## WASTE DISPOSAL NOTES

Waste disposal routes have been determined by legal, safety, and logistical considerations and in agreement with the Environment Agency, the University Safety Office, and waste disposal contractors.

**DOMESTIC WASTE**: Non-hazardous waste (e.g. paper\* / packaging / non-hazardous plastic ware etc.) is disposed of in bins with black bag inserts or in office type waste bins. Bags are removed and replaced by the cleaners.

\*Where available, use a recycling bin for waste paper.

**GLASS**: Clean and uncontaminated laboratory waste glass i.e. clean dry winchesters *with their caps removed*, clean reagent bottles and non-contaminated glassware (broken and/or unbroken, optical fibres etc. to be taken to Stores where one of two declaration forms will need to be completed. Domestic glass waste e.g. drinks bottles, jars etc. dispose of in recycling bins located throughout the department.

LAMPS: Tungsten filament and halogen lamps are to be disposed of as glass waste (see above). Fluorescent tubes are collected by Building Services for disposal via Tube Stillage. Compact fluorescent tubes and gas discharge lamps are treated as hazardous waste, disposed of by completing a hazardous waste form available from the University Safety Office website <a href="http://www.admin.ox.ac.uk/safety">http://www.admin.ox.ac.uk/safety</a>> and returned as an email attachment as instructed.

**IT / ELECTRONICS EQUIPMENT:** To be sent to an approved salvage company for components to be recycled. Information regarding the location of local collection points is available from Building Services. Do not place such items in with domestic or metal waste.

LASERS: Contact the Departmental Laser Supervisor.

**METAL:** Do not place waste metal in with domestic waste. Uncontaminated waste metal, including metal swarf from workshops, must be disposed of through an approved metal salvage company. **Physics East Site:** Uncontaminated waste metal to be placed in the waste metal skip in the rear yard of the Clarendon Laboratory, metal swarf to be placed in designated bins. **Physics West Site:** Contact Building Services (DWB) about local arrangements for disposal of uncontaminated waste metal.

**SHARPS**: ALL SHARPS (contaminated or not) and ALL SYRINGES (with needles or not – do not re-sheath needles prior to disposal) must be disposed of in approved sharps bins (obtainable from Stores) which should be sealed and replaced when the fill line is reached. Return full sharps bin to Stores for removal as clinical waste and to get a replacement. THIS ROUTE MUST NOT BE USED TO DISPOSE OF CHEMICAL OR GLASS WASTE.

**CHEMICAL WASTE:** Users of hazardous chemicals should determine methods of inactivation and/or routes of safe disposal before ordering or using. Hazardous chemical waste must be disposed of through the University Safety Office who will provide advice on the packaging and labelling. Forms in electronic format for the disposal of non-radioactive hazardous waste can be obtained from the Safety Office website <http://:www.admin.ox.ac.uk/safety> and returned as an email attachment as instructed. If uncertain about disposal please contact the Physics Chemical Safety Advisor or the Physics Area Safety Officer.

**CHLORINATED** and **NON-CHLORINATED WASTE SOLVENTS**: Do not store quantities >2.5 litres of waste solvents in the laboratory or workshop. Research groups and/or workshops are to ensure that waste solvents are disposed of through the University's hazardous waste chemical scheme (see "Chemical Waste" above).

**WASTE AEROSOL CANISTERS:** Waste aerosol canisters, whether empty or still containing some or all of the contents must be disposed of as chemical waste. During working hours, Stores provide a central collection point for waste aerosol canisters.

**WASTE OILS:** Laboratories or workshops producing waste oil must take it for disposal to the appropriate waste oil collection point (i.e. Physics East Site – Clarendon Laboratory, Physics West Site – Department of Engineering).

**BIOLOGICAL WASTE (Non-Clinical)**: Disinfect liquids and glassware containing cells or micro-organisms using 1% Virkon for 1 hour before discarding liquids to drains. Where Virkon is not the most effective disinfecting agent, the material must be treated according to the risk assessment for that organism before discarding. Disinfected disposable plastics and glassware can then be disposed of as for non-hazardous items.

If making safe biological waste by AUTOCLAVING, put contaminated pipettes, plasticware, petri dishes, paper etc. into biohazard (autoclave) bags. These bags must be properly supported and must not be over-filled. Always ensure that biohazard bags are closed and supported during transportation. Follow the posted instructions for autoclaving. Do not leave waste that has not been autoclaved in the autoclave room at any time. This route must not be used to dispose of chemical waste or recognisable clinical waste (tissue etc.). Discard any excess autoclaved agar to drains with copious quantities of hot water.

**PIPETTES & MICROPIPETTE TIPS**: Pipettes and tips must not be thrown directly into domestic waste (black bags) as they can pierce plastic bags and cause injury. Decontaminate tips if necessary and then put them in a container (such as an old rinsed salt container or Dispo jar) then seal with a lid and put directly into domestic waste. Likewise, pipettes must be decontaminated (if necessary) then bundled together and/or wrapped in a bag or box before being placed into the domestic waste. If tips or pipettes are biologically contaminated, disinfect before using this route or dispose of via autoclave waste.

GELS: Place non-radioactive, non-biohazardous gels in a bag or plastic wrap and put into domestic (black bag) waste. This includes ethidium bromide stained gels (at 1:1000 dilution of stock).

**RADIOACTIVE WASTE:** Only the Departmental Senior Radiation Protection Supervisor [DSRPS] may organize the disposal of radioactive waste. All users wanting to dispose of radioactive isotopes must consult the DSRPS beforehand.

## DO:

- check with any of the listed personnel (Appendix 1 / Contacts) if unsure about a correct disposal route.
- ensure anything entering the domestic waste route is either inherently safe or has been rendered safe.
- support autoclave (biohazard) bags in containers capable of containing any spillages.
- double bag items where necessary.
- determine how you are going to dispose of hazardous chemicals before purchasing and only purchase minimum quantities. Disposal costs of unused/dated chemicals considerably
- outweigh any bulk purchase savings.
- label hazardous agents with a name, date, and contents to facilitate future disposal.
- refer to the Department's waste disposal flow chart for disposal of specific items.

## DO NOT:

- expose colleagues, cleaners, or contract staff to anything hazardous by your own actions or inactions.
- use domestic waste, autoclave waste, or clinical waste to dispose of hazardous chemicals you may inadvertently expose others.
- put sharps into anything other than sharps bins irrespective of whether contaminated or not.
- attempt to retrieve items from sharps bins.
- put syringe bodies into anything other than a sharps bin. This is in agreement with the University's waste contractor and ensures that syringes do not end up in domestic waste where intravenous drug users may find them.
- re-sheath or remove syringe needles from syringe bodies but put directly in sharps bin most needlestick injuries occur during re-sheathing. Use a larger sharps bin if necessary.
- put solvents or oils down drains.
- overfill bags and bins they can burst or cause manual handling problems if particularly heavy.
- leave (unlabelled) hazardous items in communal areas (e.g. fume cupboards).

Additional information can be obtained from the Department's waste disposal flow chart and University Safety Policy Statement, Hazardous waste disposal UPS S5/11

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