



Friedrich-Alexander-Universität  
Erlangen-Nürnberg

# Waste management guidelines

For organizational units at  
Friedrich-Alexander-Universität Erlangen-Nürnberg

December 2023



Contents	Page
Important contact addresses .....	03
Further information .....	04
Glass .....	06
Old clothes .....	07
Waste oil .....	08
Waste paper and cardboard .....	09
Asbestos .....	10
Batteries and rechargeable batteries.....	11
Narcotics .....	12
Organic waste.....	13
CDs .....	14
Confidential waste .....	15
DSD material .....	16
Electrical and electronic waste.....	17
Photographic chemicals .....	19
Waste from genetic engineering facilities.....	19
Infectious material .....	20
Cooling equipment.....	20
Plastics.....	21
Light bulbs .....	22
Medicines .....	22
Metal waste.....	23
Waste containing mercury .....	24
Radioactive waste .....	24
Residual waste .....	25
Hazardous waste .....	26
Bulky waste .....	27
Spray cans .....	28
Polystyrene.....	28
Animal corpses and waste from animal husbandry .....	29
Toner and ink cartridges .....	30

These waste management guidelines are not an exhaustive list.  
The hospital has waste management guidelines of its own.

Publisher: Friedrich-Alexander-Universität Erlangen-Nürnberg  
Editor: **G6 – Operational Environmental Management and Technical Safety** Schlossplatz  
4  
91054 Erlangen  
Phone: + 49 9131 85 20259/20258 Fax: + 49 9131 85 25092  
Email: [wertstoffe@fau.de](mailto:wertstoffe@fau.de)  
Internet: <https://www.intern.fau.de/liegenschaften-und-gebaeudemanagement/operativer-umweltschutz-und-technische-anlagensicherheit/>

## Waste advice

The waste management officer and officer for hazardous substances at FAU and Uniklinikum is Mr. **Gunselmann**.

Phone: + 49 9131 85 25083

Email: [harald.gunselmann@fau.de](mailto:harald.gunselmann@fau.de)

## Recycling depot

Paul-Gordan-Straße 10

91052 Erlangen

**Opening hours:** Wednesday 9 am-12 pm

Phone: + 49 9131 85 22139 (only during opening hours)

Email: [wertstoffe@fau.de](mailto:wertstoffe@fau.de)

Internet: <https://www.intern.fau.de/liegenschaften-und-gebaeudemanagement/operativer-umweltschutz-und-technische-anlagensicherheit/>

## Disposal of waste in general

(Residual waste, bulky waste, recycling materials such as glass, paper...)

G6 – Operational Environmental Management and Technical Safety

Immerwahrstraße 4

91058 Erlangen

Phone: + 49 9131 85 20259

+ 49 9131 85 0258 Mr. **Rose**

+ 49 9131 85 71094 Mr. **Kolacyak**

Fax: + 49 9131 85 25092

Email: [wertstoffe@fau.de](mailto:wertstoffe@fau.de)

## Disposal of hazardous waste and dangerous goods

Preparations for transporting and disposing of chemicals, gasoline, varnish and paint, waste oil etc. are subject to various regulations, including the Regulation on the carriage of dangerous goods by road/rail (GGVSEB, ADR etc.).

G6 – Operational Environmental Management and Technical Safety

Immerwahrstraße 4

91058 Erlangen

Phone: + 49 9131 85 250 -83 Mr. **Gunselmann**

-84 Mr. **Koch**

-92 Mr. **Wittmann**

+ 49 9131 85 202 58 Mr. **Rose**

Email: [sondermuell@fau.de](mailto:sondermuell@fau.de)

Internet: <https://www.intern.fau.de/liegenschaften-und-gebaeudemanagement/operativer-umweltschutz-und-technische-anlagensicherheit/>

[Back to contents](#)

## Waste management guidelines

Last updated: December 2023

FURTHER INFORMATION

G6 – Operational Environmental Management and  
Technical Safety

Page: 04

## **Excerpts from legal regulations of relevance when collecting, transporting and storing waste.**

*Circular Economy Act (Kreislaufwirtschaftsgesetz, KrWG)*

[www.umwelt-online.de/regelwerk/abfall/krwabfg/krwg\\_ges.htm](http://www.umwelt-online.de/regelwerk/abfall/krwabfg/krwg_ges.htm)

*Bavarian Waste Management Act (Bayerisches Abfallwirtschaftsgesetz)*

[www.umwelt-online.de/regelwerk/abfall/laender/bay/abfg\\_ges.htm](http://www.umwelt-online.de/regelwerk/abfall/laender/bay/abfg_ges.htm)

*Chemicals Act (Chemikaliengesetz) and Hazardous Substances Ordinance (Gefahrstoffverordnung)*

[www.umwelt-online.de/regelwerk/gefstoff/ueber.htm](http://www.umwelt-online.de/regelwerk/gefstoff/ueber.htm)

*Regulation on the transport of dangerous goods (Gefahrgutverordnung)*

[www.umwelt-online.de/regelwerk/gefahrgut/ggvseeb\\_ges.htm](http://www.umwelt-online.de/regelwerk/gefahrgut/ggvseeb_ges.htm)

*Packaging Regulation (Verpackungsverordnung)*

[www.umwelt-online.de/recht/abfall/verpack.vo/vpv\\_ges.htm](http://www.umwelt-online.de/recht/abfall/verpack.vo/vpv_ges.htm)

*Waste Oil Regulation (Altölverordnung)*

[www.umwelt-online.de/regelwerk/abfall/alt\\_ges.htm](http://www.umwelt-online.de/regelwerk/abfall/alt_ges.htm)

*Battery Act (Batteriegesetz)*

[www.umwelt-online.de/regelwerk/abfall/battg\\_ges.htm](http://www.umwelt-online.de/regelwerk/abfall/battg_ges.htm)

*Water Resources Act (Wasserhaushaltsgesetz)*

[www.umwelt-online.de/regelwerk/wasser/whg/whg\\_ges.htm](http://www.umwelt-online.de/regelwerk/wasser/whg/whg_ges.htm)

*Federal Emissions Control Act (Bundesimmissionsschutzgesetz)*

[www.umwelt-online.de/regelwerk/luft/bimschg/bim\\_ges.htm](http://www.umwelt-online.de/regelwerk/luft/bimschg/bim_ges.htm)

