recycling</li> <li>The tubes are stored in a designated container (coffin) and disposed of by the University's appointed contractor</li> </ul>	<ul> <li>Ensure that all fluorescent tubes and energy efficient bulbs are stored in their original packaging. A request to remove any tubes and bulbs for recycling should be logged via the School/Directorate Building Liaison Officer (BLO).</li> <li>Maintenance staff undertaking tube replacement in the University, store the resultant waste tubes in designated storage containers (coffins) at the following locations:         <ul> <li>Works Department, Rugby Road</li> <li>David Keir Building (Boiler House)</li> <li>Elms Village</li> <li>Medical Biology Centre (Goods Ramp).</li> </ul> </li> <li>Once the coffin is nearing capacity, the DLO manager is informed who advises Environmental Services that a collection and replacement is required. Environmental Services contacts the University's appointed contractor to arrange collection</li> </ul>	

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### **Waste Stream Management**

HAZARDOUS WASTE  WASTE STREAM	DISPOSAL ROUTE	ARRANGEMENTS	INSTRUCTIONS
Disposal of Nominally Empty Chemical Containers	Recycling	These include empty glass winchesters, plastic and aluminium chemical bottles. Adherence to this procedure will ensure this waste is classified as non-hazardous waste	<ul> <li>Non-Solvent Containers</li> <li>Screw off the lid of the container and rinse</li> <li>Ensure as much chemical as possible is decanted from the container</li> <li>Rinse the container thoroughly and allow to dry</li> <li>Deface the hazard symbol (orange and black in colour) with a permanent marker and clearly write 'RINSED' in capital letters on the white section of the label</li> <li>DO NOT replace the lid of the container. Dispose of the lid separately in the general waste stream</li> <li>Take the empty container to the laboratory supervisor who MUST check the container prior to disposal</li> <li>Once checked, the empty container can be taken to the designated disposal area.</li> <li>Solvent Containers</li> <li>Screw off the lid of the container and rinse</li> <li>Ensure as much solvent as possible is decanted from the container</li> <li>Place the container in a fume cupboard overnight to allow the solvent to evaporate safely in a contained and controlled manner</li> <li>Deface the hazard symbol (orange and black in colour) with a permanent marker and clearly write 'RINSED' in capital letters on the remainder of the label</li> <li>DO NOT replace the lid of the container. Dispose of the lid separately in the general waste stream</li> <li>Take the empty container to the laboratory supervisor who MUST check the container prior to disposal</li> <li>Once checked, the empty container can be taken to the designated disposal area.</li> </ul>

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WASTE STREAM	DISPOSAL ROUTE	ARRANGEMENTS	INSTRUCTIONS
Laboratory Waste	Hazardous Waste		<ul> <li>Ensure the appropriate Personal Protective Equipment (PPE) is worn at all times.</li> <li>Schools MUST NOT arrange for the collection and disposal of waste through other contractors.</li> <li>Please refer to the separate procedures for the disposal of chemical and clinical wastes</li> </ul>
Chemical Oxygen Demand (COD) Test Vials	Hazardous Waste		<ul> <li>Place the used vial in its original packaging box.</li> <li>Once the box is full with used vials, place the lid on the box, clearly write 'WASTE' in capital letters with a permanent marker on the remainder of the label.</li> <li>Take the empty container to the laboratory supervisor who MUST check the container prior to disposal.</li> <li>Once checked, the empty container can be taken to the designated disposal area</li> </ul>
Sharps Disposal	Hazardous Waste	Sharps for disposal include scalpels, needles, syringes etc.	<ul> <li>Sharps in contact with clinical wastes</li> <li>These should be disposed of in accordance with the Biological/ clinical waste disposal procedure</li> <li>Sharps in contact with chemicals</li> <li>These should be disposal of in the sharps boxes labelled as 'Chemically contaminated sharps</li> <li>When full, these boxes must be taken to the designated disposal area.</li> <li>Non-hazardous Sharps</li> <li>Defined as Sharps used which have not been in contact with contamination e.g. the use of scalpels for cutting plastic</li> <li>These should be disposed of in sharps boxes labelled as 'Non-contaminated sharps'</li> <li>When full, these boxes can be disposed of via the general mixed waste stream (external blue bins).</li> </ul>
Non-Contaminated Broken Glassware	Disposal	Broken glassware from lab areas which is not contaminated can be disposed of via the general mixed waste stream (external blue bins)	<ul> <li>Broken glassware must be placed in either a sturdy cardboard box or specific 'Magpie' box.</li> <li>Ensure the appropriate PPE is worn at all times (safety glasses and gloves).</li> <li>Before leaving the lab area, clearly label the cardboard box as 'NON-CONTAMINATED BROKEN GLASSWARE' with a permanent marker. This is not necessary when the 'Magpie' boxes are used as they are pre labelled.</li> <li>When full enough to be comfortably lifted, secure the box by taping its openings with heavy duty tape and take the box to the designated blue bin area.</li> <li>Open the lid of a blue bin with sufficient space for the box to be placed.</li> <li>Lift the box very carefully and place it in the bin.</li> </ul>
Contaminated Broken Glassware	Disposal		<ul> <li>Contaminated broken glassware should be disposed of in the respective sharps boxes (dependant on type of contamination i.e. chemical/clinical) provided in the laboratory areas</li> </ul>



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LABORATORY WASTE			
WASTE STREAM	DISPOSAL ROUTE	ARRANGEMENTS	INSTRUCTIONS
			<ul> <li>Used Petri dishes not containing microbiological cultures</li> <li>Place the used Petri dishes in a bag. DO NOT USE A BIOHAZARD BAG</li> <li>When full, ensure the bag is securely closed and wrap the 'STERILE' laboratory tape around the bag at least twice</li> <li>Fill in the 'MADE SAFE FOR DISPOSAL' label (template below) and apply to the bag</li> <li>Take the bag to the laboratory supervisor who MUST check and sign off prior to disposal</li> <li>Once checked, the bag can be taken to the designated disposal area and disposed of in the mixed general waste stream (external blue bins).</li> </ul>
Petri Dishes			Queen's University Belfast  Laboratory waste –  MADE SAFE FOR DISPOSAL
			Dept/Lab: Date:/ Supervisor's Initials: Extension no
			<ul> <li>Petri dishes containing microbiological cultures/genetically modified organisms (GMO's)</li> <li>Please refer to the Biological/clinical waste disposal procedure</li> </ul>