OP 8.1.10 - Control of emissions to air and water

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Version Control

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V2015:1.0	Integration into ISO 2015	Julian Greaves; Sustainability Manager	29/08/17

PROCEDURE:

PURPOSE:

- To minimise emissions and discharges to air and water,
- To minimise pollution risks by ensuring potentially polluting materials are stored safely and appropriately,
- To ensure compliance with all relevant environmental legislation

METHOD:

Emissions to Air:

Boilers:-

- BSU employs an external contractor under a cyclical maintenance contract to undertake servicing of heating and hot water boilers to ensure optimum operating standards and energy efficiency are achieved.
- Contract and maintenance records relating to the above are kept by the Estates Department.

Other Emissions:-

- Local Exhaust Ventilation (LEV) systems (in woodworking and etching studios, and science laboratories) are serviced annually as required by Health and Safety Executive Guidance Note 54.
- Equipment containing ozone-depleting substances or fluorinated greenhouse gases (air conditioning units, refrigeration units, and fire protection equipment) are serviced twice annually by competent engineers, according to F-gas regulations
- Maintenance contracts and records relating to the above are kept by the Estates Department.
- Emissions from BSU-owned vehicles are controlled by regular servicing of vehicles, according to manufacturer's recommendations. Records are maintained by the Estates Department

Bonfires:-

- Burning waste in the open is occasionally carried out by the Grounds Department to dispose of waste plant matter generated through grounds maintenance works, in accordance with Environmental Permitting Regulations exemption Paragraph 30. Environment agency exemption in Folder 6.1.3 - Compliance obligations.

Emissions to Water:

- Foul effluent from bathrooms, kitchens, workshops is directed to foul sewer.
- Emissions to water of potentially harmful substances are managed and prevented in the following ways:
    - Effluent from the ceramics studio at Sion Hill is directed through a three-part settlement tank before discharge to foul sewer. When necessary, the Ceramics Technician disconnects the settlement tank and removes the 'sludge' contaminated with suspended solids/heavy metals – this is decanted into a drum and consigned as hazardous waste to an appropriately licensed waste contractor. Any other 'slops' contaminated with ceramics glazes are collected in a drum in the workshop.
    - Waste fixer and developer solutions from photography workshops, and waste etching solutions, are treated as Hazardous Waste stored in suitably labelled containers until collection by appropriate contractors.
    - Used etching/lithography solutions and washings from laboratories are diluted to a further 20-1 ratio with water, the spent acid is diluted with running tap water for up to 20min and flushed to drain under email agreement with Wessex Water.
    - Emissions to water from other hazardous liquids/materials is prevented by collection and storage in suitable, labelled containers in dedicated storage locations, typically in locked and bunded 'Chem-Safe' containers, prior to disposal by a certified Hazardous Waste contractor.
    - Spill kits and absorbent granules are kept at accessible points close to laboratories and workshops, for use in emergencies.

- Possible discharges and related hazards associated with fuel storage and use are controlled via Operational Procedure 8.2.15 – Spill Management
  - Any uncontrolled discharges that have the potential to cause a pollution are reported to the relevant authority and records are kept in 6.1.3 - Compliance obligations

EFFECTS & ACTIONS ON NON-CONFORMANCE:

If this procedure is not applied it may result in:

- a failure to comply with relevant pollution prevention legislation,
- a failure to minimise on-site pollution risks,
- a non-conformance with clauses of the ISO 14001 standard.

Departures from this procedure are addressed using procedure 10.2 Nonconformity, corrective action & preventive action.