*Electrical and Electronic Equipment Act (Elektro- und Elektronikgerätegesetz)*

[www.umwelt-online.de/regelwerk/abfall/krwabfg/reeg\\_ges.htm](http://www.umwelt-online.de/regelwerk/abfall/krwabfg/reeg_ges.htm)

*Commercial Waste Regulation (Gewerbeabfallverordnung)*

[https://www.gesetze-im-internet.de/gewabfv\\_2017/](https://www.gesetze-im-internet.de/gewabfv_2017/)

### **Waste management in the municipalities**

*Erlangen*

[www.erlangen.de/desktopdefault.aspx/tabid-1236/](http://www.erlangen.de/desktopdefault.aspx/tabid-1236/)

*Nuremberg*

[www.asn.nuernberg.de](http://www.asn.nuernberg.de)

*Fürth*

[www.fuerth.de/Home/stadtentwicklung/Abfallwirtschaft.aspx](http://www.fuerth.de/Home/stadtentwicklung/Abfallwirtschaft.aspx)

### **G6 – Operational Environmental Management and Technical Safety at FAU**

<https://www.intern.fau.de/liegenschaften-und-gebuedemanagement/operativer-umweltschutz-und-technische-anlagensicherheit/>

## Dumpsters

If you are provided with a dumpster, please bear the following in mind:

- Please fill the dumpster as quickly as possible.
- If you require a dumpster for longer than 2 weeks, please register it with us beforehand.
- If you receive a **delivery note**, please **always** send a **copy** to **G6 – Operational Environmental Management and Technical Safety** (-> [p.03](#)).
- If receptacles for residual waste or paper have to be moved for an event, please inform **G6 – Operational Environmental Management and Technical Safety** in good time, at least 2 weeks in advance of the date of the event (-> [p.03, in the middle](#))

## Battery containers

- Please submit a request for new battery containers to **G6 – Operational Environmental Management and Technical Safety** (-> [p.03, in the middle](#))
- From now on, containers will only be exchanged free of charge if you have at least three boxes or a 60L barrel. For smaller quantities, a fee is charged to the Chair. In order to avoid this fee, please register your request for a full battery collection box to be exchanged with G6 – Operational Environmental Management and Technical Safety (-> [p.03, in the middle](#)).

## Description

The rules for disposing of waste glass depend on whether it is hollow glass, flat glass or laboratory glass with a high melting point.

Hollow glass includes, for example, glass bottles, glass jars, clean chemical storage bottles (completely empty and without labels).

## Disposal

You are responsible for disposing of glass bottles and jars yourself, sorted according to color (white, brown and green), without lids, in the glass recycling containers provided for this purpose.

## Location of glass recycling containers at FAU

### Erlangen city center

Bismarckstraße 1 (courtyard)  
Schwabachanlage 10  
Theaterplatz/car park  
Fahrstraße/Henkestraße  
Schloss (in the building)  
Halbmondstraße (in the building)  
Bohlenplatz/Östl. Stadtmauerstraße

### Nuremberg

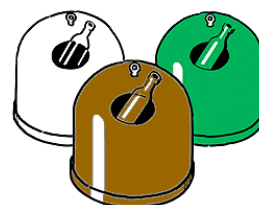
Findelgasse 7/9  
Lange Gasse 20  
Regensburger Str. 160

### Fürth

Dr.-Mack-Str., in front of the sports hall

### FAU Campus Erlangen South

Cauerstr. 4/Process Engineering  
Egerlandstr. 1/3/Chemistry  
Lecture hall Chemistry / Computer Science building  
Staudtstraße 7/close to the multi-story car park  
FAU's recycling depot, Paul-Gordan-Str. 10  
Close to Tentoria  
Erwin-Rommel-Str./entrance to backyard of the Chemikum building



**Do not** discard the following in glass recycling containers:

- Glass with a high melting point (laboratory glass, glass from oven doors, microwave ovens, preserving jars or heat-resistant glass)
- Flat glass (window glass, mirrors and windscreens)
- Light bulbs (energy-saving bulbs, fluorescent tubes, standard light bulbs, LEDs)

These types of glass can be taken to the recycling depot or disposed of in consultation with **G6 – Operational Environmental Management and Technical Safety**. (→ p. 03, in the middle)

Contaminated glass ought to be disposed of in the same way as hazardous waste.

**G6 – Operational Environmental Management and Technical Safety** Disposal of hazardous waste (→ p. 03, at the bottom)

## Avoiding/reducing waste

Using returnable bottles makes more sense than recycling.

**Recommended times for disposing glass** Monday - Saturday between 7 am and 7 pm

### Description

Old clothes are clothes or textiles etc. that can still be either used again or recycled.

Heavily soiled or contaminated clothes ought to be disposed of with residual waste.

### Recycling

Used clothes that are no longer needed but are still usable can be disposed of in old clothes containers. The containers are available at the following locations:

#### Erlangen city center

Drausnickstraße, car park at the sports center  
Hofmannstraße, at the entrance to Neuer Markt  
Münchnerstraße, south car park  
Parkplatzstraße, bus station  
Theaterplatz, car park  
Theodor-von-Zahn-Straße / Gebberstraße  
Westliche Stadtmauerstraße / Paulistraße

#### FAU Campus Erlangen South

Erwin-Rommel-Straße, student accommodation  
Friedrich-Bauer-Straße / Preußensteg  
Theodor-Heuss-Anlage / Breslauer Straße

Further information

<http://www.erlangen.mein-abfallkalender.de/containerstandorte>

#### Nuremberg

Prinzregentenufer 9, where ADAC used to be  
Feldgasse, at the corner of Rudolphstraße  
Fahrradstraße, at the corner of Johann-Sebastian-Bach-Straße  
Dutzendteichstraße 1  
Neumarkter Straße, at the corner of Regensburger Straße

Further information

<http://www.kvnuernberg-stadt.brk.de/dienstleistungen/kleidersammlung>

### Avoiding/reducing waste

Old clothes can also be used as cleaning rags, cloths etc.

