Stockholms universitet

Registration number: 83-1891-12	Date (issued/revised): 120607/171006	Page 1 (55)
Document name: Waste management procedures		
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Waste management procedures for Stockholm University

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General instructions

The procedures in brief

The waste management procedures are intended to give you guidance about how waste is handled at Stockholm University. The procedures cover all waste generated in the University's activities.

The procedures are divided into two parts, office waste and laboratory waste, and are based on current legislation. They will be revised in connection with amendments to the legislation or changes in other requirements.

The procedures have been produced in cooperation with the University's waste contractors, veterinary surgeon, biosafety expert, radiation protection expert, safety engineer, environmental coordinator and a working group of representatives from various departments and the administration as well as the City of Stockholm's Environment and Health Administration and Stockholm Vatten AB.

Responsibility and scope

Everyone working, studying or carrying out activities at Stockholm University, Frescati, Kräftriket and Sveaplan has to follow the University's procedures for waste management. Local waste management procedures apply to the other university areas, for example at AlbaNova or in Kista at the Department of Computer and Systems Sciences.

The departments (or equivalent) are responsible for sorting waste according to current legislation and instructions issued by the University.

The Section for Purchasing and Logistics *[Sektionen för inköp och logistik]*, which belongs to the Technical Support Office, is responsible for the procurement of waste contractors and has a coordinating responsibility for waste management.

The University's waste contractors for waste from its activities are responsible for the waste management centres. They are in charge of information, signage and the collection and removal of source-separated waste. The waste contractor for hazardous waste is responsible for information, signage and the collection and removal of hazardous waste.

Household waste and industrial waste

The waste that may be generated in the University's activities is either classified as household waste, industrial waste or hazardous waste.

Household waste is the waste that ends up in the waste baskets in our offices, lunch rooms and kitchenettes. It also includes waste produced in common areas, i.e. students' and visitors' waste. Akademiska Hus is responsible for the disposal of household waste, and it is their waste contractor that collects household waste.

The waste that the University is responsible for is *industrial waste* and *hazardous waste*. As an operator the University is required to ensure that all waste generated in its activities is disposed of in a safe and environmentally correct way. Waste is reused, recycled, destroyed or disposed of in landfills. It is the waste contractors procured by the University that handle the collection of industrial waste and hazardous waste.

Types of waste at Stockholm University

The following types of waste are disposed of and handled at Stockholm University.

Household waste	**Industrial waste**	**Hazardous waste**
Household waste[1] Compostable[2] Food waste[3]	Glass containers Metals Furniture Plastic Paper for recycling Separable waste Stretch-wrap and shrink-wrap (pallet packaging) Wood Toner cassettes Corrugated cardboard and paper containers/packaging	Animal products Antibiotics Batteries Biological agents Electrical and electronic waste (Electric waste) GMMs GMOs Human by-products Chemicals Refrigerators and freezers Laboratory glass Light sources Narcotics andnarcotic chemicals Radioactive waste Sharps

[1] Akademiska Hus is responsible for the disposal of household waste. This waste is classed as separated combustible waste and goes to energy recovery.
[2] Food leavings, fruit peel, coffee grounds, planting soil, i.e. compostable waste that is mainly generated in our kitchenettes and is handled as household waste.
[3] Food waste that arises in food preparation in restaurant kitchens and similar settings.

Deposit waste at the waste management centres

The University has a number of waste management centres where you can deposit your source-separated waste. As far as possible, the waste management centres have been adapted to the source-separation needs of nearby activities.

Never deposit anything at a waste management centre that you cannot source separate. Never leave anything standing on the floor or in another container. This creates difficulties for the people working on waste management. Instead ask one of the contacts for waste management procedures, see the *Contact information* section.

When discarding bulky waste, such as old furniture, electrical equipment, fridges, or large volumes of waste, a collection order has to be made. There is a charge for this.

For advice about ordering the collection of bulky waste, please contact:
The Goods Reception, tel. 08-16 2517 or e-mail: gods@su.se

Also notify the Goods Reception when leaving furniture at the designated spot outside the SU shop in the Arrhenius Laboratory.

Contaminated material (contaminated with, for example, chemicals, radioactive waste or infectious waste) is absolutely not included here and must be handled on the basis of the contamination, see "Part for laboratory activities".

Waste management centres for industrial waste:
D3, South Building, opposite the large refuse storage room with an exit to the culvert.

A2, Arrhenius Laboratory, outside the SU Shop

P2, Arrheniuslaboratoriet, rum P204

Geoscience Building, floor 2 under the entrance

Manne Siegbahn Laboratory, between the buildings at Frescativägen 24B and 26

Frescati backe, Svante Arrheniusväg 21, ground floor

Frescati hagväg Building 8, at the gable end opposite building 10

Kräftriket Building 18, parking area at Building 3

Department of Social Work, Sveaplan 162

Edvard Anderssons Greenhouse, outdoors

Depositing hazardous waste

All types of hazardous waste apart from radioactive waste are marked with a waste label and delivered to room M212, Svante Arrhenius väg 16F. The opening hours are Wednesdays and Fridays at 10.30–11.00.

Radioactive waste is marked with waste labels and warning symbols for ionising radiation and deposited in room A205 (opposite the SU Shop) on Thursdays at 9.45-10.15.

For the collection of hazardous waste at a department, contact the University's waste contractor.

Source separation options for students

Students and other visitors can source separate their waste. The computer rooms and some seminar rooms have containers for paper for recycling.

Two other waste management centres are available for source separation of other types of waste: one in the South Building between House C and House D on floor 3 and one in the Arrhenius Laboratory, Building A on floor 2.

Recycling stations are also available at a number of places around campus, where you can sort your plastic, paper, metal and glass containers, newspapers and recycled paper, as well as refundable PET bottles and aluminium cans.

Other information about waste

You can find other information about waste and waste management at the following addresses:

www.stockholm.se	City of Stockholm
www.ftiab.se	FTI (Förpacknings- och tidningsinsamlingen)
www.naturvardsverket.se	Swedish Environmental Protection Agency
www.kemi.se	Swedish Chemicals Agency
www.sopor.nu	General information about waste
www.hansandersson.se	Veolia Recycling Solutions Sweden AB, contractor
www.sekamiljoteknik.se	SEKA Miljöteknik AB, contractor
www.avfallsverige.se	Industry organisation

Transport documents

In Sweden a transport document has to be drawn up for the transport of hazardous waste. The document has to contain information about the sender, recipient, carrier, type of waste and quantity of waste and be signed by the sender and recipient.

Transport documentation is handled by Stockholm University's waste contractor for hazardous waste. The University is obliged to check that the carrier has a permit to transport hazardous waste.

Record keeping

Under Section 55 of the Waste Ordinance the operator of an activity that generates hazardous waste must make records each year of the quantity and type of waste and the receiving plants. These records must be retained for at least three years.

Records of hazardous waste are collected by the Technical Support Office. They are held in electronic form. It is the waste contractor that keeps the records.

Dangerous goods by road

Dangerous goods must be separated, marked, packaged and transported in accordance with the Act (SFS 2006:263) and the Ordinance (SFS 2006:311) on the Transport of Dangerous Goods by Road and the Provisions (MSBFS 2015:1) of the Swedish Civil Contingencies Agency on the Transport of Dangerous Goods by Road and in Terrain (ADR-S[4]). Contact the University's safety adviser for dangerous goods if you need help in these matters.

The university's safety adviser: Daniel Sellberg, SEKA Miljöteknik AB.
Contact details: 070-795 00 26, daniel.sellberg@sekamiljoteknik.se

If an accident or incident occurs during transport, it should be reported in SAMIR (su.se/samir).

Spills and clean-ups of hazardous substances

Spills must be collected immediately and the site of the spill must be cleaned. Depending on the properties of the spill suitable protective and cleaning equipment must be used. Liquid spills must always be absorbed using absorbents. The spill is packed according to its properties and is treated as hazardous waste. Absol is recommended as an absorbent.

[4] ADR= European **A**greement concerning the international carriage of **D**angerous goods by **R**oad; **S**= Swedish adaptation of the international ADR regulations.

Certificate for the deposit of electrical laboratory equipment

The person depositing the equipment has to sign a certificate that the equipment is not contaminated and does not contain dangerous components. This is in order to guarantee a safe working environment for the recycling personnel.

The certificate can be arranged as shown below and has to be given to the waste contractor.

If unsure whether the equipment is contaminated or not contact the hazardous waste contractor for assessment and possible collection.

There is a template for the certificate at the Sustainable campus web (Miljöwebben), under How to do: http://www.su.se/sustainablecampus

Certificate for instrument/apparatus/equipment/refrigerator/freezer from laboratory activities

Name:
Department:
Tel:

I hereby certify that this equipment :

is NOT contaminated with hazardous substances (chemicals or radioactive or infectious substances) ☐

does NOT contain any particularly dangerous components (e.g. radiation sources) ☐

Signature: _____

Marking of hazardous waste

The Stockholm University waste label must be used on all packaging containing hazardous waste.

seka™
MILJÖTEKNIK AB
Tfn huvudkontor: 08-23 53 00

FARLIGT AVFALL
HAZARDOUS WASTE

STOCKHOLMS UNIVERSITET

Radioaktivt / Radioaktive ☐
A & B-ämnen (tillståndspliktiga) ☐
CMR-ämnen ☐
Narkotikaklassat alt. narkotikakemikalier/ Drugs ☐

Vattenhalt / Percent water _____%

pH= _____

Speciell förvaring / Special storage
Refridgerator ☐
Freezer ☐

AVFALLSSLAG SPECIFIKATION:
TYPE OF WASTE, SPECIFICATION:

_____

Institution, avd / Dept. section: _____
Institutionsnummer / Dept. number: _____
Referens / Reference: _____

AVLÄMNARE / SUBMITTER
Förnamn / First name:_____
Efternamn / Surname:_____
Telefon nr / Phone nr: _____

Datum / Date: _____

Packaging for hazardous waste

The department (or equivalent) can order help with the sorting, packaging and collection of hazardous waste. The types of packaging used in transportation must be approved for the transport of dangerous goods.

