

## Emissions and Discharges Targets (excluding CO<sub>2</sub>)

(CO<sub>2</sub> objectives and targets are contained within the UWE Carbon Management Plan)

## A - Greenhouse Gases

## Methane (CH<sub>4</sub>)

At UWE our significant Methane emissions are from the decay of organic waste in municipal solid waste landfills.

#### Objective:

Roll out food waste recycling across the University

## Targets:

- By March 2012 the Student Village (2000 occupants) will have food waste recycling infrastructure
- By July 2012 to have diverted 25 tonnes of food waste from landfill
- By October 2012 to adopt onsite composting of food waste
- By July 2013 to have achieved and an annual food waste diversion from landfill of 100 tonnes

## Nitrous Oxide (N<sub>2</sub>O)

At UWE direct Nitrous Oxide emissions are from the combustion of fossil fuels, particularly the use of natural gas for heating and in the use of diesel in the UWE vehicle fleet.

#### Objective:

Reduce the amount of fossil fuels directly used by UWE

#### Targets:

An absolute reduction in UWE fleet consumption of fossil fuels of: (2011 base)

- 5% for year Jan 2012 Dec 2012
- 10% for year Jan 2013 Dec 2013
- 15% for year Jan 2014 Dec 2014

Complimentary targets exist in the SMART travel Plan to reduce indirect emissions from staff and student commute to work and study.

#### **Fluorinated Gasses**

At UWE Hydrofluorocarbons (HFCs) are the significant fluorinated gas used. Uses include refrigerants in refrigeration and air-conditioning.

## Objective

To reduce the need for use of Fluorinated Gasses

Document	Document Ref	Last Revision	Revision No Page 1 of 3	
Emissions and Discharges Targets	EMS.PROG.005	26 Jan 2012	1	

#### **Targets**

Through masterplanning maximise the use of natural ventilation in new builds and refurbishments

## **B - Non-Greenhouse Gasses**

# Nitrogen oxides (NOx, includes NO, N $O_2$ ), Sulphur Dioxide (SO $_2$ ) and Particulate matter (PM $_{10}$ )

See objectives and targets above for Nitrous Oxide

## **Volatile Organic Compounds (VOCs)**

A source of VOCs at UWE is from the use of paints and other protective coatings. UWE vehicle use is a second source

## Objective:

To reduce the release of VOCs from University operations

## Target:

- By July 2013 to limit paint use in University maintenance to those classified as Low VOC (or better)
- See also objectives and targets above for Nitrous Oxide

## **C - Discharges to Sewer**

## Chemical discharges from laboratories

Chemical waste is currently disposed of either by a licensed waste contractor or via the sewerage system. If disposed of by sewerage it is diluted to minimise its toxicity in the sewerage system. The university is permitted to dispose of specified chemicals via the sewerage system.

## **Objective**

To indentify the best environmental option for the disposal of chemical waste from laboratories, i.e., sewerage or hazardous waste collection by waste contractor and to instigate the new procedure thereafter.

#### Target

By July 2012 establish the best environmental option for chemical waste disposal and to implement any new process by January 2013

## Food waste from catering operations

Document	Document Ref	Last Revision	Revision No	Page 2 of 3
Emissions and Discharges Targets	EMS.PROG.005	26 Jan 2012	1	

#### **Objective**

Divert food waste from University catering outlets away from the sewerage system

#### Target

Establish food waste collection from all University catering outlets by July 2012

## Cleaning chemicals from cleaning operations

Over the last 5 years Cleaning Services has reviewed the use of cleaning chemicals so as to improve environmental and health and safety performance. This had led to the department using non-hazardous substances in all but a few processes.

## Objective

To continually review availability and effectiveness of less hazardous chemicals to substitute for remaining hazardous cleaning agents.

## D - Releases to water courses

Potential sources of a pollutant release to a water course at UWE include accidental spillages, run-off from car parks, waste storage areas and sewage overflow

## **Objective**

Prevent the release of pollutants into a watercourse, and in the event of a release have adequate systems in place to prevent a serious pollution incident.

## **Target**

By July 2012 to have installed remote monitoring sensors on the Frenchay Campus water course to continually monitor a suite of water quality parameters.

## Reporting

Progress against this target and set of actions will be reported in the annual Sustainability Report.

Chris Abbott
Director of Facilities

January 2012

Document	Document Ref	Last Revision	Revision No	Page 3 of 3
Emissions and Discharges Targets	EMS.PROG.005	26 Jan 2012	1	