### Disposal

If you would like to dispose of large quantities of clothes, please contact **G6 – Operational Environmental Management and Technical Safety** (→ p. 03)

[Back to contents](#)

**Description**

Waste oil is used

- engine oil
- gear oil
- hydraulic oil
- oil residues
- oil mixtures (emulsions)



Waste oils are differentiated between

- Oils **suitable** for recycling  
These are oils whose origin can be traced and which have less than 20 mg PCP/kg or less than 2 g total halogen/kg.
- Oils **not suitable** for recycling  
are classed as hazardous waste.

Please take care to separate waste oils carefully by type.

According to the Waste Oil Regulation, dealers are required to take back combustion engine oils and gear oils free of charge. G6 – Operational Environmental Management and Technical Safety asks you to use this option.

**Disposal**

Quantities of under 10 liters can be registered via the online system for the disposal of hazardous waste, "Sondermüll online".

Larger quantities must be disposed of separately.

**G6 – Operational Environmental Management and Technical Safety** Disposal of hazardous waste (→ p.03, at the bottom) is happy to advise.

**Storage**

Please first consult **Occupational Safety** and then G6 – Operational Environmental Management and Technical Safety for all questions relating to storage.

Storage containers can also be used for transporting purposes after checking with G6 – Operational Environmental Management and Technical Safety.

**Avoiding/reducing waste**

You must make use of the option to return waste oil when purchasing new oil, in particular for quantities of over 10 liters.

[Back to contents](#)



## Description

- Waste paper includes:
- office paper
  - paper packaging
  - newspapers
  - magazines



Flat paper saves space.

Tearing up boxes saves space.

Please remove staples, string and tape.



### Important

Dispose separately of confidential waste covered by **data protection** provisions.

## Disposal



Dirty boxes or used paper towels do not belong in paper waste.

**G6 – Operational Environmental Management and Technical Safety** is happy to advise you (→ p.03, in the middle).

## Avoiding/reducing waste

- Use the back of paper that has only been printed on one side as scrap paper.
- Avoid making unnecessary copies and printing documents unnecessarily
- Use double-sided printing and copying as far as possible
- Use email instead of fax and post wherever possible
- Use recycling paper

### Note: **Data protection**

Paper with personal data or other data that ought to be protected must not be disposed of carelessly. (→ p.15)

Order **lockable containers** for documents for shredding in accordance with data protection policies.

**G6 – Operational Environmental Management and Technical Safety** is happy to advise you (→ p.03, in the middle).

[Back to contents](#)

# Waste management guidelines

Last updated: December 2023

G6 – Operational Environmental Management and Technical Safety

ASBESTOS

Page: 10

## Description



Asbestos is a fiber with outstanding mechanical properties. For this reason, it was used a lot in the past. If disturbed, the tiny fibers can be released and inhaled, increasing the risk of lung cancer. Weakly bound asbestos poses the greatest threat.

#### Occurrence

- Asbestos cement (Eternit) in building materials (asbestos board, roof panels, ...)
- Asbestos sheets in seals, fuses, equipment
- Asbestos fibers in brake pads, flooring
- Asbestos gaskets as seals in equipment

Asbestos is legally processed and imported in large quantities in China and above all in Russia.

#### Disposal

Please contact **G6 – Operational Environmental Management and Technical Safety** if you suspect that asbestos is contained.



Objects made of asbestos **must not be**

- broken
- worked on (sanded or separated using an angle grinder...)
- cleaned (using a high pressure washer, brushing...)

**Occupational Safety** (Mr. Schüller, - 26631) is happy to advise you on how to handle asbestos. **G6 – Operational Environmental Management and Technical Safety** (→ p.03, in the middle).

[Back to contents](#)

## Waste management guidelines

Last updated: December 2023

G6 – Operational Environmental Management and  
Technical Safety

### BATTERIES AND RECHARGEABLE BATTERIES

Page: 11

#### Description

Batteries are largely composed of valuable materials such as zinc, nickel, iron, steel, manganese or aluminum. In addition, used batteries may also contain heavy metals or hazardous materials. Used batteries must be returned, not disposed of in residual waste.

#### Disposal

A special return system has been set up in order to re-gain a large part of the valuable materials and in order to avoid possibly spreading heavy metals into the environment. REBAT is the largest return system for batteries from devices in Germany. Small quantities are collected in boxes (see picture). Larger quantities are collected in yellow

barrels. Barrels are available at FAU's recycling depot.  
Containers from CCR-rebat are available at the following locations:

### Erlangen city center

Schloss	– room 0.022
Administration Halbmondstr.	– room 0.044
Applied Geology	– storage room for contaminated waste
Applied Geology	– workshop
Mineralogy	– room 0.205
Kollegienhaus	– in the entrance area
Physics in Medicine	– electronics workshop 00.076
University Library	– mailroom
Exp. Medicine I	– workshop U 1.041
Crystallography	– laboratory
Faculty of Humanities, Social Sciences, and Theology	– gate
Faculty of Law	gate
Pharmacy / Food Chemistry	– workshop 0013
Biochemistry	– workshop basement and corridor 1st floor
Organic Chemistry	– rear entrance, workshop
Physiology II	– ground floor
Occupational Safety	– first floor

### Nuremberg

WiSo Faculty Findelgasse	– room 0.029
WiSo Faculty Lange Gasse	– room 2.235
Education Science seminar building	– room U1.025
FAPS	– workshop
Energy Process Engineering	– workshop



### FAU Campus Erlangen (south)

Engineering Design	– electronics workshop
Institute of Physics	– warehouse
Inorganic Chemistry	– workshop, basement, room A00.61
Chemical Reaction Engineering	– chemicals warehouse and T 0.94
Computer Science	– room 02.125
Electronics Engineering	– room 3.23
Interim storage room for hazardous waste	– storeroom
Mech. Process Engineering	– room 0.343
Materials Science and Engineering I	– workshop
Materials Science and Engineering VI	–3rd floor
Physical Chemistry I	– room 00.130
Animal Physiology	– building A room 00133
Microbiology	– secretary's office
Physical Chemistry II	– mechanics workshop
FAPS	– sensor lab 0035
Mechanical and electronics workshop	
Telephone switchboard FAU Campus Erlangen South	
Recycling depot	

**Place tape over terminals of rechargeable batteries and batteries containing lithium before disposing of them.**

**! Do not place broken rechargeable batteries containing lithium in the collection boxes!**

Please always inform G6 – Operational Environmental Management and Technical Safety whenever you need to swap collection boxes, either by phone or by writing to [wertstoffe@fau.de](mailto:wertstoffe@fau.de).



