

Hazardous chemical waste collection service

Instructions for DLMs

The University of Otago operates approximately 700 laboratories and these generate a wide range of different chemical wastes, some of which pose hazards to human health and safety or to the environment. The University of Otago funds the Health and Safety Office to collect and dispose of such wastes in order to facilitate the removal of such wastes and to discourage inappropriate disposal or accumulation of such wastes. The following are instructions for using this service.

How to request a waste pick-up

There is now a role-based email for waste pick-up requests –

chemwaste@otago.ac.nz

Please forward all waste pick-up requests to this email.

Details of all wastes must be entered on the *Hazardous Waste Form*. More detailed instructions on how to complete this form are provided below.

Once we have your completed waste form we will be in touch to arrange pick-up of your waste. Please note that depending on the number of other jobs in process we may not be able to respond immediately – typical response times are 2-4 weeks from receipt of the waste list – during quite periods we may be able to respond more quickly and at busy times it may take longer.

What wastes are collected?

Most chemical wastes can be collected, including;

- Unwanted lab chemicals
- Waste organic solvents (e.g. xylene, acetonitrile, methanol, chloroform)
- Mercury containing equipment (e.g. thermometers)
- Contaminated plastic (e.g. tubes, assay plates contaminated hazardous substances)
- X-ray film processor wastes

However, please note that we cannot accept -

- Gas cylinders
- Explosives or other class 1 articles (e.g. ammunition, safety flares)
- Radioactive or infectious/biohazard wastes

However, please contact the Laboratory Health Safety Advisor (Rob McLaren, x5136) if you need advice or assistance with such wastes.

The role of DLM.

The DLM has responsibility for ensuring there are appropriate procedures for the disposal of laboratory hazardous substances wastes in their department and in most cases will be the main point of contact in the department for disposal of substances through the chemical waste collection service (although this task may be delegated, as noted below).

How this is achieved will vary from department to department depending on a variety of factors, including the personnel and resources available. In some departments the DLM may personally collect hazardous chemical wastes in their department and complete the hazardous waste form themselves. In other departments, the DLM may require individual waste generators complete the form, which the DLM then collates these into a single file. In some departments, responsibility for some aspects of the waste collection process may be delegated to other appropriately trained and experienced personnel (e.g. a chemical store person).

What will happen to my waste?

Hazardous chemical wastes will be removed and transported to the central hazardous waste store. This is a large storage facility with segregated storage areas for incompatible hazard classes. The waste is held in this facility until it can be removed by a specialist external contractor.

There are a wide range of different disposal pathways that may be followed depending on the nature of the waste and this is part of the reason for the detailed information requested in the hazardous waste form. Some wastes (e.g. many solvents, oils) may be recycled for industrial use, others may be chemically treated to render non-hazardous (e.g. formaldehyde), while some may be sent overseas for high temperature incineration (e.g. chlorinated solvents).

Can you provide/return containers for hazardous waste?

No – it is the responsibility of the department to provide waste containers. It is also not possible to return waste containers as these are removed by the contractor (initially to Christchurch, with many then being shipped on to other locations, including overseas – it would simply be too costly and complex to clean and return waste containers).

Instructions for completing the waste form

Please **do not merge or split cells** in the waste form. We copy the data from your waste form into our waste inventory and merging/splitting cells can result in errors when can copy your data.

Please **do not enter text or other non-numeric values** in the ‘No.’ or ‘volume/weight’ columns (such as units, or symbols such as ‘≈’ or ‘x’). There are separate columns provided for the number of items and the unit of measurement. For logistical purposes it may be necessary to sum the quantity column and the presence of non-numeric data in these columns interferes with this.

Explanation of column headings

Dept ID: Please label each waste container with a unique identifier that will allow us to link the container to the entry on the waste list. Note, if you have packaged a large number of small waste containers (e.g. vials, microfuge tubes) of the same type in a larger outer package (e.g. box or bag) then you only need to label the outer container. Pre-numbered labels for this purpose are available from the Lab Health and Safety Advisor but you may also use your own if you prefer.

L/S: Is the waste primarily liquid (L) or Solid (S). Please record plastic or other solids contaminated with a liquid substance as solid.

Name on Container/description: Please provide the name of the substance as written on the container (e.g. 1M HCl) or a physical description (e.g. broken thermometer).

Hazardous components: If not already given in the previous column – please indicate the major hazardous components present.

UN No, Proper Shipping Name, DG Class, Sub-risk, Packing Group and Hazchem code¹: These are assigned to substances that are classed as Dangerous Goods for transport purposes and can be obtained from [Chemwatch \(Gold FFX\)](#). If the transport section of the SDS states (in relation to land transport) that the substance is “Not regulated for transport of dangerous goods” then the substance is not a dangerous good and these cells should be left blank.

HSNO: These are the HSNO hazard classifications¹ and can be obtained using [Chemwatch \(Gold FFX\)](#).

No. The number of individually packaged items covered by the description – please note that where many small containers of the same thing (e.g. vials or tubes) have been packaged into one outer container (e.g. bag, box or pail) treat the whole as a single container. More than one item should be listed on a row only when it the same waste in the same size and type of container (e.g. four 20L drums of waste xylene).

Volume/Weight: Please give the approximate amount held in individual package(s) (as above, where small containers like vials or tubes have been placed in an outer container – just give the overall amount held in the outer container). Wherever possible, please try to give values as Kilograms or Litres. Note, for quantities under <1mL or g just list these as 0.001 L or Kg – it is not necessary to record down to mg quantities. For empty containers, give the quantity as ‘0’.

Unit: Please enter the unit of measurement for the amount (e.g. Kg, L) – please don’t place this in the volume/weight column.

Type/Size of Packages: Please indicate the type of the container (note: where small containers of the same waste have been packaged together in a larger outer container, it is only necessary to give the type of the outer container), e.g. drum, pail, bag, plastic bottle, glass bottle, box. For empty containers, please specify the container size (e.g. 5L plastic bottle).

Total Quantity: The overall quantity (in the units given above), i.e. the value in the ‘No.’ column multiplied by the ‘Volume/Weight’ column.

¹ DG and HSNO Classifications can be readily obtained from [Chemwatch \(Gold FFX\)](#) for the majority of pure chemicals as well as for many common reagents and commercial products and it is expected that departments will make a reasonable effort to complete this information for such items. However, for mixed wastes (e.g. mixed organic solvent waste from an HPLC) classification can be more difficult to determine. If the DLM is unsure how to classify a waste and the information is not available on Chemwatch then these cells may be left blank on the form – these will be completed at the Health and Safety Office in such cases (for frequently generated wastes you may be provided with details to use in future).