It is important that the contents are known and documented on the waste label, and that substances that may react with each other are not mixed. Fore more information contact the University's waste contractor for hazardous waste.

Some examples of suitable packaging that can be ordered from the SU Shop are shown below, such as waste containers in plastic and cardboard. Packaging for infectious waste must be designed so that it can be opened and then resealed without this being visible. Containers for infectious and/or sharp waste should thus be used.

Cardboard box for hazardous waste, with inner bag. Article no: 6344-038

Plastic container for infectious waste and/or sharps. Article no: 6342-030, 6342-050.

Plastic container for hazardous waste with double lids . Art-nr: 6343-030, 6343-050.

Drums, UN-approved. Article no: 6305-005, 6305-010, 6305-025.
NB! Do not fill the drum to more than 80 per cent.

Containers for infectious and/or sharp. Article no: 3900-001–3900-002.
ADR-approved containers.

General legislation about waste

Waste management is mainly governed by Chapter 15 of the Environmental Code (Swedish Code of Statutes SFS 1998:808) on waste and producer responsibility. A number of government ordinances are associated with the Environmental Code, and the most central of these is the Waste Ordinance (SFS 2011:927) The Waste Ordinance classifies and defines types of waste.

The legislation linked to each type of waste is given under that type of waste in the procedures.

Litter

The Waste Ordinance contains a ban on causing litter outdoors in a place that the general public has access to or can view.

For everyone’s convenience, people working, studying or carrying out activities at Stockholm University are encouraged not to cause litter outdoors or indoors.

Contact information

Stockholm University

Jenny Lilliehöök Environmental Coordinator	08-16 3988	jenny.lilliehook@su.se
Margaretha Åkerholm Environmental Officer	08-16 3312	margaretha.akerholm@su.se
Mats Hansson Safety Engineer	08-16 2251 070-333 8619	mats.hansson@su.se
Stefan Trygg Section Head, Purchasing and Logistics	08-16 2686	stefan.trygg@su.se
Goods reception	08-16 2517	gods@su.se
Anki Östlund Biosafety Expert	08-16 4097	anki.ostlund@su.se
Mats Jonsson Radiation Protection Expert	08-790 9123	matsj@kth.se
Raad Askar Veterinary Surgeon	08-16 2052	raad.askar@su.se

Veolia Recycling Solutions Sweden AB (industrial waste)

Tomas Arlinder	070-467 07 34	tomas.arlinder@hansandersson.se
Peter Lemberg	070-702 93 03 80	Peter.Lemberg@hansandersson.se

SEKA Miljöteknik AB (hazardous waste)

Daniel Sellberg Safety adviser	070-795 00 26	daniel.sellberg@sekamiljoteknik.se
Patrik Karlsson (For ordering retrieval)	070-795 00 27	patrik.karlsson@sekamiljoteknik.se

Part for office activities

Batteries

Classification/separation
Batteries containing the heavy metals lead, mercury, hexavalent chromium and cadmium are classed as hazardous waste. Other batteries are not classed as hazardous waste. All spent batteries must be collected for reuse or disposal.

Collection/handling
Spent batteries are collected and delivered to a waste management centre. Car batteries are delivered to the nearest petrol station.

Marking/labelling
The container must be marked with a descriptive text (Swedish and English) and/or a symbol.

Storage at waste management centre
Plastic recycling container. No other special requirements.

Hand-over/transport
Spent batteries are collected at the waste management centre by the waste contractor who takes the batteries down to the large recycling centre under Aula Magna. Then the spent batteries are transported to a recycling plant or to intermediate storage.

Final disposal
The batteries are sorted manually by their heavy metal content at a plant. Batteries containing mercury are stored with SAKAB pending a decision on final disposal. Other batteries containing the heavy metals nickel, cadmium and lead go to metal recovery.

Specific legislation
SFS 2008:834 Ordinance on Producer Responsibility for Batteries

Electrical and electronic products

Classification/separation
Electric waste is classified as hazardous waste and contains a large amount of heavy metals and toxic substances such as lead, mercury, cadmium, hexavalent chromium, brominated flame retardants and PCB.

Put simply, electric waste is an end-of-life apparatus that is run by a battery or a cable. Electric waste is divided into two categories: electrical and electronic products.

Electric products are, for example, lamps, computers, monitors, copiers, printers, electric kettles, coffee makers (deposited without jar), microwave ovens, fume cabinets and centrifuges. Electronic products are components that control electric products, for example light sensors and glow switches.

Electric cables are classified as metal and they are separated by the waste contractor.

The handling of fluorescent tubes and light sources is regulated in another ordinance, see the *Light sources* section.

For information about the handling of refrigerators and freezers, see the *Refrigerators and freezers* section.

Collection/handling
Small numbers of end-of-life electric products are deposited at the nearest waste management centre. For a larger number or bulky end-of-life electric products, order collection from the Goods Reception, tel. 08-16 25 17 or e-mail: gods@.su.se

Marking/labelling
The recycling containers/collection point must be marked with a descriptive text (Swedish and English) and/or symbols.

If the equipment has been used in laboratory activities the person depositing the equipment must sign a certificate that the equipment not is contaminated and do not contain dangerous components. Certificates can be found under “How to do” at Sustainable campus web, www.su.se/sustainablecampus. If unsure whether the equipment is contaminated or not contact the hazardous waste contractor for assessment and possible collection.

Storage at waste management centre
Electrical cages or placed in the area marked for that purpose.

Hand-over/transport
The electric waste deposited is collected by the waste contractor at the waste management centre. Then the electrical waste is taken to the large recycling centre under Aula Magna for further transport.

Final disposal

Electric waste is driven to electronics recovery where it is sorted and dismantled. The parts of the electric waste that are harmful to the environment are disposed of. The metal in the electric waste goes to metal recycling and the plastic in the casings to energy recovery. Some components of the electric waste are repaired and reused.

Specific legislation

SFS 2014:1075 Ordinance on Producer Responsibility for Electric Equipment
SFS 2016:1128 Ordinance on Fluorinated Greenhouse Gases
SFS 2012:259 Ordinance on Environmental Sanction Charges

Glass containers (coloured and clear)

Classification/separation

Glass containers such as bottles and jars are separated into coloured and clear glass. In principle, container glass only consists of soda lime glass and this is the only glass that goes to recycling.

For the handling of ***laboratory glass***, see the *Laboratory glass* section. For information about the handing of ***other glass***, such as drinking glasses and window glass, see the *Landfill waste* section

Contaminated material (contaminated with, for example, chemicals, radioactive waste or infectious waste) is absolutely not included here and must be handled on the basis of the contamination, see "Part for laboratory activities".

Collection/handling

Glass containers are deposited at the nearest waste management centre. The waste management centre has a recycling container for coloured glass and one for clear glass. When the glass containers are deposited they must be completely empty and, if necessary, well-cleaned and evaporated.

Lids and bottle caps of other materials must be removed before the glass containers are placed in the recycling container.

Refundable glass containers are returned to a shop or point of purchase.

Marking/labelling

The collection point must be marked with a description text (Swedish and English) and/or a symbol.

Storage at waste management centres

Plastic banks 190 litres. Recycling containers for coloured and for clear glass.

Hand-over/transport

Separated glass containers are collected by the waste contractor at the waste management centres and are taken down to the large recycling centre under Aula Magna for further transport.

Final disposal

All glass collected is driven to Svensk Glasåtervinning for processing into recycled glass. The glass collected is checked and sorted. Some of this process is done manually and some by machine so as to remove contaminants and other material. Then the glass containers are crushed or ground down.

Specific legislation

SFS 2014:1073 Ordinance on Producer Responsibility for Packaging

Household waste

Classification/separation

Household waste is classified as combustible and is waste that burns without additional energy once a combustion process has started.

Household waste includes, for example, tissue paper, dye-ingrained paper, OH film, transparent disposable plastic bags, dishcloths, dirty plastic and paper containers and packaging, string, candles, plastic flowerpots, plastic cutlery, disposable mugs, disposable glasses and disposable plates of plastic, plastic tape round packaging, teabags, fruit peel and coffee grounds.

In laboratory activities non-contaminated gloves, plastic pipettes, pipette tips, Falcon pipes, Eppendorf pipes, labels, wads and serviettes are also counted as household waste.

Contaminated material (contaminated with, for example, chemicals, radioactive waste or infectious waste) is absolutely not included here and must be handled on the basis of the contamination, see "Part for laboratory activities".

Collection/handling

Household waste in placed in the container for the purpose. To avoid a sanitary nuisance bin liners for household waste must be tied properly and not torn.

Marking/labelling

A descriptive text (Swedish and English) and/or a symbol must be posted at waste management centres.

Storage at waste management centres

Plastic banks 660 litres.

Hand-over/transport

The cleaners empty the containers for household waste in offices, kitchenettes and toilets. Then they take the household waste to the nearest waste management centre. Household waste is then collected by the waste contractor who takes the waste down to the large recycling centre under Aula Magna.

Final disposal

The energy in household waste is recovered by combustion in Högdalen thermal power station.

Specific legislation

NFS 2004:4	The Swedish Environmental Protection Agency's Regulations and General Advice on the Handling of Combustible Waste and Organic Waste.