Car batteries must be returned to dealers.

**G6 – Operational Environmental Management and Technical Safety** is happy to advise you (→ p.03, in the middle).

### Avoiding/reducing waste

Where possible, connect devices to the power supply, use rechargeable batteries or solar-powered devices.

[Back to contents](#)

## Waste management guidelines

Last updated: December 2023

G6 – Operational Environmental Management and Technical Safety

NARCOTICS

Page: 12

### Description

Drugs or narcotics are substances covered by Appendices I-III of the Narcotics Act (*Betäubungsmittelgesetz, BtMG*). This includes all “classical” narcotics such as opium, heroin, cocaine, synthetic drugs (Ecstasy, LSD), hash and marijuana. The Narcotics Act covers a number of other substances and compounds. Medical drugs such as methadone, morphine or codeine are also included.

([www.umwelt-online.de/regelwerk/lebensmt/amg/btmg\\_ges.htm](http://www.umwelt-online.de/regelwerk/lebensmt/amg/btmg_ges.htm))

According to the BtMG, permission must be granted by the Federal Institute for Drugs and Medical

Products (Bundesinstitut für Arzneimittel und Medizinprodukte) before handling narcotics.

Occupational Safety provides advice on obtaining approval and applying for permission.

Phone: + 49 9131-85-26768 Ms. **Muchow-Eggers**  
Email: [doerte.muchow-eggers@fau.de](mailto:doerte.muchow-eggers@fau.de)  
Internet: [www.as.zuv.uni-erlangen.de](http://www.as.zuv.uni-erlangen.de)

[Back to contents](#)

## Waste management guidelines

G6 – Operational Environmental Management and  
Technical Safety

Last updated: December 2023

### ORGANIC WASTE

Page: 13

#### Description

Organic waste comes from organic sources and is composted.

This includes:

- coffee and tea dregs
- waste from fruit and vegetables
- houseplants
- green cuttings and weeds
- bouquets of flowers

#### Disposal

Organic waste must be disposed of in the green garbage bins marked “Biomüll”.  
Green garbage bins are available at the following locations:

##### Erlangen city center

Bismarckstr. 1  
Bohlenplatz 6  
Fahrstr. 17  
Glückstr. 10  
Glückstr. 5  
Harfenstraße 10

##### South Erlangen

Am Wetterkreuz 13  
Am Wetterkreuz 15  
Egerlandstr. 1/3 - Chemistry  
Erwin-Rommel-Str 3  
Erwin-Rommel-Str 58  
Erwin-Rommel-Str 36

Henkestr 91  
Jordanweg 2  
Katholischer Kirchenplatz 9  
Kochstr 6a  
Kochstr. 2  
Kochstraße 6a  
Krankenhausstr. 9  
Schlossgarten 5a  
Schlossplatz 4  
Schuhstr. 1a  
Staudtstr. 5  
Turnstr 5  
Universitätsstr 17  
Universitätsstr 40  
Universitätsstr 42  
Universitätsstr. 22  
Ulrich-Schalk-Straße 3 91056 Erlangen  
Waldstraße 6

Staudtstr. 9  
**Nuremberg**  
Koberger Straße 60

**Fürth**  
Dr.-Mack-Straße 77

As a rule, garden waste is collected and composted by specialist companies or staff at the Botanical Garden.



- sweepings
- vacuum cleaner bags
- plastic waste
- used paper hand towels
- residual waste
- recyclable materials
- animal protein



**G6 – Operational Environmental Management and Technical Safety** is happy to advise you ([→ p.03, in the middle](#)).

#### Avoiding/reducing waste

Use organic waste as compost

[Back to contents](#)

## Waste management guidelines

G6 – Operational Environmental Management and Technical Safety

Last updated: December 2023

CDs

Page: 14

### Description

CDs consist of a plastic substrate, a layer of aluminum and a protective coating.

It is possible to dismantle and recycle the various components.



### Disposal

Old CDs can be taken to the recycling depot. ([→ p. 3, at the top](#))



Packaging and cases should be removed beforehand.

**G6 – Operational Environmental Management and Technical Safety** is happy to advise you ([→ p.03, in the middle](#)).

**Please note**

CDs containing confidential data must be destroyed mechanically before being taken for recycling. (→ p. 15)

[Back to contents](#)

## Description

Confidential waste includes all data carriers that contain sensitive data relating to people, operations or the institute.

For example: Employment contracts, research results...

Data carriers may be either made of paper or plastic (CDs, disks, magnetic ribbon etc.). Please note that data carriers tend not to be marked correctly.



## Disposal

Pursuant to the General Data Protection Regulations, the various data carriers must be kept under lock and key and mechanically destroyed to ensure that they only contain information that is extremely difficult to be used out of context and that would entail a great deal of effort to be pieced back together.

Paper, hard data carriers (CDs, magnetic ribbons, microfiches, USB sticks) and hard drives that contain data covered by data protection provisions are each collected separately.

The companies documentus, Rhenus and Rudolf Fritsche are responsible for disposing of paper and hard data carriers, and the companies documentus and Rhenus for disposing of hard drives.

FAU's Data Protection Officer, **Mr. Gärtner -25860** is happy to advise you.

If you have questions concerning waste disposal, **G6 – Operational Environmental Management and Technical Safety** is happy to advise you (→ [p.03, in the middle](#)).

## Containers

(Example)



70l (= 10 folders)



240l (= 30 folders)



350l/415l (= 50-60 folders)



600l (= 80 folders)

# Waste management guidelines

Last updated: December 2023

G6 – Operational Environmental Management and  
Technical Safety

**DSD MATERIAL (GRÜNER PUNKT (GREEN DOT); GELBER SACK (YELLOW SACK))**

Page: 16

## Description

All sales packaging has to be recycled via the Duales System Deutschland (DSD). All packaging is collected in either the “yellow sack” or the “yellow bin”.

