

## Processes and emissions at Westhoughton Westhoughton

### B2.1

#### Step and repeat

This process uses uv curable resin to produce large plastic shims so these can be made in to nickel masters

**Emissions:** none for process m/c  
small amount extracted during cleaning(acetone), once per shift

#### Silvering

This process sprays silver onto the plastic so it can conduct electricity so a nickel master can be grow

**Emissions:** Silver spray chemicals (MSDS attached to mail)

#### Electro plating

This process produces nickel shims for embossing from nickel master

**Emissions:** A small amount of nickel sulfamate fumes, tank temp set at 52°) but only when the lids of tanks are opened this is 3-4 times a day and 15-20mins at the longest its open.

#### Embossing

This process is used to emboss the image into the foil by using a nickel shim on a roller and using heat and pressure

**Emissions:** Extraction is on all the time m/c running and its taking away small amount of burning heat transfer oil after roller change and fumes from the lacquer on the foil

#### Print

6 x print machines that all can operate using water based products and solvent based, all machines are connected to the 2 external oxidisers when running solvent based products a bypass is situated outside for use when running water based products

There is 1 mixing station situated behind Uteco 2 that is used for mixing small quantities of ink for use on all machines

The ink store holds small quantities of solvent based ink and the polymer ink kitchen is situated in there that supplies ink to the polymer production line

### B2.2

Drawing showing water emission point attached, copy of consent also attached

### B2.3

Oxidisor discription - the site has 2 oxidisors the targets of these can accommodate 40000m<sup>3</sup> so as long as the large oxidiser is operational we can operate any machine in the print hall

Fugitive emission controls - all fumes are destroyed during the oxidisor process, this control measure is checked annually by an MCERT accredited contractor with results shared with the LA

### B2.4

List of raw materials used - Document attached showing list of chemicals on-site

### B2.5

How do we manage waste -

Haz waste - collected bi-weekly by registered carrier, waste source - cleaning, print production  
General waste for landfill - collected weekly - waste source - all areas of site, kitchens, toilets, offices etc  
DMR - collected weekly - waste source - packaging, none secure raw material, film  
Scrap wood - Collected when we have a skip full - source - packaging waste  
Metal - collected when we have a skip full - source - metal tins, engineering etc

Site has a dedicated waste walker who makes sure all waste is being segregated correctly, we also issue site flashes to educate staff on waste recycling which has seen a reduction of landfill over the years

### B2.6

Spillage procedure for the yard - Spillage procedure attached

### B2.7

Can provide energy usage for site but difficult to provide a breakdown by machine (attached energy document)

### B2.8

BCP for oxidisor - Document attached (Loss of oxidisor)

### B2.9

Noise sources - Thermol oxidisor  
Compactor

External noise survey attached no changes since survey was carried out

### B2.10

Monitoring programme

Air - Annual stack monitoring carried out by an MCERTS approved contractor, continual monitoring also in place

Water - Monthly checks by United Utilities

Noise - last external monitoring carried out in 2012 raised no issues, site is not deemed to be noise issue

### B2.11

Regular scenarios are completed were environmental incidents are tested, the yard area is the highets risk area and has a drain valve fitted for an emergency situation

Copy of Environmental large spill is attached

### B2.12

Copy of Environmental large spill is attached

### B4.1

No complinats received other than 1 noise related issue that was cleared up and not found to be our site in 2012