Refrigerators and freezers

Classification/separation
Refrigerators and freezers contain coolants that can harm the ozone layer and are classified as hazardous waste.

Collection/handling
End-of life refrigerators and freezers are collected at the department. A collection order is made to the Goods Reception, tel. 08-16 25 17 or e-mail: gods@.su.se

If refrigerators or freezers have been used in laboratory activities, the person depositing the refrigerators or freezers must sign a certificate that they are not contaminated and do not contain dangerous components. Certificates can be found under “How to do” at Sustainable campus web, www.su.se/sustainablecampus.

If unsure whether the equipment is contaminated or not contact the hazardous waste contractor for assessment and possible collection.

Marking/labelling
The collection point must be marked with a descriptive text (Swedish and English) and/or a symbol.

Storage at waste management centres
End-of-life refrigerators or freezers must be handled with care and stored upright to avoid and coolant leakage.

Hand-over/transport
End-of-life refrigerators or freezers are driven down to the recycling centre under Aula Magna. Then the end-of-life refrigerators and freezers are transported to an intermediate storage centre. After that the end-of-life refrigerators and freezers are taken to Svensk freonåtervinning for final disposal.

Final disposal
End-of-life refrigerators and freezers are first emptied of coolant and then cut apart. The coolant is disposed of in an environmentally correct way. The plastic goes to combustion for energy recovery and the metal is reused and made into new metal products.

Specific legislation
SFS 2014:1075 Ordinance on Producer Responsibility for Electric Equipment
SFS 2016:1128 Ordinance on Fluorinated Greenhouse Gases
SFS 2012:259 Ordinance on Environmental Sanction Charges

Food waste and compostable waste

Classification/separation
Food waste and compostable waste are classified differently depending on where the waste is collected and handled. Food waste is the waste that is generated in food preparation in restaurant kitchens and cafés. Compostable waste is the waste that is generated in our activities, such as fruit peel, coffee grounds and food leavings.

Collection/handling
Food waste is collected and handled by the restaurant operator.

Compostable waste is placed in containers for household waste in kitchenettes, office areas, etc.

Marking/labelling
No requirements.

Storage at waste management centres
Food waste from food preparation must be stored in cold storage rooms.

Hand-over/transport
Food waste is collected by the waste contractor who takes the waste down to the large recycling centre under Aula Magna for further transportation.

Final disposal
Food waste goes to a digestion plant where it produces biogas. Compostable waste is mixed with other household waste and goes to energy recovery.

Specific legislation
No specific legislation.

Light sources

Classification/separation

Fluorescent tubes, low-energy lamps and other light sources containing mercury are classed as hazardous waste. Incandescent bulbs contain lead but are not classed as hazardous waste, Unusual light sources such as LED-lamps, halogen lamps, etc. are not classed as hazardous waste either.

Collection/handling

All light sources must be collected. Used light sources are collected and placed in the intended recycling container at the waste management centre. That is, fluorescent tubes, low-energy lamps and incandescent bulbs are not mixed in one and the same recycling container.

Unusual light sources like LED lamps, halogen lamps and the lamps used in, for example, microscopes are placed in the recycling container for incandescent bulbs.

Great care must be taken in leaving and handling light sources so that they do no burst or are not broken off.

Marking/labelling

The waste management centre must be marked with a descriptive text (Swedish and English) and/or a symbol.

Storage at waste management centres

No special requirements.

Hand-over/transport

Used light sources are collected at waste management centres by the waste contractor. Then they are taken down to the large recycling centre under Aula Magna.

Final disposal

Used light sources are sent to a recycling plant. Metal, glass and certain types of luminescent material are recycled and mercury is disposed of in a safe and controlled way.

Specific legislation

SFS 2000:208	Ordinance on Producer Responsibility for Incandescent Bulbs and Certain Light Fittings
SFS 2012:259	Ordinance on Environmental Sanction Charges

Metals

Classification/separation

Metal containers and objects are sorted as metal. Examples of metal containers are cans, tubes, aluminium foil, aluminium trays, lids, bottle caps and medicine tubes. Metal objects can be iron scrap, metal tubes, car and cycle parts, screws, nails, pots, metal cutlery, and metal refill cartridges for pens, paper punches and staplers.

Contaminated material (contaminated with, for example, chemicals, radioactive waste or infectious waste) is absolutely not included here and must be handled on the basis of the contamination; see "Part for laboratory activities".

Lead containers used for delivery of isotopic solutions or other radioactive material shall be submitted to the hazardous waste room, M212 at KÖL. See also under Radioactive.

Collection/handling

Metal collected is deposited at a waste management centre in the recycling container for the purpose. Containers must be empty, well-cleaned and aired. Lids and bottle caps of other materials are removed. Refundable drink cans are returned to a shop or point of purchase.

Marking/labelling

The waste management centre must be marked with a descriptive text (Swedish and English) and/or a symbol.

Storage at waste management centres

No special requirements.

Hand-over/transport

Metal deposited is collected at the waste management centre by the waste contractor. Then it is taken down to the major recycling centre under Aula Magna.

Final disposal

Collected metal is ground, separated and smelted down to make a new raw material. Recovering metal saves energy, for example 95 per cent of the energy required to extract and produce new aluminium is saved (source: www.ftiab.se).

Specific legislation

SFS 2014:1073 Ordinance on Producer Responsibility for Packaging

Furniture

Classification/separation
Old furniture that consists of different materials is dismantled if possible and sorted by type of waste.

The furniture that cannot be dismantled is separated as separable waste.

Collection/handling
Collection has to be ordered when discarding old furniture, and there is a charge for this.

To order collection, contact the Goods Reception, tel. 08-16 2517 or e-mail: gods@su.se

Marking/labelling
No requirements.

Storage at waste management centres
Sent by delivery service. Left standing at the designated place.

Hand-over/transport
The waste contractor collects discarded furniture. Then it is taken down to the large recycling centre under Aula Magna. After that the furniture is taken to a plant and dismantled and separated.

Final disposal
Discarded furniture is separated and dismantled. Then it is sent to energy recovery and is used for district heating or is placed in a landfill.

Specific legislation
No specific legislation.

Plastic

Classification/separation

The plastic fraction is a mixed fraction containing rigid plastic, non-rigid plastic and Styrofoam. Rigid plastic is plastic containers such as bottles, jars, boxes, drums, empty spray cans, etc.

Non-rigid plastic is plastic containers such as carrier bags and plastic sacks and also non-rigid plastic used to protect an object. For example, cushions of non-rigid plastic used as protection from bumps and scratches in transport.

Styrofoam blocks and shavings are counted as Styrofoam. For the separation of stretch and shrink plastic, see the *Pallet packaging* section. For other rigid plastic such as plastic cutlery, straws, washing-up brushes and flowerpots, see the *Household waste* section. For the separation of stretch and shrink plastic, see the *Stretch and shrink plastic* section.

Contaminated material (with, for example, chemicals or radioactive or infectious waste) is absolutely not included here and must be handled on the basis of the contamination, see "Part for laboratory activities".

Collection/handling

Plastic is deposited in the recycling container for rigid plastic at the waste management centre. All plastic containers deposited must be completely empty, well cleaned and, if necessary, evaporated. Lids and bottle caps and other material must be removed before the plastic containers are placed in the recycling container.

Other rigid plastic is placed in the recycling container for household waste. Refundable plastic bottles are returned to a shop or point of purchase.

Marking/labelling

The waste management centre must be marked with a descriptive text (Swedish and English) and/or a symbol.

Storage at waste management centres

Plastic recycling containers, 660 litres.

Hand-over/transport

Rigid plastic is collected at the waste management centre by the waste contractor who takes the separated plastic down to the large recycling centre under Aula Magna.

Final disposal

A test is being conducted on recovering recycled plastic as new plastic products. If the University's plastic for recycling does not meet these requirements, it will be recycled as heat energy by combustion in Högdalen thermal power station.

Specific legislation

SFS 2014:1073 Ordinance on Producer Responsibility for Packaging

Paper for recycling

Classification/separation

Paper for recycling is a mixed paper fraction. Examples of paper for recycling that is separated are newspapers, magazines with both soft and hard covers, direct advertising, phone books, surplus paper copies, photocopy paper wrapping, course booklets, course catalogues, computer lists, books, envelopes, Post-It notes (of recycled paper) and receipts.

Other paper products, such as labels (gummed paper), coated paper (glossy paper), carbon paper and self-adhesive stickers are separated as household waste.

Collection/handling

Paper for recycling is deposited in the recycling container either at the department or at the nearest waste management centre. Paper covered by secrecy is placed in separate recycling containers with locks.

It you are going to throw out large quantities of books and magazines/journals, you have to order extra recycling containers.

Contact the Goods Reception, tel. 08-16 2517 or e-mail: gods@su.se

Other paper products are placed in the recycling container for household waste.

Marking/labelling

The waste management centre or collection point must be marked with a descriptive text (Swedish and English) and/or a symbol.

Storage at waste management centres

Plastic recycling containers, 190 litres. The fire authority’s requirements apply to recycling containers kept in common areas. Otherwise no special requirements.

Hand-over/transport

Returned office paper is collected at the department or deposited at the waste management centre. The paper is taken down the large recycling centre under Aula Magna for further transport,

Final disposal

Paper for recycling collected is taken to a separation plant for checking, sorting and baling. Then it is taken to a paper mill to become a new raw material for the production of new paper.

Paper covered by secrecy, books and journals with hard covers and other papers products are disposed of by combustion and energy recovery.