Larger quantities of plastic sorted according to type can be disposed of in large containers that can be ordered from G6 – Operational Environmental Management and Technical Safety, see under plastics.



## Disposal

### Erlangen / Nuremberg

The “yellow sack” or the “yellow bin” should be used to collect DSD material.

The following ought to be put in the “yellow sack” or the “yellow bin”:

- Plastic tubs e.g. from dairy products with a lid, margarine
- Plastic films e.g. carrier bags, plastic bags, wrapping foil, pasta bags, muesli wrappers
- Trays for fruit and vegetables and other foam packaging
- Plastic bottles, e.g. from washing-up liquid, detergent, toiletries, cooking oil
- Composite materials, e.g. juice and milk cartons, soup packages
- Aluminum packaging, aluminum foil, aluminum cans, e.g. packaging for medicines
- Polystyrene packaging
- Plastic tubes

The following waste is **not counted as DSD material**:



- CDs/disks, plastic components, e.g. office materials made of plastic, stamps, plastic cases, toys,
- plastic sleeves, packaging that has not been fully emptied,
- video cassettes, ballpoint pens, returnable bottles,
- returnable cans, magnetic boards, plastic furniture,
- beverage crates, cleaning buckets, power strips, boxes



**G6 – Operational Environmental Management and Technical Safety** is happy to advise you (→ [p.03, in the middle](#)).

## Avoiding/reducing waste

Choose reusable packaging wherever possible.

[Back to contents](#)



### Description

Electrical and electronic waste consists of electrical and electronic equipment and parts of devices that are no longer required. These devices include valuable raw materials and substances that are damaging to the environment. The Electrical and Electronic Equipment Act (Elektronikgerätegesetz) regulates the provisions for taking back and disposing of this waste.

([www.umwelt-online.de/regelwerk/abfall/krwabfg/reeg\\_ges.htm](http://www.umwelt-online.de/regelwerk/abfall/krwabfg/reeg_ges.htm)).



### Disposal

- 1.) Any components containing confidential information (such as hard drives) must be formatted or extracted and mechanically destroyed by the last user before disposal. Mechanical destruction may also be carried out by disposal companies that provide secure containers for confidential material and subsequently destroy the data carriers or hard drives correctly. Please contact **G6** if you require secure containers for destroying confidential data carriers.
- 2.) Dangerous substances (oil, radioactive substances) must be removed beforehand.
- 3.) You must follow the following procedure before destroying devices that are still in working order: [https://www.intern.fau.de/files/2021/03/prozessablauf\\_verschrottung-entsorgung-von-geraeten.pdf](https://www.intern.fau.de/files/2021/03/prozessablauf_verschrottung-entsorgung-von-geraeten.pdf)
- 4.) Remove batteries from the device.
- 5.) Devices including fitted lithium batteries and rechargeable batteries must be made secure before you dispose of them. Devices must be packed securely as if for transport, for example in a wire mesh crate. A warning sign must be attached to the packaging.
- 6.) Cellphones are collected in separate collection boxes intended for this purpose. These boxes are available at the recycling depot.
- 7.) Heat exchangers (refrigerators, air conditioning units, heat pumps etc.) must be collected and disposed of separately.
- 8.) Devices with a screen exceeding 100cm<sup>3</sup> must be collected separately, preferably in wire mesh crates.
- 9.) Light bulbs should be discarded separately, see the section on light bulbs.

Small devices or small quantities can be delivered directly to the recycling depot.

It is also possible to arrange for small quantities to be collected after registering with G6 – Operational Environmental Management and Technical Safety. For quantities exceeding 1m<sup>3</sup>, disposal should be arranged individually in consultation with G6. We need notice of approximately 2 weeks.

G6 – Operational Environmental Management and Technical Safety is happy to advise you (→ p.03, in the middle).

Important: Please be sure to de-register devices logged in the inventory before disposing of them!

FAU works together with a disposal company that manually dismantles all electronic components and sorts the individual elements according to the raw materials they are made of in order to allow new products to be made. The recycling quota is >95 %. It would be helpful if you could collect electrical waste in a wire mesh crate at your Chair. We can provide one if necessary.

#### **Avoiding/reducing waste**

- When purchasing new products, please check that they have a long service life, offer a retrofitting guarantee and can be repaired.
- Make sure that devices are easy to disassemble (e.g. screwed together rather than glued together).
- Check whether devices can be returned to the manufacturer or seller.
- Avoid devices with a compact design
- Please use the furniture/equipment exchange forum in UniviS for computers and IT accessories that are no longer required but are still in good working order.  
([www.univis.uni-erlangen.de](http://www.univis.uni-erlangen.de)).

[Back to contents](#)

## Waste management guidelines

Last updated: December 2023

PHOTOGRAPHIC CHEMICALS


G6 – Operational Environmental Management and  
Technical Safety

Page: 19

#### **Description**

Fixing baths and developing solutions are required for developing exposed films (such as X-ray films). These can only be used once before they should be forwarded for recycling (silver recovery) or disposal.

<p><b>Disposal</b></p> <p>Small quantities of photographic chemicals, separated according to fixing baths and developing solutions, can be registered with G6 – Operational Environmental Management and Technical Safety for disposal as hazardous waste.</p> <p>For larger quantities, fixing baths and developing solutions should be collected separately in large tanks. These are then collected by vacuum trucks and forwarded for processing and disposal.</p> <p><b>G6 – Operational Environmental Management and Technical Safety</b> Disposal of hazardous waste (→ p.03, at the bottom) is happy to advise.</p>
<p><b>Avoiding/reducing waste</b></p> <p>Avoid waste by using digital photography</p>

