FITTINGS & MATERIALS RISK ASSESSMENT

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<th>Risk Assessment</th>
<th>Date Compiled</th>
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<th>Risk Type</th>
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<td>RA-0080</td>
<td>03/12/2003</td>
<td>Paul Divall</td>
<td>Contamination</td>
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<th>Fitting or Material</th>
<th>Locality</th>
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<td>Non-Domestic</td>
<td>Mains or Storage</td>
<td>Significant Heath Risk Premises (Risk Reduction)</td>
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**Determine Risk**

For the purposes of this Risk Assessment, a Glass Washing Machine is a Device used solely for the Cleaning of Receptacles made of Impervious Materials that are only used by Humans for the Consumption of Liquids. The Risk is from the fluid contents that a Glass Washing Machine may contain at Significant Heath Risk Premises returning into the Supply. The device used to prevent backflow shall be appropriate to the highest applicable fluid category to which the fitting is subject downstream before the next device.

**Reference**

- Water Regs R15.16
- Water Regs Schedule 2 Para. 15(3)

**Degree or Category of Risk**

Significant Health Hazard Premises have been assessed as having the potential to return into the Supply a concentration of Toxic substances, including any fluid which contains:

- a) Chemical, Carcinogenic substances or Pesticides (including Insecticides and Herbicides), or
- b) Environmental Organisms of Potential Health Significance.

Glass Washing Machines at Significant Health Risk Premises require Backflow Protection for a Fluid Category 4 Risk. The following list of examples is not exhaustive and premises viewed as a similar Risk by the Water Undertaker will require the same Degree of Backflow Protection.

1) Food Preparation (e.g. Canteens, Cafeteria, Refectories and Restaurants)
2) Public Houses
3) Premises for the Sale of Tea, Coffee and other Beverages

**Comments & Conclusions**

In September 2002 the Technical Support Group discussed Glass Washing Machines. It was decided that at Premises as listed above, these Devices represent a Slight Health Hazard and are a Fluid Category 3 Risk.

Although this evaluation may be reviewed, enforcement can only be made on current authoritative evaluation of Risk. However this Risk Assessment is still valid. Therefore, in the interest of national conformity but only when no Greater Risk is identified and the Water Undertaker has no concerns about local Control Measures, enforcement for a Fluid Category 3 Risk may be applied. A typical Greater Risk is from Receptacles returning from use that may have been Contaminated with Unidentified or Noxious Substances.

**Control**

Glass Washing Machines fitted at Significant Health Risk Premises (Reduced Risk Premises as listed above) will incorporate or be fed via:

1) An EC backflow prevention device (Verifiable double check valve) or
2) An ED backflow prevention device (Non-verifiable double check valve) or
3) An AG air gap (minimum size circular overflow).

Where the Undertaker deems either the Arrangement or Control Measures are inadequate, a Glass Washing Machine will incorporate or be fed via:

1) A type BA verifiable backflow preventer with a reduced pressure zone (RPZ valve) or
2) A type AF device (Air gap with circular overflow incorporating a tundish) or
3) A type AF device (A large circular overflow pipe capable of maintaining an air gap at a critical level with full flow of the inlet device).

In all cases a no less effective device acceptable to the Water Undertaker may be used.

**Reference**

- Water Regs Tables S6.1 & .2

**Instruments**

- Water Regulations X Byelaws X H&S at Work X
- Approved CoP Environmental Building Regulations
- Other Technical Support Group (Northern) 12/09/2002 and SD-0004

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