Specific legislation

SFS 2014:1074 Ordinance on Producer Responsibility for Paper for Recycling

Separable waste

Classification/separation

Separable waste is a fraction that consists of many different materials, objects that cannot be separated from one another and/or cannot be separated at the waste management centre. That is, the final separation takes place at the separation plant.

Separable waste is separated into combustible, metal, filler and landfill waste.

Combustible is waste that cannot be reused and where the materials cannot be recovered. Examples are ring-binders, plastic wallets, magazine rack holders, videotapes, CDs, CD covers, diskettes, video tapes, ink ribbons, plastic pens without metal cartridges, mouse-pads and fabric products, plastic pipette racks, fruit baskets, etc.

Metal arises when waste consisting of metal and other materials is separated at the separation plant. Examples are ring-binders of metal and hardboard and tables of wood and metal.

Filler is waste such as broken porcelain, ceramics, windowpane glass, drinking glasses and stone.

Landfill is waste that cannot be reused or recycled. Examples are concrete, gypsum wallboard and insulation.

Contaminated material (with, for example, chemicals or radioactive or infectious waste) is absolutely not included here and must be handled on the basis of the contamination, see "Part for laboratory activities".

Collection/handling

Separable waste is deposited at a waste management centre. Order a recycling bank or a container when throwing out large quantities of separable waste. Contact the Goods Reception, tel. 08-16 2517 or e-mail: gods@.su.se

Marking/labelling

A waste management centre must be marked with a descriptive text (Swedish and English) and/or a symbol.

Storage at waste management centres

Plastic recycling containers 660 litres.

Hand-over/transport

Separable waste is collected at the waste management centre by the waste contractor who takes it down to the large recycling centre under Aula Magna.

Final disposal

The waste is driven to a separation plant where it is separated into four different fractions. Then the waste is used for material recovery or energy recovery or placed in a landfill. The waste for energy recovery is then transported to a combustion plant.

Specific legislation

SFS 2001:512 Ordinance on the Landfill of Waste

NFS 2004:4 The Swedish Environmental Protection Agency's Regulations and General Advice on the Handling of Combustible Waste and Organic Waste.

Stretch and shrink wrap (pallet packaging)

Classification/separation
Stretch- and shrink-wrap is transparent soft polythene (LPDE, LLDPE) and is separated as stretch- and shrink-wrap. Other names for stretch- and shrink-wrap are stretch film, blown film, air bubble film and shrink film.

Collection/handling
The wrap is collected in perforated, transparent plastic sacks placed in sack stands. These sack stands are available as selected collection points. Stretch- and shrink-wrap must be dry and clean from contaminants.

Marking/labelling
The collection point must be marked with a descriptive text (Swedish and English) and/or a symbol.

Storage at waste management centres
Plastic bags in sack containers.

Hand-over/transport
The stretch-and shrink-wrap is collected at the waste management centre by the waste contractor. Then the plastic is compressed in a baling press and taken down to the large recycling centre under Aula Magna.

Final disposal
Recycled stretch-and shrink-wrap is used to make plastic sacks at Miljösäck in Norrköping

Specific legislation
SFS 2014:1073 Ordinance on Producer Responsibility for Packaging

Toner cassettes and ink cartridges

Classification/separation
Toner cassettes and ink cartridges mainly contain plastic, toner powder and certain metal components. The toner cassettes that have the Swan label can be reused several times before going to energy recovery. The toner powder is controlled from an environmental and harm to health perspective.

Collection/handling
The used toner cassettes, toner bottles and ink cartridges must be collected and deposited at the nearest waste management centre.

Toner cassettes and ink cartridges are placed in the paperboard box in place at the waste management centre. The toner bottles are put in the recycling container for plastic for recycling.

Marking/labelling
A waste management centre must be marked with a descriptive text (Swedish and English) and/or a symbol.

Storage at waste management centres
Paperboard box.

Hand-over/transport
The used toner cassettes and ink cartridges are returned to the manufacturer’s production plant.

Final disposal
The toner cassettes and ink cartridges are not separated until they come to the plant. The bulk of the cassettes and cartridges are reused in the manufacture of new toner cassettes and ink cartridges. In the case of cassettes and cartridges that are broken, some plastic parts and residues of toner powder go to energy recovery and are burned in Mora’s district heating plant.

Specific legislation
SFS 2014:1075 Ordinance on Producer Responsibility for Electric Equipment

Wood

Classification/separation

Painted, varnished and clean wood and wood products are separated as wood. Examples of wood products include disposable pallets, planks, wooden crates, wooden furniture and plywood.

Wood contaminated with, for example, plaster or concrete waste is separated as separable waste.

Impregnated wood is classed as hazardous waste and treated on this basis. It can be difficult to see the difference between impregnated wood and wood that is untreated.

If there is any doubt as to whether or not the wood is impregnated, contact Tomas Arlinder at H.A. Andersson recycling AB, tel. 070-467 07 34 or e-mail: tomas.arlinder@hansandersson.se.

Collection/handling

Wood and impregnated wood products are deposited at a waste management centre. A collection order must be made when disposing of large quantities. There is a charge for this.

To order collection, contact the Goods Reception, tel. 08-16 2517 or e-mail: gods@su.se

Marking/labelling

The waste management centre must be marked with a descriptive text (Swedish and English) and/or a symbol.

Storage at waste management centres

Plastic recycling containers 660 litres. No special requirements.

Hand-over/transport

Then wood is taken down to the large recycling centre under Aula Magna. Then the wood and wood products are transported to a plant. The wood is broken down into chips and furniture is dismantled.

Final disposal

Wood and wood products are chipped and sent for energy recovery as district heating. Impregnated wood and wood products are treated as hazardous waste and are sent to a combustion plant with a permit to handle the wood.

Specific legislation

SFS 2014:1073 Ordinance on Producer Responsibility for Packaging (applies, for example, to wooden crates or pallets used to protect products on delivery)

Corrugated cardboard and paper packaging/containers

Classification/separation
Corrugated cardboard is paperboard with a corrugated middle layer. Paper containers are containers like cereal, juice, milk and pizza cartons.

Collection/handling
Cardboard and paper containers are deposited at the nearest waste management centre or placed in the recycling container provided at the department.

If possible, remove tape and other material adhering to the cardboard. The paper containers must be clean and dry before being deposited for recycling.

Marking/labelling
The collection point and waste management centre must be marked with a descriptive text (Swedish and English) and/or a symbol.

Storage at waste management centres
Plastic recycling containers 660 litres. No special requirements.

Hand-over/transport
Recycling containers for cardboard are collected by the waste contractor from the department or at the nearest waste management centre. Cardboard and paper containers then go to the large recycling centre under Aula Magna.

Final disposal
The cardboard and paper containers go to recycling. The material is separated first and then becomes new raw material. New cardboard, new containers and the surface layer of gypsum board are made from the recycled pulp.

Specific legislation
SFS 2014:1073 Ordinance on Producer Responsibility for Packaging

Part for laboratory activities
Animal products and by-products

Background
The Swedish Board of Agriculture (SJV) requires a licence for the use, import and transport of animal by-products for research and diagnostic purposes. One background to the rules is the need to ensure traceability. Stockholm University has obtained a general licence from SJV for the import and use of animal products and by-products for research purposes. The University must keep a continuous import register that can be presented on request. A complete list of products imported must be sent to SJV every six months.

Definition: All products from the animal kingdom that are not intended for human consumption are defined as animal by-products and are regulated in Regulation (EC) No 1069/2009 of the European Parliament and of the Council. This includes proteins (excl. antibodies, cell cultures or other proteins that are affinity-purified and are placed in a salt water solution) and animal-origin serum.
CE-certified products are counted as finished products and are exempt from the provisions, as are entire bodies or parts of Swedish wild animals (incl. wild-caught fish that is not bearing any communicable disease).

Third-country import: All import from a third country, i.e. outside the EU, Norway, Iceland and Switzerland, must be accompanied by an import permit and a commercial document (issued by the sender). A copy of the commercial document must be sent to Mats Hansson at the Safety Section (08-16 22 51, mats.hansson@su.se). The original must be retained by the recipient for at least two years.

Import within the EU/transport: No import/entry permit is required to bring in research material within the EU, but the carrier must be approved for this and a commercial document must accompany the material. When transported, samples for research and diagnostic purposes must be marked "For research and diagnostic purposes". Export consignments may need to be marked in another language depending on the receiving country.

Commercial document
The sender must ensure that samples for research and diagnostic purposes are accompanied by a commercial document in accordance with Commission Regulation (EU) No 142/2011, which shall specify the following:

- a description of the material and the animal species of origin
- the category of the material
- the quantity of the material
- the place of origin and the place of dispatch of the material
- the name and the address of the sender, and
- the name and the address of the recipient and/or user

The commercial document is available on the website of the Swedish Board of Agriculture.

Classification/separation

Animal products/by-products are divided into three different categories on the basis of a risk assessment, where category 1 is considered to be the greatest risk and category 3 the least risk to human and animal health. Some examples are given below:

Category 1: Entire bodies or body parts of animals suspected of being infected by a TSE (Transmissible Spongiform Encephalopathy). Animals that have ingested prohibited or hazardous substances. Laboratory animals used in experiments, wild animals suspected of being infected with diseases communicable to humans or animals. Specified risk material (defined according to Article 3.1 (g) and Annex 5 of EC 999/2001).

Category 2: Droppings and digestive tract content of production animals. Animals that do not belong to category 1 and have not been slaughtered for human consumption (e.g. died in an accident). Laboratory animals that have not been used for experiments, with the exception of domestic game not deemed to be infectious.