<p>GENETIC ENGINEERING</p> <p>WASTE FROM GENETIC ENGINEERING FACILITIES</p>		<p>Page: 19</p>
<p><b>Description</b></p> <p>Genetic engineering must be conducted in facilities designed especially for that purpose. Permission from the relevant authorities (government of Lower Franconia) is required pursuant to the Genetic Engineering Act (GenTG) before setting up and operating such facilities.</p> <p>Occupational Safety is responsible for administrative procedures (application, permission etc.) (Ms. Muchow-Eggers, phone: -26768; email: <a href="mailto:doerte.muchow-eggers@fau.de">doerte.muchow-eggers@fau.de</a>; internet: <a href="http://www.as.zuv.uni-erlangen.de">www.as.zuv.uni-erlangen.de</a>).</p>		
<p><b>Disposal</b></p> <p>Responsibility for preparing waste for disposal and the disposal of waste lies with the Biological Safety Officer or project manager of the genetic engineering facilities.</p> <p>Waste from genetic engineering facilities must be treated before disposal (for example by autoclaving) in accordance with the provisions of the relevant authorization notice and the GenTG as well as any relevant incidental provisions.</p> <p>If the waste remaining after this treatment still contains hazardous substances, you must register it with <b>G6 – Operational Environmental Management and Technical Safety</b> Hazardous waste disposal(→ p.03 at the bottom).</p>		

[Back to contents](#)

<p>Waste management guidelines</p> <p>Last updated: December 2023</p>		<p>G6 – Operational Environmental Management and Technical Safety</p>
<p>INFECTIOUS MATERIAL</p>		<p>Page: 20</p>
<p><b>Description</b></p>		

This includes materials contaminated with harmful substances or biological contaminants. These include

- blood
- contaminated disposable laboratory equipment such as cloths, pipettes etc.
- material contaminated with biological agents

Infectious waste should be disinfected or inactivated as far as possible (e.g. in autoclaves).

### Disposal

A consultation is required before disposing of infectious material.

Please get in touch with **G6 – Operational Environmental Management and Technical Safety**, Disposal of hazardous waste

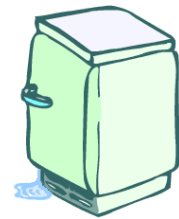
(→ [p.03 at the bottom](#)).

## COOLING EQUIPMENT

Page: 20

### Description

Coolants or insulation used in cooling equipment often contain substances harmful to the environment. As well as dangerous hydrochlorofluorocarbons in coolants and in the synthetic insulating foam, they may also contain engine oil and heavy metals.



### Disposal

Cooling equipment is collected once you have registered it for disposal.

**G6 – Operational Environmental Management and Technical Safety** is happy to advise you (→ [p.03, in the middle](#)).

### Avoiding/reducing waste

Ask dealers about the terms of return when you purchase a new piece of equipment.

[Back to contents](#)

## Waste management guidelines

Last updated: December 2023

G6 – Operational Environmental Management and  
Technical Safety

## PLASTICS

Page: 21

### Description

Waste made of plastic such as, for example, molds, semi-finished products, fibers, plastic sheets or films or packaging.

## Disposal

The recycling bins available at FAU Campus Erlangen South marked “Abfall zur Verwertung” (waste for recycling) can be used for disposal:

Egerlandstr. 3  
Martensstraße 5a  
Paul-Gordan-Straße 5-7  
Staudtstr. 5 (Biologikum)  
Staudtstr. 7 (Physikum)

In Erlangen city center, yellow bins or yellow sacks are available for disposing of packaging waste. Please feel free to contact us if you have larger quantities of plastic sheeting or other plastics for disposal.

Larger quantities of plastic sorted according to type can be disposed of in large containers that can be ordered from G6 – Operational Environmental Management and Technical Safety.

**G6 – Operational Environmental Management and Technical Safety** is happy to advise you (→ p.03, in the middle).

## Avoiding/reducing waste

Choose reusable packaging wherever possible. Avoid unnecessary packaging when making purchases. Ask suppliers if they can provide more environmentally friendly alternatives such as wood shavings, cellulose chips or recycled paper/cardboard.

[Back to contents](#)

# Waste management guidelines

Last updated: December 2023

G6 – Operational Environmental Management and  
Technical Safety

## LIGHT BULBS

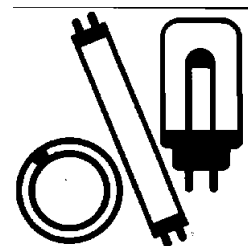
Page: 22

### Description

Due to the substances used in them, fluorescent tubes, energy-saving bulbs and LED lamps are classed as waste requiring special monitoring.



- Fluorescent tubes should never be disposed of with residual waste.
- They must never be broken or smashed.



## Disposal

Fluorescent tubes that are broken or no longer work must be disposed of correctly. You can take them to the **recycling depot**. (→ [p.03 at the top](#))

Halogen bulbs and normal light bulbs can be disposed of in residual waste.

Larger quantities can be collected upon request.

**G6 – Operational Environmental Management and Technical Safety** is happy to advise you (→ [p.03, in the middle](#)).

## MEDICINES

Page: 22

### Description

Medicines are classed as waste requiring special monitoring.

They must not be made available to unauthorized persons.



### Disposal

As a rule, expired medicines can be returned to any pharmacy or the “**Giftmobil**” in the municipality where you live.

Expired medicines from institutions within FAU or waste generated during the production or use of medicines can be disposed of via the return service offered free of charge by the **hospital pharmacy**.

**G6 – Operational Environmental Management and Technical Safety** Disposal of hazardous waste (→ [p.03, at the bottom](#)) is happy to advise.

[Back to contents](#)

## Waste management guidelines

Last updated: December 2023

G6 – Operational Environmental Management and  
Technical Safety

## METAL WASTE

Page: 23

### Description

Metal waste is a raw material that is well suited for recycling. It has to be free from contamination before recycling. It is essential that it is separated from all other materials. Metal waste may be varnished, but no other materials such as wood or plastic may be attached to it.

### Disposal

Metal waste such as drinks cans or tins and aluminum foil should be disposed of in containers for waste metal.

[Location of metal containers at FAU:](#)

### Erlangen city center

Bismarckstraße 1  
Fahrstraße 17 / Schuhstraße 19  
Henkestraße 42  
Schwabachanlage 10

### FAU Campus Erlangen South

Cauerstr. 4  
Egerlandstr. 1/3  
Lecture hall Chemistry / Computer Science building  
Staudtstr. 5  
Staudtstr. 7

### Nuremberg

Lange Gasse 20  
Regensburger Straße 160  
Findelgasse 7/9

Waste metal can be delivered to the **recycling depot**.

Larger quantities can also be collected upon request, and G6 – Operational Environmental Management and Technical Safety can provide containers for special collections.

