



Disposal of substances to University drainage systems

Procedures

Doc control no: PRSG 30.1 WELLBEING, SAFETY AND HEALTH MANAGEMENT SYSTEM

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Procedure for disposal of substances to University drainage systems

Introduction

All waste produced by the University of Leeds needs to be managed in line with this and the other Procedures found at www.leeds.ac.uk/safety. This Procedure covers the disposal of waste substances into the University's drainage system, and meets the stringent legal requirements placed on the University by the EU, the Environment Agency and Yorkshire Water.

No waste can be disposed of via the drains unless we know that it will not harm or damage people, the environment, the sewerage systems or those that work in them.

If you need further advice, support or guidance please contact the University Environmental Compliance Managers or your Health and Safety Manager (for contact details see www.leeds.ac.uk/safety).

Scope

These Procedures must be followed by **everyone disposing of waste to the drainage system on University sites** except sites at St James' Hospital who must follow any Leeds Teaching Hospital Trust Procedures. If any other variation to these Procedures is considered necessary it can only be put into practice if it is **agreed in writing** by the University of Leeds, Head of Health and Safety or their delegated nominee.

This procedure does not cover the disposal of radioactive substances, for advice or guidance on this please contact the University Radiation Protection Officer on ext. number 34202.

Definitions

Disposal to Drain

Any disposal of substances (including spillage) via the drainage system on campus - either the enclosed drainage system or the surface drainage system.

Enclosed drainage system

The drainage systems provided from or within a building; including sinks, toilets, showers and sluices.

Environmentally Hazardous Substances

Substances which can cause harm to the environment, these are identified by their H Statements, listed in "Section 2" of the MSDS (Material Safety Data Sheet) for the substance.

- H400** Very toxic to aquatic life
- H401** Toxic to aquatic life
- H402** Harmful to aquatic life
- H410** Very toxic to aquatic life with long lasting effects
- H411** Toxic to aquatic life with long lasting effects
- H412** Harmful to aquatic life with long lasting effects
- H413** May cause long lasting harmful effects to aquatic life

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Persistent effect or damage to the environment

Substances that have either an accumulative effect, or an instant damaging effect on the environment. This is often indicated by the Globally Harmonised Systems (GHS) symbol:



Surface Drainage System

Open drainage on university sites except sites at St James' Hospital - from car parks, footpaths and rain water drainage.

Prohibited List (Disposal to Drain)

The University's agreed list of substances that **cannot** be disposed of via the University drainage system. This includes the 'Red List' (an EU regulated list of substances), substances listed in the EC Dangerous Substances Directive and substances banned by Yorkshire Water. See the Prohibited List (Disposal to Drain) attached to this Procedure for the detail.

Water Miscible

Materials or substances that form a homogenous (uniform) solution with water.

Spillage or inadvertent disposal

The unwanted, unintentional or intentional release of a substance identified on the Prohibited List (Disposal to Drain) into one or more of the University drainage systems.

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Procedure

This Procedure explains the steps which must be followed to dispose of substances via the University's drainage system and should be read in conjunction with the introduction, scope and definitions on pages 2-3. If you need further advice, support or guidance please contact the University Environmental Compliance Managers or your Health and Safety Manager (for contact details see www.leeds.ac.uk/safety).

Step 1- Identify if the substance you wish to dispose of, is on the "Disposal to substances to University drainage systems -Prohibited List").

In summary this includes substances that are:

- Environmentally hazardous substances.
- Corrosives (acids and bases) (unless between pH 5.5 and 11.5)
- Oil and grease including mineral oils and oil emulsions (unless below 0.5g per litre)
- Paints and varnish
- Live microbiological cultures
- Metals and their compounds
- Cyanides / cyanide containing compounds containing cyanide
- Phenols, cresols and simple derivatives
- Tar and tar oils
- Organo-halogen compounds, including pesticides, herbicides (their residues) and degreasing agents
- That cause a nuisance (e.g. smell)
- That produce flammable, harmful or toxic vapours (e.g. solvents, petroleum spirit)
- Have the potential to interfere with its free flow (i.e. block the system) (e.g. solids, sediments, nappies)
- Could detrimentally affect the treatment and disposal of sewer contents
- Could have a detrimental affect any watercourse, estuary or coastal water into which the treated effluent will eventually be discharged (Substances with H Statements)
- Any material not listed above that is on the University banned list (list below)

Step 2 – If the substance *is* on the "Disposal to substances to University drainage systems -Prohibited List", dispose of it following the correct University Waste Procedure

If it *is* on the list, do not dispose of the substance via the drainage system. Instead you should check www.leeds.ac.uk/safety and follow the correct Waste Procedure e.g. Healthcare Waste Procedure

Step 3 – If you are sure that the substance *is not* on the "Disposal to substances to University drainage systems - Prohibited List", then dispose to drain with additional water to dilute (in some instances a minimum dilution factor is specified):

- Substances listed in the table below with a **minimum further dilution of 100 times**.
- Corrosive waste substances where the pH is between 5.5 and 11.5.
- Hot liquids at less than 60°C, if hotter than this then the maximum volume that can be disposed of from a single disposal point in any 24 hour period is 50 litres.
- Oil and Grease at concentrations of less than 0.5g per litre.
- Non-hazardous water miscible substances may be disposed of via drains.