Category 3: Parts of slaughtered animals that are fit for human consumption but are for commercial reasons not intended for human consumption. Parts of slaughtered animals rejected as unfit for human consumption, but which do not show any signs of communicable diseases. Animal by-products obtained in the production of products intended for human consumption.

Handling/storage

Users handling and storing samples for research and diagnostic purposes shall take all the necessary measures to avoid the spread of diseases that can be communicated to humans or animals, primarily by observing good microbiological practice (according to AFS 2005:1).

Non CE-marked animal products/by-products for research and diagnostic purposes and those originating from the use of such products shall, if they are not saved for reference purposes or returned to the third country of origin, be disposed of in the following way:

- Animal products from the EU, Norway, Iceland and Switzerland can, after autoclaving, be treated as household waste and be poured out in a sink. Alternatively they can be disposed of by combustion.
- Animal products/by-products from a third county can, after autoclaving, be treated as household waste and be poured out in a sink if the volumes are not in excess of 2000 ml and they originate from a country from which the EU permits the import of fresh meat (list in EU 206/2010, Part I, Annex II). Alternatively they can be disposed of by combustion.
- Other products including animal carcasses are disposed of by combustion. Category 1 products that contain or are suspected of containing infectious organisms shall, if possible, be treated so that the pathogenic organisms are inactivated before the products are handed over to the approved waste contractor.

Animal products/by-products for combustion must be packed in yellow plastic containers (SU Shop article no 6342-030 or 6342-050) intended for this purpose and immediately be

deposited with the waste contractor. The waste may be held in intermediate storage in a refrigerator (max + 8 C) for 1–5 days; for storage for more than 5 days freezer-storage is required. Storage may take place at the department concerned.

The Animals Section has its own handling procedure for waste, e.g. cage material, dead animals and organs. For more information see the special document obtained via the Animals Section.

Marking/labelling

Stockholm University waste label filled in with:

- Special storage: refrigerator or freezer?: (x)
- Type of waste, specification: “Animal products/by-products” and specification
- Submitting department, department number and reference
- Submitter’s name, phone no and date

Animal products that have been inactivated and classed as household waste must NOT be marked.

Hand-over/transport

Waste can be deposited on Wednesdays or Fridays at 10.30-11.00 in room M212 at KÖL (Chemical Education Laboratories), Svante Arrhenius väg 16F. If refrigerator/freezer storage is required, waste may only be deposited on the same day that the carrier has for collection. Contact the University´s waste contractor for hazardous waste to decide a date. The waste contractor then transports the waste for destruction.

Final disposal

Combustion arranged by the waste contractor.

Specific legislation

EC 1069/2009	Regulation of the European Parliament and of the Council laying down health rules as regards animal by-products and derived products not intended for human consumption and repealing Regulation (EC) No 177/2002 (Animal by-products Regulation)
EU 142/2011	Commission regulation implementing Regulation (EC) No 1069/2009 of the European Parliament and of the Council laying down health rules as regards animal by-products and derived products not intended for human consumption and implementing Council Directive 97/78/EC as regards certain samples and items exempt from veterinary checks at the border under that Directive
SFS 2006:805	Act on Feed and Animal By-products
SFS 2006:814	Ordinance on Feed and Animal By-products
SJVFS 2006:84	Involvement with Animal By-products and the Import of Other Products, apart from Products for Human Consumption that can Spread Communicable Diseases to Animals
SJVFS 2007:21	Public Control of Feed and Animal By-products

Further information is available at:
www.jordbruksverket.se/amnesomraden/djur/produkterfrandjur/

Antibiotics

Classification/separation

It is important to avoid releases of antibiotics that can reach the ecosystem. Antibiotic waste must be treated differently depending on its stability.
The following information presupposes that the waste does not contain substances or organisms that, by themselves, require the waste to be classed as hazardous waste.
Antibiotics not listed below are treated as hazardous waste until another decomposition method has been approved (via the biosafety expert, who then enters the antibiotic on the list set out below).

Readily broken down and can be poured out in a sink:
Ampicillin, Carbenicillin, Chloramphenicol, Penicillin

Inactivated by heat and must be autoclaved (or boiled) before being poured out in a sink:
Amphotericin (Fungizone), Erytromycin, Geneticin (G418), Gentamicin, Neomycin, Puromycin, Streptomycin, Sulfadoxine, Tetracycline

Can withstand heat/autoclaving and have unknown properties and must be submitted for combustion
Blasticidin S, Ciprofloxacin, Enrofloxacin, Kanamycin, Nalidixic acid, Vankomycin (ought really to be replaced, the last one that works against multidrug-resistant staphylococci), Zeomycin, Zeocin

Handling/storage

Antibiotics to be deposited for combustion must be treated as hazardous waste. Solutions containing antibiotics are collected in plastic drums and treated as hazardous waste.

Marking/labelling

Stockholm University waste label filled in with:

- Type of waste, specification: “Antibiotics” and specification
- Submitting department, department number and reference
- Submitter’s name, phone no and date

Hand-over/transport

Waste can be deposited on Wednesdays or Fridays at 10.30-11.00 in room M212 at KÖL (Chemical Education Laboratories), Svante Arrhenius väg 16F. The waste contractor then transports the waste for destruction.

Final disposal

Combustion arranged by the waste contractor.

Specific legislation

AFS 2005:5 Cycostatics and Other Medicinal Products with Lasting Toxic Effects

Biological agents (bacteria, viruses, etc.)

Classification/separation

Biological agents are defined as microorganisms, cell cultures and human internal parasites that can generate ill health. Note that human cell lines can also be virus contaminated. If there is any prophylaxis, staff handling the organisms should be vaccinated, for example. They are divided into different risk groups (see AFS 2005:1).

Risk group 1 – low risk: Work with risk group 1 organisms does not normally need to be reported.

Risk group 2 – moderate risk: Work with risk group 2 organisms is reported via the University's Biosafety Committee to the Swedish Work Environment Authority (Stockholm District), annexing a work description and information about waste management.

Risk group 3 – high risk: A permit for work with risk group 3 organisms must be obtained from the Swedish Work Environment Authority via the University's Biosafety Committee. Requires a specially equipped laboratory where inactivation of the organisms takes place before they leave the lab.

Risk group 4 – very high risk: None at Stockholm University; requires a special safety laboratory.

Handling/storage

Biological agents must be inactivated as soon as possible by either autoclaving or chemical treatment. Then they can be poured out in a sink or treated as household waste, provided that they do not contain any other hazardous waste.

Biological agents that cannot be inactivated on site are packed in yellow plastic containers (SU Shop article no 6342-030 or 6342-050) intended for this purpose and deposited as soon as possible with the waste contractor. The waste may be held in intermediate storage in a refrigerator (max + 8 C) for 1–7 days; for storage for more than 7 days freezer-storage is required. Storage may take place at the department concerned.

Inactivation

For autoclaving (20 min, 121ºC, 150 kPa) the material must be packed in special closed autoclave bags when it leaves the laboratory for transport to the autoclave where it is received by informed staff.

Chemical treatment, alt. I: **Potassium Peroxomonosulphate**, active substance 0.5% *(e.g. Virkon* or *Perform*).

Chemical treatment, alt. II: **Hypochlorite**, active substance 0.5% *(e.g. Klorin*).

Chemical treatment, protocol: Object: place object in 1% *Virkon*, 1% *Perform* or 15% *Klorin* solution for 2 minutes, remove from solution, leave damp for 10 minutes, rinse in water.
Liquids: add *Virkon* or *Perform* powder directly to the liquid, 2% final concentration, or add *Klorin* concentrate to the liquid, final concentration 15%, leave overnight.

From an environmental point of view, autoclaving is to prefer. The best active substance among the chemical methods is potassium hydrogen peroxymonosulfate, this because of its good biodegradability. *Perform classic concentrate OXY* does not contain the surfactant LAS (Linear Alkylbenzene Sulfonate), which *Virkon S* does. LAS ends up in the sludge phase of the sewage treatment plant and therefore *Perform* is a better option than *Virkon*. *Perform* however, comes in different variations so make sure that the one you use does not contain quaternary ammonium compounds. Hypochlorite (in e.g. *Klorin*) may chlorinate the organic materials in the sewage water to form a mixture of different chlorinated compounds. It is not exactly known which compounds that are formed and therefore either its toxicity or biodegradability. Therefore, hypochlorite shall be avoided if possible. Remains of both options can though be diluted in the drain after being used. Solutions containing high levels of hypochlorite (>1% active ingredient) must be submitted as hazardous waste.

Marking/labelling

Stockholm University waste label filled in with:

- Special storage: refrigerator or freezer?: (x)
- Type of waste, specification: “Biological agents”, risk class and specification
- Submitting department, department number and reference
- Submitter’s name, phone no and date

Biological agents that have been inactivated and classed as household waste must NOT be marked.

Hand-over/transport

Waste can be deposited on Wednesdays or Fridays at 10.30-11.00 in room M212 at KÖL (Chemical Education Laboratories), Svante Arrhenius väg 16F. If refrigerator/freezer storage is required, waste may only be deposited on the same day that the carrier has for collection. Contact the University´s waste contractor for hazardous waste to decide a date. The waste contractor then transports the waste for destruction.

Final disposal

Combustion arranged by the waste contractor.

Specific legislation

AFS 2005:01 Microbiological Work Environment Risks – Infection, Toxigenic Effect, Hypersensitivity

Genetically modified microorganisms – GMMs (not GMOs)

The main principle is that no living genetically modified microorganisms shall leave the University unless there are special reasons. Cleaning and decontamination must be carried out to the extent required to prevent GMMs harming health or the environment. The methods used must be designed to prevent the spread of GMMs. The handling of GMMs depends on the activity concerned.