**G6 – Operational Environmental Management and Technical Safety** is happy to advise you (→ p.03, in the middle).

### Avoiding/reducing waste

You should reduce your use of aluminum as far as possible, particularly for packaging purposes, as its manufacturing process requires a lot of energy and generates significant amounts of water pollution.

[Back to contents](#)

## Waste management guidelines

G6 – Operational Environmental Management and  
Technical Safety

Last updated: December 2023

WASTE CONTAINING MERCURY

Page: 24

### Description

Waste containing mercury includes

- elemental mercury
- contaminated mercury residues
- contaminated equipment (glasses, tubes, cloths, absorbent materials, sponges etc.)
- Fluorescent tubes (→ [light bulbs](#))

### Disposal

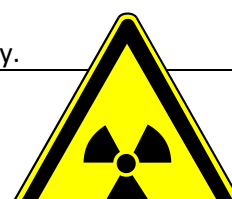
**G6 – Operational Environmental Management and Technical Safety** Disposal of hazardous waste (→ p.03, at the bottom) is happy to advise.

## RADIOACTIVE WASTE

Page: 24

### Description

Radionuclides are used in various areas at FAU and Uniklinikum Erlangen. Radioactive waste is generated as a result. This waste must be collected and disposed of separately.



The Radiation Protection Ordinance (Strahlenschutzverordnung, StrlSchV) stipulates that authorization from the Regional Environmental Protection Office (Landesamt für Umweltschutz) is required before handing radioactive materials. Occupational Safety is responsible for administrative procedures (application, permission etc.)  
(Ms. Muchow-Eggers, phone: -26788; email: [doerte.muchow-eggers@fau.de](mailto:doerte.muchow-eggers@fau.de); internet: [www.as.zuv.uni-erlangen.de](http://www.as.zuv.uni-erlangen.de)).

### Disposal

Radioactive waste must be disposed of via the Radiation Protection Officer according to the regulations stipulated by the Gesellschaft zur Behandlung radioaktiver Stoffe in Bayern (organization for handling radioactive materials in Bavaria, GRB) or the provisions stipulated in the authorization notice and the StrlSchV.

Radioactive materials that are firmly encased in equipment must be removed correctly in accordance with StrSchV before the equipment is disposed of; the removed material must be disposed of via the Radiation Protection Officer, as described above.

Information about which Radiation Protection Officer is responsible for your area is available from Occupational Safety (Ms. Muchow-Eggers, phone: -26768; email: [doerte.muchow-eggers@fau.de](mailto:doerte.muchow-eggers@fau.de); internet: [www.as.zuv.uni-erlangen.de](http://www.as.zuv.uni-erlangen.de)).

[Back to contents](#)

## Waste management guidelines

G6 – Operational Environmental Management and  
Technical Safety

Last updated: December 2023

### RESIDUAL WASTE

Page: 25

#### Description

Residual waste is waste that cannot be allocated to any of the types of waste listed in these guidelines after sorting and that cannot be re-used using current technology.

This includes:

- rags
- sweepings
- coated paper
- soiled film/cardboard/paper
- paper hand towels
- sanitary products
- laboratory glass (DURAN glass)

#### Disposal

Residual waste must never include hazardous substances, such as

- chemical residues and toxic substances and all materials containing chemical deposits
- waste oil or waste containing oil





- any waste that is burning, smoldering or liable to self-ignite
- explosive substances
- gas cylinders
- radioactive substances
- infectious material
- substances that are harmful to the environment

Residual waste should be collected at collection points located as centrally as possible.

### **Avoiding/reducing waste**

Before disposing of residual waste, you should double check whether it is possible to recycle the substances in any way.

[Back to contents](#)

## Waste management guidelines

Last updated: December 2023

G6 – Operational Environmental Management  
and Technical Safety

HAZARDOUS WASTE

Page: 26

### **Description**

These are waste materials that have hazardous properties and may therefore pose a potential danger for health and/or the environment. They require special monitoring.

## Disposal

You must register such substances with **G6** before disposing of them.

Phone: + 49 9131 85250 -83 Mr. **Gunselmann**

-84 Mr. **Koch**

-92 Mr. **Wittmann**

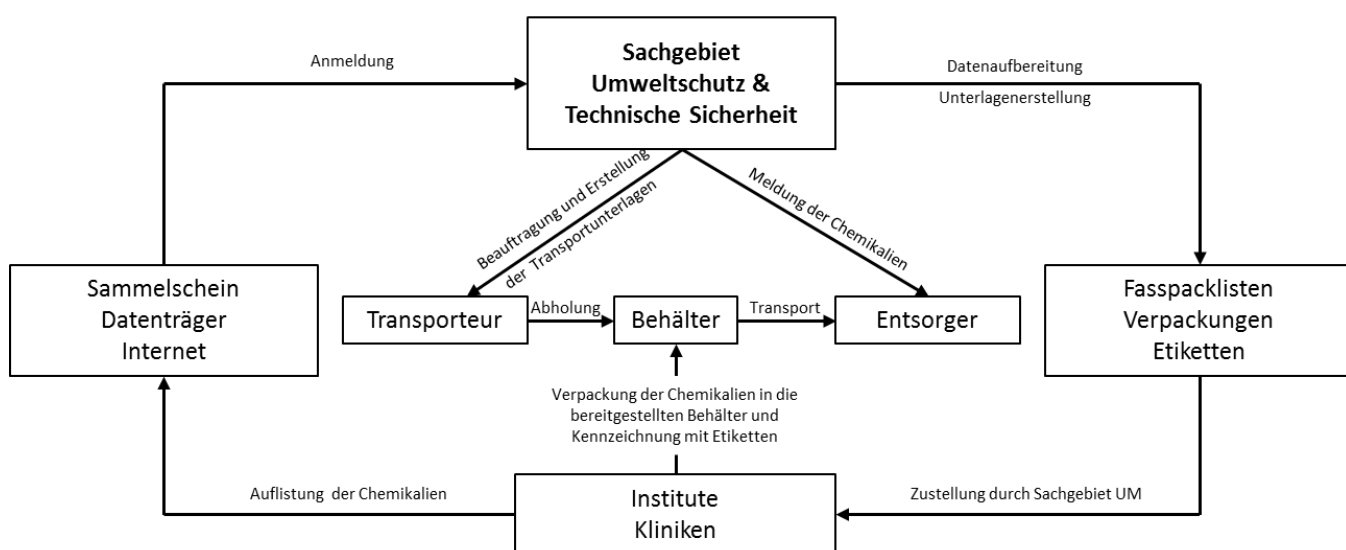
+ 49 9131 85202 -58 Mr. **Rose**

Email: [sondermuell@fau.de](mailto:sondermuell@fau.de)