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- Disinfected Bio-hazardous substances (contact the University Biological Safety Managers or University Environmental Compliance Managers for advice).
- Radioactive Substances **ONLY** if the sink is designated for radioactive waste and disposal is in accordance with the University's permit conditions (contact the University Radiation Protection Officer or University Environmental Compliance Managers).

Step 4 - If the substance is *not* on the Disposal to substances to University drainage systems -Prohibited List and not listed in Step 3 above

If the substance does *not* appear on the Disposal to substances to University drainage systems -Prohibited List and is *not* listed in Step 3 above, *or* if you are unsure and wish for clarification, please contact the University Environmental Compliance Managers or your Health and Safety Manager (for contact details see www.leeds.ac.uk/safety).

Step 5 – if there is an incident, report on Sentinel

If an incident resulting in a spillage or inadvertent disposal has occurred, report the incident through your local contacts and the online University accident and incident reporting system (Sentinel) - using the 'environmental incident' category.

Waste Substances that can be currently disposed of to drain with 100 x volume of water unless they fall into one of the listed categories above, please note these substances are being monitored by regulatory bodies and appear on lists where EQS's for protection of saltwater life have been agreed but as yet have not been adopted into legislation, if this changes they may move to the prohibited list

Name of substance	CAS NUMBER
Abamectin	71751-41-2
Ammonia	
Bromine (and its compounds)	
Bromoxynil	1689-84-5
Carbendazim	10605-21-7
Chlorine	
Chlorine dioxide	10049-04-4
Chlorothalonil	1897-45-6
Chlorotoluron	
Chlorpropham	101-21-3
Dichlorobenzenes (all compounds)	
Dichlorophen	
Diflubenzuron (Dimilin)	35367-38-5
Doramectin ORAMECTIN	117704-25-3
EDTA (Ethylenediaminetetraacetic acid)	
Ethofumesate	
Fluoride (and its compounds)	16984-48-8

Flusilazole	85509-19-9
Formaldehyde	50-00-0
Imazethypyr	
loxynil	
Isoproturon	34123-59-6
Ivermectin (Stromectol)	70288-86-7
Macazeb	
Malachite Green	569-64-2
Mabeb	
Mevinphos	26718-65-0
Nonylphenols	25154-52-3
NTA (Nitilotriacetic Acid)	139-23-9
Octylphenols	1806-26-4
Oxolinic Acid	14698-29-4
Oxytetracycline	79-57-2
Pendimetalin	
Phthlates	
Pirmincarb	
Pirmiphos- methyl	
Prochloraz	
Propyzamide	
Styrene	100-42-5

If you need further advice support or guidance please contact the University Environmental Compliance Managers or Health and Safety Manager (for contact details see www.leeds.ac.uk/safety).

Procedure for dealing with emergency, spillage or inadvertent disposal of substances to University drainage systems

This Procedure explains the steps which must be followed in an emergency situation if a substance is spilled or inadvertently disposed of via the University's drainage system. This Procedure should be read in conjunction with the introduction, scope and definitions on pages 2-3.

If you need further advice, support or guidance please contact the University Environmental Compliance Managers or your Health and Safety Manager (for contact details see www.leeds.ac.uk/safety).

Step 1- Identify the substance

Identify the substance which has been spilled or inadvertently disposed of via the University's drainage system.

Step 2 – Follow your local process for spillages/ emergencies

Use the spill kit as identified in the risk assessment.

Step 3 – Call for extra support

It would be useful to have the following information when you call (location, substance and quantity, action taken so far, your contact details)

In the following order, call:

- **The University Environmental Compliance Managers**
 - Sarah Burdall on 0113 34 38042 or Lynn Clarke on 0113 34 38043
- **Health and Safety Services** on 0113 34 34201
- Facilities Directorate Helpdesk Phone: 0113 34 35555
- If the spillage relates to radioactive substances contact the University Radiation Protection Officer Andrew Cowling 0113 34 34202
- If the spillage relates to biological substances contact the University Biological Safety Managers Mark Behrendt 0113 34 34302 or Sarah Burdall 0113 34 38042.

Emergencies - Out of hours (5pm – 8am and all weekend): in an out of hours emergency call the Security contact number: 0113 34 32222

Step 4 – Report the incident on Sentinel

If an incident resulting in a spillage or inadvertent disposal has occurred, report the incident through your local contacts on the University accident and incident reporting system (Sentinel), using the 'environmental incident' category.

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