Classification/separation

F activity: contained use of genetically modified microorganisms with negligible or no risk of harm to human health or the environment. The activity must be reported to the Swedish Work Environment Authority via the University's Biosafety Committee, which must hold a risk assessment and information about risk management.

L activity: contained use of genetically modified microorganisms with low risk of harm to human health or the environment. The activity must be reported to the Swedish Work Environment Authority via the University's Biosafety Committee, which must hold a risk assessment and a handling instruction and information about risk management.

R activity: contained use of genetically modified microorganisms with moderate or high risk of harm to human health or the environment. The activity requires a permit from the Swedish Work Environment Authority and special laboratories and is not dealt with here.

Handling/storage

GMMs must be inactivated as soon as possible by either autoclaving or chemical treatment. Then they can be poured out in the sink or treated as household waste, provided that they do not contain any other hazardous waste.

GMMs that cannot be deactivated on site are packed in yellow plastic containers (SU Shop article no 6342-030 or 6342-050) intended for this purpose and are deposited as soon as possible with the waste contractor. The waste may be held in intermediate storage in a refrigerator (max + 8 C) for 1–7 days; for storage for more than 7 days freezer-storage is required. Storage may take place at the department concerned.

Inactivation

For autoclaving (20 min, 121ºC, 150 kPa) the material must be packed in special closed autoclave bags when it leaves the laboratory for transport to the autoclave where it is received by informed staff.

Chemical treatment, alt. I: **Potassium Peroxomonosulphate**, active substance 0.5% *(e.g. Virkon* or *Perform*).

Chemical treatment, alt. II: **Hypochlorite**, active substance 0.5% *(e.g. Klorin*).

Chemical treatment, protocol: Object: place object in 1% *Virkon*, 1% *Perform* or 15% *Klorin* solution for 2 minutes, remove from solution, leave damp for 10 minutes, rinse in water.
Liquids: add *Virkon* or *Perform* powder directly to the liquid, 2% final concentration, or add *Klorin* concentrate to the liquid, final concentration 15%, leave overnight.

From an environmental point of view, autoclaving is to prefer. The best active substance among the chemical methods is potassium hydrogen peroxymonosulfate, this because of its good biodegradability. *Perform classic concentrate OXY* does not contain the surfactant LAS (Linear Alkylbenzene Sulfonate), which *Virkon S* does. LAS ends up in the sludge phase of the sewage treatment plant and therefore *Perform* is a better option than *Virkon*. *Perform* however, comes in different variations so make sure that the one you use does not contain quaternary ammonium compounds. Hypochlorite (in e.g. *Klorin*) may chlorinate the organic materials in the sewage water to form a mixture of different chlorinated compounds. It is not exactly known which compounds that are formed and therefore either its toxicity or biodegradability. Therefore, hypochlorite shall be avoided if possible. Remains of both options can though be diluted in the drain after being used. Solutions containing high levels of hypochlorite (>1% active ingredient) must be submitted as hazardous waste.

Marking/labelling

Stockholm University waste label filled in with:

- Special storage: refrigerator or freezer?: (x)
- Type of waste, specification: “GMM” and specification
- Submitting department, department number and reference
- Submitter’s name, phone no and date

GMM that have been inactivated and classed as household waste must NOT be marked.

Hand-over/transport

Waste can be deposited on Wednesdays or Fridays at 10.30-11.00 in room M212 at KÖL (Chemical Education Laboratories), Svante Arrhenius väg 16F. If refrigerator/freezer storage is required, waste may only be deposited on the same day that the carrier has for collection. Contact the University´s waste contractor for hazardous waste to decide a date. The waste contractor then transports the waste for destruction.

Final disposal

Combustion arranged by the waste contractor.

Specific legislation

AFS 2011:02 Contained Use of Genetically Modified Micro-organisms

Genetically modified organisms – GMOs (not GMMs)

Classification/separation

The main principle is that no living genetically modified organisms (GMOs) shall leave the University unless there are special reasons. Anyone conducing activities with the contained use of GMOs must report this via the University's Biosafety Committee to the relevant supervisory authority, which can issue a time-limited permit after an inspection.
With regard to the contained use of GMOs (not GMMs) the supervisory authority is the Swedish Board of Fisheries for aquatic organisms and the Swedish Board of Agriculture for other organisms.

Handling/storage

GMOs must be inactivated as soon as possible by either autoclaving or some other approved treatment. Then they can be treated as household waste, provided that they do not contain any other hazardous waste.

GMOs that cannot be inactivated on site are packed in yellow plastic containers (SU Shop article no 6342-030 or 6342-050) intended for this purpose and deposited as soon as possible with the waste contractor. The waste may be held in intermediate storage in a refrigerator (max + 8 C) for 1–7 days; for storage for more than 7 days freeze-storage is required. Storage may take place at the department concerned.

Marking/labelling

Stockholm University waste label filled in with:

- Special storage: refrigerator or freezer?: (x)
- Type of waste, specification: "GMO" and specification
- Submitting department, department number and reference
- Submitter's name, phone no and date

GMO that have been inactivated and classed as household waste must NOT be marked.

Hand-over/transport

Waste can be deposited on Wednesdays or Fridays at 10.30-11.00 in room M212 at KÖL (Chemical Education Laboratories), Svante Arrhenius väg 16F. If refrigerator/freezer storage is required, waste may only be deposited on the same day that the carrier has for collection. Contact the University´s waste contractor for hazardous waste to decide a date. The waste contractor then transports the waste for destruction.

Final disposal

Combustion arranged by the waste contractor.

Specific legislation

SFS 2000:271	Ordinance on the Contained use of Genetically Modified Organisms
FIFS 2004:2	Genetically Modified Aquatic Organisms
SJVFS 1995:33	The Use of Genetically Modified Animals
SJVFS 2007:29	Contained Use of Genetically Modified Plants

Human By-products (blood, tissues and cell cultures)

Classification/separation

Blood and blood products that are not decontaminated can contain infectious agents, for example the Hepatitis B virus and the HIV-virus, and must therefore be treated as infectious. Note that human cell lines may also be virus contaminated. Blood infection cannot be airborne and is not transferred through uninjured skin either. Laboratories that handle blood or blood products and have not been decontaminated must have written instructions for their work. When handling non-decontaminated human blood samples staff should be vaccinated against Hepatitis B.

Handling/storage

Human by-products must be inactivated as soon as possible by either autoclaving or chemical treatment. Then they can be poured out in the sink or treated as household waste, provided that they do not contain any other hazardous waste.

Human by-products that cannot be inactivated on site are packed in yellow plastic containers (SU Shop article no 6342-030 or 6342-050) intended for this purpose and deposited as soon as possible with the waste contractor. The waste may be held in intermediate storage in a refrigerator (max + 8 C) for 1–5 days; for storage for more than 5 days freeze-storage is required. Storage may take place at the department concerned.

Inactivation

For autoclaving (20 min, 121^{o}C, 150 kPa) the material must be packed in special closed autoclave bags when it leaves the laboratory for transport to the autoclave where it is received by informed staff.

Chemical treatment, alt. I: **Potassium Peroxomonosulphate**, active substance 0.5% *(e.g. Virkon* or *Perform*).

Chemical treatment, alt. II: **Hypochlorite**, active substance 0.5% *(e.g. Klorin*).

Chemical treatment, protocol: Object: place object in 1% *Virkon*, 1% *Perform* or 15% *Klorin* solution for 2 minutes, remove from solution, leave damp for 10 minutes, rinse in water.
Liquids: add *Virkon* or *Perform* powder directly to the liquid, 2% final concentration, or add *Klorin* concentrate to the liquid, final concentration 15%, leave overnight.

From an environmental point of view, autoclaving is to prefer. The best active substance among the chemical methods is potassium hydrogen peroxymonosulfate, this because of its good biodegradability. *Perform classic concentrate OXY* does not contain the surfactant LAS (Linear Alkylbenzene Sulfonate), which *Virkon S* does. LAS ends up in the sludge phase of the sewage treatment plant and therefore *Perform* is a better option than *Virkon*. *Perform* however, comes in different variations so make sure that the one you use does not contain quaternary ammonium compounds. Hypochlorite (in e.g. *Klorin*) may chlorinate the organic materials in the sewage water to form a mixture of different chlorinated

compounds. It is not exactly known which compounds that are formed and therefore either its toxicity or biodegradability. Therefore, hypochlorite shall be avoided if possible. Remains of both options can though be diluted in the drain after being used. Solutions containing high levels of hypochlorite (>1% active ingredient) must be submitted as hazardous waste.

Marking/labelling

Stockholm University waste label filled in with:

- Special storage: refrigerator or freezer?: (x)
- Type of waste, specification: “Human by-products” and specification
- Submitting department, department number and reference
- Submitter’s name, phone no and date

Human by-products that have been inactivated and classed as household waste must NOT be marked.

Hand-over/transport

Waste can be deposited on Wednesdays or Fridays at 10.30-11.00 in room M212 at KÖL (Chemical Education Laboratories), Svante Arrhenius väg 16F. If refrigerator/freezer storage is required, waste may only be deposited on the same day that the carrier has for collection. Contact the University´s waste contractor for hazardous waste to decide a date. The waste contractor then transports the waste for destruction.

Final disposal

Combustion arranged by the waste contractor.

Specific legislation

AFS 2005:01 Microbiological Work Environment Risks – Infection, Toxigenic Effect, Hypersensitivity

Chemicals

Classification/separation

In principle all chemical rests are classified as hazardous waste/goods and must not be poured down drains, except as permitted by the University's *Procedures for the disposal of liquid chemical residues and aqueous solutions* (can be found under "How to do" at Sustainable campus web, www.su.se/sustainablecampus).