Internet: <https://www.Referat G6 – Operativer Umweltschutz und technische Anlagensicherheit .zuv.fau.de/>

You require authorization in order to use the online service for the disposal of hazardous waste "Sondermüll online". Please contact G6 (Mr. Gunselmann, phone: -25083, Mr. Koch, phone: -25084 or [www.Referat G6 – Operativer Umweltschutz und technische Anlagensicherheit .zuv.fau.de](http://www.Referat G6 – Operativer Umweltschutz und technische Anlagensicherheit .zuv.fau.de)).

## Schematischer Entsorgungsablauf für Sondermüll



## Avoiding/reducing waste

- Avoid keeping excessive stocks of chemicals
- Only accept gifts of chemicals if you really need those quantities of that type of chemical
- Do not contaminate storage containers
- Use distillation to re-gain solvents
- Do not use substances that are difficult to dispose of (e.g. compounds containing mercury, chromo-sulfuric acid)
- Conduct experiments at as small a scale as possible

[Back to contents](#)

## Description

Bulky waste includes furniture and fittings that are too large or too bulky to fit into a waste container and cannot therefore be disposed of with residual waste.

## Disposal

If you have large quantities of bulky waste, please inform G6 in advance to allow containers for bulky waste to be provided if necessary.

**G6 – Operational Environmental Management and Technical Safety** is happy to advise you (→ p.03, in the middle).

## Avoiding/reducing waste

Please advertise furniture that is still in good working order in the **furniture/computer exchange forum** in UnivIS.  
([www.univis.uni-erlangen.de](http://www.univis.uni-erlangen.de))

## Description

These are pressurized metal cans used to spray liquids.  
They are differentiated as follows:

- Spray cans containing toxic substances (e.g. spray paint)
- Spray cans containing substances that are **not** toxic (such as hairspray)



## Disposal

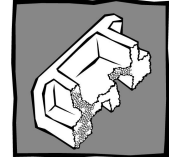
In the case of spray cans containing toxic substances,  
**G6 – Operational Environmental Management and Technical Safety** Disposal of hazardous waste (→ p.03, at the bottom) is happy to advise.

Spray cans containing substances that are **not** toxic and are marked with the green dot should be disposed of in the yellow sack or yellow bin.

## Description

While it is true that polystyrene is well suited for recycling, the fact that it is available in surplus means that recycling is not always profitable. In order to be suitable for recycling, polystyrene must be completely clean with nothing adhered to it (stickers, labels etc.).

It is almost impossible to tell packaging chips made of polystyrene apart from those made of cellulose or other materials. This makes it impossible to collect them separately for recycling purposes.



## Disposal

If polystyrene cannot be returned to the company that delivered it, it should be collected and disposed of in separate sacks (available from Ms. Kellner or Mr. Rose, phone: - 20259 or -20258. The polystyrene is taken for recycling and made into insulating material or leveling compound.

The following conditions must be met:

- Polystyrene must be clean, not painted, and with no stickers attached
- You must separate packaging chips, white and colored pieces of polystyrene

Full sacks can be taken to the FAU recycling depot or handed over during the Thursday tour. Please register with Ms. Kellner or Mr. Kolacyak, phone - 71094 or -20258

**G6 – Operational Environmental Management and Technical Safety** is happy to advise you (→ p.03, in the middle).

## Avoiding/reducing waste

- Use reusable packaging.
- Ask suppliers if they can provide more environmentally friendly alternatives such as wood shavings, cellulose chips or recycled paper/cardboard.
- If possible, use polystyrene and polystyrene chips more than once.

## Description

Animal corpses and waste from animal husbandry (animal bedding etc.) must be collected and disposed of correctly.

As a rule, material of this nature that comes from laboratories in genetic engineering facilities ought to be inactivated, for example via autoclaving.

Materials matching the above description that are not from genetic engineering facilities should be prepared for disposal in consultation with G6.

## Disposal

In the case of animal corpses and waste from animal husbandry,

**G6 – Operational Environmental Management and Technical Safety** Disposal of hazardous waste (→ p.03, at the bottom) is happy to advise.

[Back to contents](#)

## Description

Ink cartridges from ink jet printers and toner cartridges from laser printers and fax machines are expensive and complicated products that consist of a robust plastic case filled, for example with, springs, screws, a print head and a handful of toner or a few millimeters of ink.

## Disposal

Empty toner and ink cartridges from ink jet printers, laser printers and fax machines are generally taken back by dealers for disposal or recycling when you buy a new cartridge.

Some departments at the University provide collection boxes (IPC collection box from the company Interseroh) for collecting toner and ink cartridges. Please note the following:

- Please only wrap cartridges in their plastic packaging or in a plastic bag (dispose of box via waste paper).
- Do not place residual waste, office waste, boxes, plastic parts, ink tanks or containers used exclusively for toner (no photoconductor drums) in the collection boxes.



Once the container is full, you can send an email directly to the company Interseroh Recycling together with the form included in the box to arrange for collection (and delivery of a new box) or you can inform G6 – Operational Environmental Management and Technical Safety (email to [wertstoffe@fau.de](mailto:wertstoffe@fau.de)).

**Please note:** The box must be closed securely with tape. Be sure to give the address for collection.

Please contact **G6 – Operational Environmental Management and Technical Safety** (→ [p.03, in the middle](#)) if you have any questions or requests for locations

## Avoiding/reducing waste

- Please ensure that cartridges are completely empty before taking them for recycling or refilling. In order to avoid damaging cartridges, they should be disposed of together with the plastic packaging they came in (dispose of boxes via waste paper).
- Do not print or copy documents unless absolutely necessary.
- Use refillable cartridges.

[Back to contents](#)