Handling/storage

For a more detailed description of the sorting and packing of chemical residues, contact the University´s contractor for hazardous waste. The same requirements apply to the storage of chemical residues as to pure chemicals, more information in *Chemical handling procedure* at Sustainable campus web. Chemical residues for destruction and pure chemicals should be kept apart from one another.

NB! Chemicals that can react with one another should be kept separate and not packed together. If this is not done, the department will be billed for the time it takes to sort these chemicals.

Chemicals in small original containers

When large quantities of chemicals are to be discarded (e.g. when emptying/cleaning a lab), always contact staff of the University´s contractor for hazardous waste. Their staff will sort and pack the chemicals on site and then transport them for destruction.

Small quantities of chemicals can be deposited in their original containers in room M212 if the packaging and seal are intact and the contents are clearly stated on the label. The jars are preferably transported in a shopping basket, plastic boxes or equal. A chemist will later sort these, and by large quantities there is a charge for this time. Please mark your basket/box as these can usually not be returned until the next opening. Do not transport larger amount at a time than what a basket hold.

Solid chemicals without risk of reaction with each other (e.g. some salts) may be packed directly in a cardboard box for hazardous waste, if a list of all content is attatched. If you are unsure of what you are allowed pack together, contact the contractor before packing. If the contractor afterwards finds out that it has to be re-packed, a cost for this is charged.

It is very important that substances that can react with one another are kept separate, for example acids and alkalis, cyanide and acids, sodium azide and heavy metals. Cellulose nitrate and picric acid must be moistened to at least 30 per cent before deposited, and aqua regia must be neutralised.

Solvents (organic, water-based, pure or mixtures)

Empty, cleaned glass bottles can be used for the collection of solvents. Solvents must not be kept in long-term storage in plastic drums since the plastic can be affected by the contents. Solvents should maintain a pH value of between 4 and 10. Different types of

solutions, such as halogenated and non-halogenated, must be collected separately since the destruction costs are different for different types.

Solvent residues must either be deposited in type-approved plastic drums intended for transport (maximum of 5 years old) or glass bottles of solvents must be packed in cardboard boxes for hazardous waste with an inner plastic bag. Plastic drums containing solvents must not be packed together in large waste containers. The SU Shop sells approved plastic drums for transport.

Perchloric acid over 72% may not be deposited; it must first be diluted to lower concentrations.

Substances that can form peroxides (e.g. ethers, THF, dioxane, isopropyl ether) should normally be peroxide-tested before being deposited, and be marked “Peroxide test OK” on the label, including the date of the test. However, if you encounter solutions suspected to contain high levels of peroxides, do not touch the bottle, block the lab and contact the University´s waste contractor for hazardous waste and the Section for Safety and Security, 08-16 42 00.

NB! Always contact staff of the University´s contractor for hazardous waste if you are not sure what to do.

Gels, buffers, dyeing solutions, etc.
Acryl amide – polymerised gels are places in closed packaging, for example, a tied plastic bag, to avoid dusting. Then they are placed in a container for hazardous waste. Monomers are placed in jars and handled as small chemical residues.

Ethidium bromide – stock solution and pure ethidium bromide are handled as small chemicals. Gels containing low concentrations of ethidium bromide must be packed in plastic bags and then placed in containers for hazardous waste. Contaminated pipette tips, gloves, underlay paper, etc. must be placed in containers for hazardous waste.

Buffer solutions and dyeing baths must be treated so that the concentration of ethidium bromide is reduced. Merck Eurolab AB och Tamro MedLab, for instance, have several products for the treatment of ethidium bromide solutions. Many use ’tea bags’ to clean solutions and baths. The ‘tea bags’ are placed in plastic packaging and handled as small chemicals.

Solutions and baths can also be treated with 1 g of active carbon per litre of solution. The solution stirred overnight and is then filtered. The carbon is treated as small chemicals.

There are restrictions from Stockholm vatten och avlopp about emptying into drains, see *Procedures for the disposal of liquid chemical residues and aqueous solutions*. If there is any uncertainty whatsoever, collect liquid residues and deposit as hazardous waste.

Marking/labelling
Stockholm University waste label filled in with:

- A or B-substance? (according to appendix 1of AFS 2014:43): (x)
- CMR- substance? (according to 38§ AFS 2014:43): (x)
- Type of waste, specification.
  State the contents in per cent, and also the proportion of water. Heavy metals must be given in a mass percentage; the pH value of solutions must be given.
- Solvent residues – note that all components of the contents must be stated on the label. Markings such as 'slop' or 'waste' must not be used.
- Substances that can form peroxides such as ethers must be peroxide tested before being deposited, and be marked "Peroxide test OK" on the label.
- Submitting department, department number and reference
- Submitter's name, phone no and date

Hand-over/transport

Waste can be deposited on Wednesdays or Fridays at 10.30–11.00 in room M212 at KÖL (Chemical Education Laboratories), Svante Arrhenius väg 16F. The waste contractor then transports the waste for destruction.

Final disposal

Chemical residues are disposed of in various ways by our waste contractors. Some are destroyed by combustion and some by wet chemical treatment while some are used as landfill.

Specific legislation

AFS 2015:7 Occupational Exposure Limit Values
AFS 2014:43 Chemical Work Environment Risks

Laboratory glass

Classification/separation

Laboratory activities generate different types of glass that go to recycling, incineration or disposal. Laboratory glass includes, for example, bottles, cans, bowls and glass tubes.

Laboratory glass is divided into the following groups:

- Contaminated laboratory glass (whole or broken)
- Non-contaminated laboratory glass **not** defined as a recyclable container (beakers, petri dishes etc)
- Non-contaminated laboratory glass **defined as a recycable container** (bottles and cans)

Handling/storage

Contaminated laboratory glass that may, for example, contain chemical residues, microorganisms or radioactive substances must be handled on the basis of the contamination concerned. This waste must be packed in approved containers and marked with waste labels, i.e. cardboard box for hazardous waste (SU Shop article number 6344-038) or plastic container for hazardous waste with double lids (SU Shop article number 6343-030 or 6343-050).

Non-contaminated laboratory glass that has **not** been defined as a recyclable container should be placed in a container for hazardous waste. For example glass beakers, petri dishes and Erlenmeyer flasks.

Non-contaminated laboratory glass that has been **defined as a recyclable container** must be empty, well cleaned and evaporated, and then placed in the recycling container for coloured or clear glass at the **recycling centre**. That is, ONLY containers (e.g. bottles and cans) are allowed to be left at the recycling centre.

Marking/labelling

Containers for non-contaminated laboratory glass that has not been used as containers must be marked “Laboratory glass”. Contaminated laboratory glass must be marked on the basis of the contamination concerned.

Hand-over/transport

Contaminated laboratory glass and non-contaminated laboratory glass that has **not** been used as a container can be deposited on Wednesdays and Fridays at 10.30–11.00 in room M212 at KÖL (Chemical Education Laboratories), Svante Arrhenius väg 16F. The waste contractor then transports it for destruction/landfill.

Non-contaminated laboratory glass that has been defined as a recyclable **containers** will be collected by the waste contractor at the recycling centre and brought to the central recycling centre under Aula Magna.

Final disposal

Contaminated laboratory glass is disposed of in a fashion depending on the contamination in question.
Non-contaminated laboratory glass not used as containers is used for energy recovery or placed in landfill.
Non-contaminated laboratory glass used as a container goes to Svensk glasåtervinning. The glass collected is checked and sorted. The glass is crushed or ground to various sizes depending on the area of use. Most of the glass is made into new containers, while the remainder is used as an additive in concrete or as an insulation material.

Specific legislation

SFS 2014:1073 Ordinance on Producer Responsibility for Packaging

Narcotics, narcotic chemicals/precursors

Classification/separation

A destruction certificate must be issued for narcotics listed in the Swedish Medical Products Agency's Regulation LVFS 2011:10 (approx. 300 substances). Select the consolidated version for the most updated list!:
(http://www.lakemedelsverket.se/overgripande/Lagar--regler/Lakemedelsverkets-foreskrifter---LVFS/Amnesvis-forteckning/Narkotika/

A destruction certificate must also be issued for category 1 narcotic chemicals/precursors:
(http://www.lakemedelsverket.se/malgrupp/foretag/narkotikakemikalier/)

N-Acetylanthranilic acid (2-Acetamidobenzoic acid)
Ephedrine
Ergometrine
Ergotamine
1-Phenyl-2-propanone (Phenylacetone)
alpha-Phenylacetoacetonitril
Isosafrol (cis + trans)
Lysergic acid
3,4-Methylenedioxyphenylpropane-2-one
Norephedrine
Piperonal
Pseudoephedrine
Safrole

A template for the destruction certificate can be found under "How to do" at Sustainable campus web www.su.se/sustainablecampus

Handling/storage

Narcotics can be deposited in their original container if the packaging and seal are intact and the content is clearly stated on the label Three copies of the certificate should be made and staff from the University´s waste contractor for hazardous waste shall sign all of them. One signed copy must be sent to Mats Hansson, Section for safety and security, mats.hansson@su.se, one copy provided the waste contractor for hazardous waste and one copy retained by the department.

Marking/labelling

Stockholm University waste label filled in with:

- Narkotikaklassat alt. Narkotikakemikalier/Drugs: (x)
- Type of waste, specification:
- Submitting department, department number and reference
- Submitter's name, phone no and date

Also attach a copy of the destruction certificate to the waste container.

Hand-over/transport

Waste is submitted to the waste contractor in room M212 at KÖL (Chemical Education Laboratories), Svante Arrhenius väg 16F on the same day as the waste contractor has a collection. Contact the University´s waste contractor for hazardous waste for a date/time. The waste contractor then transports the waste for destruction. The transport is covered by transport protection under MSBFS 2015:1.

Final disposal

Combustion arranged by the waste contractor.

Specific legislation

SFS 1992:860	Act on the Control of Narcotic Drugs
SFS 1992:1554	Ordinance on the Control of Narcotic Drugs
LVFS 2011:9	Control of Narcotic Drugs
LVFS 2011:10	List of Narcotic Drugs

Radioactive waste

Classification/separation

Radioactive waste can be divided into:

- Gaseous radionuclides
- Solid radioactive waste
- Liquid radioactive waste and scintillation liquids
- Radioactive substances in the form of sealed radiation sources
- Lead containers (not radioactive themself, but in which radiation sources have been stored)

As far as possible, radioactive substances must not be mixed with other kinds of waste.

Written procedures for the handling of radioactive waste, the estimation of the activity in the waste, the measurement of the surface dose rate and the estimation of the activity of the air emissions are set out in the University's "Radiation Safety Manual" (joint quality manual for radiation protection for the Royal Institute of Technology KTH and Stockholm University) .

Handling/storage

Radioactive substances must be stored under lock and key so that they are not accessible to unauthorised persons. The storage must be satisfactory in terms of fire protection. The storage site must be screened off so that the dosage rate does not exceed 20 µSv/h in areas where people circulate or no more than 2 µSv/h in areas used by someone on a permanent basis. The storage site must be easy to clean. If volatile substances are held there, or if there is a risk that such substances may be formed, the storage site must be well ventilated. The storage site must be marked with a warning sign for ionising radiation, the text "Storage site for radioactive substances" and "Storage site for radioactive waste" respectively, and the name and phone number of the person who is responsible for the storage site. A container for radioactive waste must be of a suitable material and design in the light of the chemical and physical properties of the substance being stored. The container must be marked with the designation of the radionuclide and information about its activity on a given date. What is said above shall also apply to the storage of radioactive waste pending final disposal.

Gaseous radionuclides

In activities where gaseous radionuclides are produced or generated from systems with labelled radioactive substances, the contribution to the radiation dose from the emissions to a representative person is estimated and the information and the method used to calculate the correlation between the activity released and the effective dose must be documented. A party who conducts such activities shall make a report to the Radiation Protection Authority no later than 1 March each year of the activity released per radionuclide for the previous calendar year. The radiation protection expert must always be consulted before an activity that can give rise to air emissions is started.

Solid radioactive waste

All solid waste (paper balls, plastic, glass, etc) and solutions, precipitates, filtrates, etc. containing radioactive substances must be disposed of as radioactive waste. Work with radioactive substances must be planned so as to minimise the quantity of waste that must be disposed of as radioactive waste.

The radioactive waste must be packed in a waste container, a well-sealed internal plastic bag and, if the waste is or can become a liquid, absorbant corresponding to twice the quantity of waste in liquid form.

Maximum permitted activity level per waste package
The total quantity of radioactive substances per waste package must not exceed the quantity of activity specified in SSMFS 2010:2. The dosage rate on the surface of a waste package submitted to a combustion plant must not exceed 5µSv/h.

Summation rule
When several radioactive substances are placed in one and the same waste package the following restriction is applicable

$$\mathbf{\Sigma_k(A_k/L_k) \leq 1}$$

Where A_k is the activity of radionuclide k and L_k is the limit value for the same nuclide.

The total activity of the waste submitted to a combustion plant from a laboratory during a calendar month must not exceed ten times the activity stated in SSMFS 2010:2.

Example: Can 1 MBq P-32 and 5 MBq C-14 be placed in the same container and sent for waste combustion for final disposal as radioactive waste?

Reply: Divide each activity value by the corresponding limit value from SSMFS 2010:2 and add up the result: 1 MBq/0,1 MBq = 10 for P-32 and 5 MBq/10 MBq = 0.5 for C-14, the sum of 10 + 0.5 gives the value 10.5.

This value exceeds the summation rule value of no more than 1, so the container must not be sent for waste combustion, at least not yet.

Measure: In this specific case the container and its contents have to decay for 16 weeks. P-32 has a half-life of 14 days, which means that the summation rule value will fall under 1 after 8 half-lives and the container can be marked and sent for combustion.

Liquid radioactive waste and scintillation liquids
Scintillation liquids are still often classified as hazardous chemical products. These must not be poured out in the slop sink for liquid radioactive waste and must be packed in plastic or glass bottles placed in a container for hazardous waste together with a sufficient quantity of absorbent to prevent leakage during transport.

Most scintillation liquids contain NPE (nonyl phenol ethoxylate). This substance is listed in Council Directive 2003/53/EC and must not be discharged into any water system within the European Community and must always be sent for final disposal by combustion.

The total activity of the waste washed out in drains from a laboratory during a calendar month must not exceed ten times the activity stated in SSMFS 2010:2. The waste washed out at one and the same time must not exceed the activity stated in SSM FS 2010:2. The same summation rule as for waste for combustion applies to releases to drains. Each discharge must be washed down with plenty of water. At every discharge point there must be a clearly visible sign saying that liquid radioactive waste may be washed down the drain.

Flammable scintillation solutions must always be packed in small plastic and glass bottles with an aggregate volume of no more than 1 litre per waste container. Absorbent must be added to the vessel; the quantity must correspond to a capacity to absorb at least double the quantity (2 litres) of liquid.

For non-flammable liquid scintillation solutions, no more than 5 litres may be packed in a waste container with a sufficient quantity of absorbent.

Radioactive substances in the form of sealed radiation sources
Under the regulations (SSM FS 2010:2) sealed radiation sources with an activity quantity of no more than 50 kBq may be sent for waste combustion. If there is the slightest uncertainty about the activity of the sealed radiation source to be disposed of, contact the University's radiation protection expert Mats Jonsson (08-790 9123, matsj@kth.se) or Mats Hansson at the Section for safety and security (08-16 2251, mats.hansson@su.se).

Lead container
The lead containers used for delivery of isotopic solutions or other radioactive materials can, free of charge, be deposited on Wednesdays and Fridays at 10.30–11.00 in room M212 at KÖL (Chemical Education Laboratories), Svante Arrhenius väg 16F. The waste contractor checks the containers regarding radiation before they are transported for recycling.

Documentation
There must be documentation of:

- -stored waste of radionuclides with a half-life of >10 h, stating the nuclide, activity and surface dose ratio on a particular date, origin and identity with traceability to a waste container.
- annual activity of radionuclides with a half-life of >10 h that have been sent to a combustion plant or have been washed down a drain.
- annual activity that has been released to the air.
- activity of waste that has been sent to an approved waste plant.

The documentation must be retained for at least five years after the final disposal of the waste.

Marking/labelling

Stockholm University waste label filled in with:

- Radioactive: (x)

- Type of waste, specification: Radionuclide, activity and surface dose rate at the specified date
- Submitting department, department number and reference
- Submitter's name, phone no and date

The warning symbol for ionising radiation must also be stuck on the waste container.

The quantity of activity in each individual waste package must not, on deposit for transportation to the waste contractor, exceed the limit value given in SSM FS 2010:2.

Hand-over/transport

Radioactive waste in accordance with these restrictions can be deposited on Wednesdays at 09:45–10:15 in room A205 (opposite the SU Shop). The waste contractor then transports the waste for destruction.

Radioactive waste that does not meet the restrictions according to these instructions and SSMFS 2010:2 must be taken charge of by Studsvik Nuclear AB. In such cases the University's radiation protection expert and SEKAs safety adviser must always be contacted since other requirements under the ARD-S transport regulations and requirements concerning reporting to the permit authority must also be complied with.

Final disposal

Combustion arranged by the waste contractor.

Specific legislation

SFS 1988:220	Radiation Protection Act
SFS 1988:293	Radiation Protection Ordinance
SFS 2007:193	Ordinance on Producer Liability for Certain Radioactive Products and Orphan Radioactive Sources
SSMFS 2009:1	Control of Cross border Transports of Radioactive Waste and Spent Nuclear Fuel
SSMFS 2010:2	Handling of Radioactive Waste and Discharges from Activities with Open Radiation Sources

Sharps

Classification/separation

Sharps waste includes discarded syringes, knife blades, Pasteur pipettes, etc. Sharps that may be contaminated with chemical residues, microorganisms or radioactivity must be handled on the basis of the contamination in question. For more information, see the sections about each type of waste.

Handling/storage

Sharps are collected in puncture-safe jars, which are then packed in a cardboard box for hazardous waste, with inner bag. Alternatively, they are collected directly in the containers for infectious waste and/or sharps (SU Shop article number 3900-001 or 3900-002) or plastic container for hazardous waste with double lids (SU Shop article number 6343-030 or 6343-050).

Contaminated sharps are stored on the basis of the contamination in question. For more information, see the sections about each type of waste.

Marking/labelling

Stockholm University waste label filled in with:

- Type of waste, specification: “Sharps”, and possible contamination
- Submitting department, department number and reference
- Submitter’s name, phone no and date

Hand-over/transport

Hand-over on the basis of the contamination concerned, for more information see the sections about each type of waste. If refrigerator/freezer storage is not requited, the waste can be deposited on Wednesdays or Fridays at 10.30-11.00 in room M212 at KÖL (Chemical Education Laboratories), Svante Arrhenius väg 16F. The waste contractor then transports the waste for destruction.

Final disposal

Combustion arranged by the waste contractor.

Specific legislation